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THE
ORIGIN AND DEVELOPMENT OF THE BENGALI LANGUAGE

BY

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With a Foreword by

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In Two Parts

Part I : Introduction, Phonology



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FOREWORD

It gives me great pleasure to have this opportunity of publicly wishing God-speed to Professor Chatterji's admirable work and of recommending it to all students of the modern languages of India.

There are two possible lines of investigation of this subject. In one, we can follow the example of Beames and view all the forms of speech as a whole, comparing them with each other, and thence deducing general rules. The other is to follow Trumpp, Hoernle, and Bloch, in taking one particular language as our text, examining it exhaustively, and comparing it with what is known of the others. Professor Chatterji, in taking Bengali as the basis of his work, has adopted the latter procedure and, if I may express my own opinion, the more profitable one. The ultimate object of all students must, of course, be to follow the lines so excellently laid down by Beames, and to give a general comparative grammar of the Indo-Aryan languages; but such an attempt,—admirable though Beames's work was,—cannot be really successful till each of the different languages has been separately and minutely dissected under the strictest scientific rules. The palace of comparative grammar cannot be built without bricks, and the bricks are made up of the facts of each particular language.

For many reasons, Bengali, in itself, is specially deserving of careful study. With a literature going back for several centuries, and preserved

with some care, it gives opportunities for the study of its history that are wanting in some other forms of Indian speech. It is a typical descendant of the great language that, under the name of Māgadhī Prakrit, was the vernacular of eastern North India for many centuries. This was the official language of the great Emperor Aśōka, and an allied dialect was used by the Buddha and by Mahāvīra, the apostle of Jainism, in their early preaching. With the shifting of political gravity at a later epoch, it became superseded as a literary form of speech by dialects current farther to the West, but as a spoken language it has developed into the modern Bengali, Oṛiyā, Bihārī, and Assamese.

Hitherto the ordinary Bengali grammars have been silent about the history of the language and the origin of its forms, and in popular books published in India, the wildest theories about these have occasionally been put forth without a shadow of justification. On the other hand, Beames, Hoernle, and Bhandarkar have written much that is illuminating in regard to it, but sufficient materials were not available to any of them for dealing with the many points of phonetics, accidence, and vocabulary that present themselves on closer examination. For this reason we can heartily welcome the ripe fruits of Professor Chatterji's labours that are to be gathered from the following pages. Endowed with a thorough familiarity with Bengali,—his native tongue,—he has been able to bring together an amount of material which no European could ever have hoped to collect; and he has had the further advantage of pursuing his theoretical studies under the guidance of some of the greatest European authorities on Indian philology. This work is accordingly the result of a happy combination of proficiency in facts and of familiarity with theory

and exhibits a mastery of detail controlled and ordered by the sobriety of true scholarship.

In a work of this kind, necessarily offering conclusions here and there on points which in the present state of our linguistic knowledge cannot be decided with absolute certainty, it is not to be expected that all scholars will agree with every statement contained in it; and, as regards myself, I must confess that he has not convinced me that I am wrong in one or two matters in which he has lucidly expressed his disagreement. But, unless we searchers after knowledge sometimes differed, learning would not progress, and there would be the less chance of arriving at the ultimate truth. I therefore welcome his criticisms, and if his arguments, on further consideration, prove that he is right, I shall be among the first to congratulate him. These points are, however, of minor importance, and in no way affect the main thesis of his book,—to give a clear and accurate account of the origins and growth of the Bengali language. In this respect, every one who reads it will admit that the author has succeeded and that his volume is a fine example of wide knowledge, and of scholarly research.

RATHFARNHAM,
CAMBERLEY (SURREY),
OCTOBER, 1925.

GEORGE A. GRIERSON.

idáṁ náma ṛṣibhyaḥ pūrvajébhiaḥ
pū́rvēbhyaḥ pathikṛdbhiaḥ

āvír āvír ma ēdhi

utá tvaḥ páśyan ná dadarśa vā́cam
utá tvaḥ śṛṇván ná śṛṇṓti ēnām
utṓ tuasmāi tanúaṁ ví sasrē
jāyḗva pátyē uśatí suvā́sāḥ

PREFACE

In 1921 the University of London accepted my thesis on 'the Origin and Development of the Bengali Language' for the degree of 'Doctor of Literature.' The present work is substantially the same thesis, but it has been entirely re-written and in some portions re-arranged, and has also been considerably augmented by the inclusion of some new matter.

The idea of systematically investigating the history of my mother-tongue first struck me over twelve years ago when I was at college in my native town of Calcutta reading for the Master of Arts examination in English with Old and Middle English and History of the English Language and a little Germanic Philology as my special subjects. The modern methods of linguistic investigation which I saw applied to English filled me with admiration and enthusiasm; and as the problem of Indo-European is equally connected with my own speech, my interests naturally began to turn wistfully in that direction. From Morris and Skeat, Sweet and Wright, and Jespersen and the rest, and from Helfenstein and Brugmann,—masters of Indo-Aryan philology like Uhlenbeck and Wackernagel, Whitney and Pischel, Beames and Bhandarkar, Hoernle and Grierson and others were naturally approached and studied for guidance and light: and I began also to look round myself, to observe facts in the words as written and as actually spoken. A few years of haphazard reading and observation, and taking notes, and stumbling on in this way, while working as Assistant Professor and Lecturer in English and in Comparative Philology in the University of Calcutta; and then in 1916 I presented as a three years' research programme for the Premchand Roychand Studentship of the Calcutta University a scheme for 'an Essay towards an Historical and

Comparative Grammar of the Bengali Language,' with a specimen of my work embodied in a thesis on 'the Sounds of Modern Bengali' as a preliminary to the investigation of Bengali Phonology. My programme and my thesis were approved by the adjudicators, the late Principal Rāmêndra Sundara Trivēdī and Mahāmahôpādhyāya Paṇḍit Haraprasāda Śāstrī, M.A., C.I.E. For the University Jubilee Research Prize for the following year the subject was announced as 'Comparative Philology with special reference to the Bengali Dialects,' and this allowed me an opportunity to put into shape my notes on the dialects of Bengali, while winning me the prize. The three years' work as Premchand Roychand student consisted of a monograph on the Persian element in Bengali, a study of the Bengali verb and verb-roots, and a study of the language of the Old Bengali Caryā poems, combined with further notes on Bengali Phonetics.

In 1919 I was selected for a Government of India linguistic scholarship for the scientific study of Sanskrit in Europe. My three years' stay in Europe, during 1919-1922, at the Universities of London and Paris, has naturally enough been of the greatest value for me in my work. It enabled me to come in touch in London with scholars like Dr. L. D. Barnett, with whom I read Prakrit, and who supervised my work in London; Dr. F. W. Thomas, who as lecturer in Comparative Philology at University College guided me in my study of Indo-European Philology; Professor Daniel Jones, under whom I studied Phonetics, who was not only my « śikṣā-guru » but also a warm friend and helper; besides Sir E. Denison Ross, Director of the School of Oriental Studies, and most sympathetic of men, and Professor R. W. Chambers (of University College), and Messrs. E. H. G. Grattan and Robin Flower (also of University College), whose classes respectively in Persian, Old English, Gothic and Old Irish I attended; and in Paris, I had the privilege of sitting at the feet of a master like Professor Antoine Meillet for different branches of Indo-European linguistics, and of studying Sanskrit and other Indo-Aryan philology under Professor Jules Bloch, besides meeting other eminent scholars like Professors Sylvain Lévi, Paul Pelliot and Jean

Przyluski. While I was in England Sir George Grierson took a personal interest in my work, an interest which manifested itself in many ways and which he in his kindness and his love of science still retains. This has benefited me to the greatest degree imaginable; and the fellowship of common studies with this *doyen* of Indo-Aryan Linguistics which it has been my very great fortune to enjoy, has been, along with my coming in similar personal touch with Professor Jules Bloch, an inspiration in my studies and my labours; and I may say the same of my coming to know Professor Meillet, the *savant* and the teacher. To all these gentlemen I have to convey my most grateful thanks for all their kindnesses and for all that I have received from them as their pupil.

The work, while it was being prepared in London in 1920-1921, had the advantage of being looked over in its first draft (except in some sections relating to the verb) by Dr. Barnett: and I am very grateful to him for much helpful advice in suggesting improvements in arrangement and in the general treatment, as well as for some references. After it was approved by the University of London, Sir George Grierson, in spite of his very heavy and urgent scientific work, honoured my book, in MS., by a careful perusal, and his criticisms and suggestions he embodied in several pages of notes. Professor Jules Bloch also did the same thing. These notes I constantly kept beside me in re-writing my thesis. Everywhere I have profited by their criticisms, and in most cases I have accepted their suggestions. I have also received some references and one or two suggestions from my friends in Calcutta while finally preparing the work for the press, and these have been acknowledged in their proper places. I have to mention here specially the names of Professor Hem Chandra Rāychaudhuri, my old college friend and colleague in the University, and of Professor Satyendranāth Basu of the University of Dacca, for some suggestions in the earlier part of the work.

In preparing the present work, the plan adopted by Professor Bloch in his 'Formation de la Langue marathe' has given me the clearest notions about what a book on the origin and development of a modern Indo-Aryan language should contain: and Professor Bloch's work, which

Sir George Grierson has described as 'without any doubt the most important book dealing with the Modern Indian languages that has appeared since the publication of Hoernle's *Grammar of the Gaudian Languages* in 1880,' has, in the clarity of its exposition and in the width of its erudition as well as in the sureness of its judgment, offered me the best model that I could have. But in my own book, as I find, I had to discuss many points, some of them side-issues, especially in the *Introduction*, which should be but merely touched upon in a work of a professedly linguistic character, not being immediately *à propos* for history of language ; and perhaps, I had to be fuller in detail; and at times, repetition became unavoidable. That was due partly to the fact that an appreciation of the racial, historical and cultural background was thought to be helpful in following the linguistic development; and the reason of the repetition is that the work of re-writing and printing my book went hand-in-hand (so that I had no opportunity of surveying the present work as a whole before the printing of it was finished), and that the same phenomenon had to be viewed from different aspects, and a repetition of a fact or an argument was felt to be necessary where a mere reference was not enough. I hope, however, that the general unity of the work has not suffered thereby. I have tried my best not to be dogmatic, and although I had to speculate and hypothesize at times to explain facts, I hope I have not let loose my fancy to roam freely, unchecked by the restraints of science. In my book no great points have been raised, no remarkable theories advanced : and fortunately there is hardly any scope for that. I have simply tried to apply the methods of Comparative Philology, as accepted by the present-day masters of the science, in working out the history of Bengali. A number of things have come into my notice as one of the first workers in the field along what may be called scientific lines, at least among Bengali speakers: and these would strike any other observer. Many of the views expressed may ultimately prove to be wrong, with the accession of new facts—as, for instance, from the systematic study of the dialects of Bengali and of the cognate speeches. The work here submitted, however, is the outcome of sincere labour in a subject for which I have the greatest love,

and it is here presented as an Essay towards an Historical and Comparative Grammar of Bengali, and as a contribution towards the scientific study of the Modern Aryan languages of India.

Linguistics as a modern science is still in its infancy in India, and the meagre dose of 'Comparative Philology' or 'Historical Grammar' which our college students reading advanced courses in Sanskrit or English, not supplementing it by any acquaintance with another cognate language of equal importance, most unwillingly gulp down, is hopelessly inadequate to create an intelligent interest in the subject. Added to this initial difficulty, Indo-Aryan linguistics both of the classical and modern periods has formed the favourite haunt of mere amateurs who seek to compensate for their want of knowledge of the principles of historical grammar and of the modern science of language by professing utter contempt of it; and the professed student of literature who knows the language but not its history shares in this contempt. To make confusion worse confounded, the spirit of scholasticism is not yet dead: we have elaborate grammars of Sanskrit masquerading as Bengali grammar, in which the genuine Bengali forms have been branded as vulgar (asādhu) beside the so-called 'polite' (sādhu) forms borrowed from Sanskrit. The first professedly historical grammar and etymological dictionary of Bengali (by that erudite and versatile scholar Rāi Bahādur Yogesh Chandra Rāy Vidyānidhi, published by the Vaṇgīya Sāhitya Pariṣad, Bengali year 1319-1322), for instance, has not been able to shake off the Sanskrit idea by appreciating the true line of linguistic development. A historical grammar of Bengali in the true sense of the term there has never been in Bengali; and there has not been a work exclusively on Bengali by any European scholar, on the lines of Trumpp's Sindhī Grammar, or Kellogg's Hindī Grammar, or C. J. Lyall's Sketch of Hindustani, to guide the Bengali scholar in acquiring a true perspective which the too near presence of Sanskrit and the fact of the language being his mother-tongue generally blur for him. But there have at times been refreshing manifestations of common sense in writing grammars of Bengali. The first Bengali to write a grammar of his mother-tongue was the Father

of Modern India, the great Rājā Ram Mohun Roy, whose work was published in English in 1826, and in Bengali in 1833; and he knew what we should mean by 'Bengali.' Chintāmaṇi Gāṅguli's book (published in the early eighties) is a great advance on the so-called Bengali grammars of the period, and in recent times we have Nakulêśvara Vidyābhuṣaṇa's little book (first edition Bengali year 1305, fourth edition 1315), and mention may be made of Hṛṣīkêśa Śāstrī's book (Bengali year 1307 = 1900). But the first Bengali with a scientific insight to attack the problems of the language was the poet Rabindranath Tagore; and it is flattering for the votaries of Philology to find in one who is the greatest writer in the language, and a great poet and seer for all time, a keen philologist as well, distinguished alike by an assiduous enquiry into the facts of the language and by a scholarly appreciation of the methods and findings of the modern western philologist. The work of Rabindranath is in the shape of a few essays (now collected in one volume) on Bengali phonetics, Bengali onomatopoetics, and on the Bengali noun, and on other topics, the earliest of which appeared in the early nineties, and some fresh papers appeared only several years ago. These papers may be said to have shown to the Bengali enquiring into the problems of his language the proper lines of approaching them.

Two works, however, though not on historical grammar, have been specially useful in writing this book, and I cannot be too grateful to the scholars responsible for them. These are the Bengali Dictionary of Jñānêndra Mōhan Dās, and the edition of the 'Śrī-Kṛṣṇa-Kīrttana,' our most important Middle Bengali text, by Basanta Rañjan Rāy Vidvad-vallabha. The former work presents the richest collection of material for phonology and for the study of the formative affixes of both New Bengali and Middle Bengali; and the latter with its excellent commentary and word index, especially the latter, has been an invaluable help for both phonology and morphology. For the rest, stray papers and monographs on points of vocabulary and grammar, in the Journal of the Vaṅgīya Sāhitya Pariṣad and in periodicals like the 'Prabāsī,' have at times been requisitioned. These latter of course are not always

up-to-date in their methods, but have nevertheless been very useful. My obligations in each case are indicated at the proper place. In connexion with the chapter on the Phonology of the Persian Element in Bengali, I have to acknowledge gratefully the assistance I received from my friend Khān Bahādur Shamsu-l-'Ulamā Maulavī Muḥammad Hidāyat Husain, PH.D., of the Presidency College, Calcutta, with whom I went through my list of Perso-Arabic loan-words in Bengali in relation to their original forms.

I have not given a bibliography separately, as all the books consulted or referred to have been sufficiently described in the text.

To indicate the pronunciation I have given phonetic transcriptions [within square brackets] in the alphabet of the International Phonetic Association slightly modified for Bengali. This has been noted in a special section immediately before the list of *Contents*.

The book is now placed before the public, and while I do so I recall with the greatest sorrow that Sir Asutosh Mookerjee is no longer in our midst to see it completed. Sir Asutosh's services to his University and to his people and his towering personality are well known in our country, and I need not dilate upon them here. For the foreign scholar interested in Indian Philology and in the spread of modern science in India to form some idea of the work of Sir Asutosh in the University of Calcutta, I would refer to the obituary note on him from Professor Sylvain Lévi, who had occasion to know the man as well as his ideals and achievements, in the 'Journal Asiatique' for 1924. In his sudden and untimely death in May 1924, I mourn the loss not only of a great national figure but also of a personal friend, and especially of one who was keenly interested in this work. Those of us who were privileged to come in intimate touch with his personality and followed his lead in university matters can say wholeheartedly that his indeed was a « svādu sakhyam » as well as a « svādvī praṇītiḥ ». After my return from Europe late in 1922, I was at a loss how to print my book, and naturally I turned to Sir Asutosh, my patron, my friend, philosopher and guide. Sir Asutosh had watched my career abroad, and he at once offered to publish my book through my *Alma*

Mater. For over a decade before that time, Sir Asutosh had been actively engaged in establishing and furthering the study of Bengali and other Indian Modern Languages in the University of Calcutta. He was responsible for the foundation of the first post of research-lecturer for an Indian language in an Indian University—the Bengali research fellowship established in 1913. After creating the University Departments of Post-graduate Teaching and Research in Arts and Science in 1916, which formally transformed Calcutta University from an examining body (teaching but indirectly through affiliated colleges) into a teaching and investigating one, he instituted the study of Indian Vernaculars as a subject for the M. A. examination in 1919. He made provision for the teaching of all the important vernaculars of India, Aryan and Dravidian ; and at his instance important volumes of typical selections from the different North Indian languages were undertaken and published. In 1922, he founded the Khaira chair of Indian Linguistics and Phonetics with the endowments furnished by the late Kumār Guruprasād Singh of Khaira, and selected me as its incumbent. Sir Asutosh's idea was to establish in Calcutta a school of Indian philology, in the widest sense of the term. He had a number of well thought-out plans, but death has put a stop to all of them. When my book was taken up by the University Press, Sir Asutosh showed a personal interest in it, and after the initial difficulties in preparing the necessary types with diacritical marks were overcome, thanks to his solicitude, he watched the progress of the work, and was at times impatient at the delay. It was a most cherished hope of mine that he would see the completion of the work, and it is my greatest regret that this hope remains unfulfilled.

While carrying the book through the press, I have received uniform kindness and encouragement from everybody concerned, and I cannot be too grateful to them. I have to express my thanks especially to the Assistant Registrar of the University, Bābu Yogesh Chandra Chakravartti, M.A., whose unfailing courtesy and prompt action have been of great help ; to Bābu Atul Chandra Ghaṭak, M.A., Superintendent

of the University Press, who took a keen interest in my book, and granted me every facility that the University Press could offer, and allowed me many special privileges : his kindness has been constant during the three years that the book took to print—the first forme was printed early in 1923, and the last ones in 1926 ; to Bābu Kālīpada Dās, B.A., Chief Assistant in the University Press, whose expert proof-reading and whose most intelligent interest have saved me from many a typographical error and many a *lapsus calami*. I have also to record that the compositors in the University Press, Bengali young men all of them, appreciated my labours and gave their most cheerful coöperation. A number of typographical errors nevertheless will appear. For these I am to a large extent responsible, as all the proofs from first to last (there were sometimes five or six proofs to read before one forme could be printed) were corrected by me. In the *Additions and Corrections* at the end of the book I have pointed out such typographical and other errors as have come to my notice, but I fear some more, though I hope they are of a trivial sort, have escaped my scrutiny, and for this I crave the indulgence of the reader.

For the *Index*, I am indebted to Bābu Sukumār Sēn, M.A., Lecturer in Comparative Philology, formerly pupil and now colleague in the University. He very kindly volunteered to prepare an index of all the Bengali words, and thus relieved me of a great burden. As he has been one of the very few serious students of Comparative Philology in our midst, whose enthusiasm for the subject is as great and as sound as his conscientious industry and his scholarly outlook, and who is himself engaged in philological researches, I could not wish this part of the work to be entrusted into better hands. He has the best thanks of his whilom teacher and friend.

I have indicated the scope of my work in a detailed list of *Contents*, and a further index of the topics discussed, as well as of the names, would have increased the bulk of the work and delayed the publication for a still longer period. The *Contents* I hope will be found to be enough.

« Méga biblíon, méga kakón » : the great evil however has been done—the text of my book, barring the *Contents* and the *Index*, runs up to nearly 1100 pages ; but this could not be helped—as the subject, it must be admitted, is a very wide one. I have not stinted any labour, and I have tried to do my best : but

« ā paritōṣād viduṣāṁ na sādhu manyē prayōga-vijñānam ».

THE UNIVERSITY,
CALCUTTA :
15 JUNE, 1926.

SUNITI KUMAR CHATTERJI.

ABBREVIATIONS

A.C. = After Christ.
Ap. = Apabhraṅśa.
Arab. = Arabic.
ASB. = Asiatic Society of Bengal, Calcutta.
B.C. = Before Christ.
B., Beng. = Bengali.
Bib. Ind. = Bibliotheca Indica Series, ASB.
Bib. Nat. = Bibliothèque Nationale, Paris.
BSOS. = Bulletin of the School of Oriental Studies, London.
Coll. = Colloquial.
DMG. = Deutsche Morgenländische Gesellschaft, Berlin.
Drav. = Dravidian.
E. = East, Eastern.
EB. = East Bengal, East Bengali.
eMB. = Early Middle Bengali.
eMIA. = Early Middle Indo-Aryan.
Ep. Ind. = Epigraphia Indica.
Hind. = Hindōstānī.
IA. = Indo-Aryan.
IAnt. = Indian Antiquary, Bombay.
IE. = Indo-European.
IF. = Indogermanische Forschungen, Berlin.
I.-Ir. = Indo-Iranian.
JA. = Journal Asiatique, Paris.
JAOS. = Journal of the American Oriental Society, New Haven.
JASB. = Journal of the Asiatic Society of Bengal, Calcutta.

JBBRAS. = Journal of the Bombay Branch of the Royal Asiatic Society.
JBORS. = Journal of the Bihar and Orissa Research Society, Patna.
JRAS. = Journal of the Royal Asiatic Society, London.
KKC. = 'Kavi-kaṇkaṇa Caṇḍī,' Vaṇga-vāsī edition.
Langue Marathe = 'La Formation de la Langue marathe' by Jules Bloch, Bibliothèque de l'École des Hautes Études, Paris, 1919.
LSI. = Linguistic Survey of India.
lMB. = Late Middle Bengali.
lMIA. = Late Middle Indo-Aryan.
Māg. = Māgadhī.
MB. = Middle Bengali.
MIA. = Middle Indo-Aryan.
MSL. = Mémoires de la Société de Linguistique, Paris.
N. = North, Northern.
NB. = New Bengali.
N.E. = North-East, North-Eastern.
NIA. = New Indo-Aryan.
N.W. = North-West, North-Western.
OB. = Old Bengali.
OIA. = Old Indo-Aryan.
OWR. = Old Western Rājasthānī.
Pers. = Persian.
Pers.-Arab. = Perso-Arabic.
Pkt. = Prakrit.
S. = South, Southern.
Śaur. = Śaurasēnī.
SBE. = Sacred Books of the East Series, Oxford.
S.E. = South-East, South-Eastern.
ŚKK. = 'Śrī-Kṛṣṇa-Kīrttana,' edited by Basanta-Rañjana Rāya, VSPd., Bengali year 1323.
Skt. = Sanskrit.
SPd. = Sāhitya Pariṣad.
Stand. = Standard.

sts., *stss.* = semi-tatsama, semi-tatsamas.

S.W. = South-West, South-Western.

tbh., *tbhs.* = tadbhava, tadbhavas.

ts., *tss.* = tatsama, tatsamas.

U.P. = United Provinces of Agra and Oudh.

VSP. = 'Vaṇga Sāhitya Paricaya' or Typical Selections from Early Bengali Literature, Two Volumes, Calcutta University, 1914.

VSPd. = Vaṇgīya Sāhitya Pariṣad, Calcutta.

VSPdP. = 'Vaṇgīya Sāhitya Pariṣad Patrikā.'

W. = West, Western.

ZDMG. = Zeitschrift der Deutsche Morgenländische Gesellschaft, Leipzig.

SIGNS

> means *gives, leads to, results in, is changed to, giving, leading to,* etc.: *e.g.*, « hasta > hattha > hātha > hāṭʰ ».

< means *comes from, is derived from, coming from, being derived from,* etc.: *e.g.*, « hāṭʰ < hātha < hattha < hasta ».

= indicates a cognate form, or a source type.

* before a word or affix indicates a hypothetical form not preserved in literature, but reconstructed: *e.g.*, « dīpa-rakṣa- + -uka- > * dīva-rakkh-ua- > * dīa-rākhuā > dērʰkhō ». This is found with forms in Indo-European, Indo-Iranian and other hypothetical stages of the speech, as well as in intermediate forms in Indo-Aryan.

? before a word or form indicates doubt as to the form proposed, or the form being the source of the word or connected with the word under discussion.

√ means root.

‡ before a word means it is dialectal, and not universally recognised.

† before a word indicates that it is obsolete.

\+ joins up the component parts which are at the basis of a Modern Indo-Aryan or other word.

-, the hyphen, has been used to analyse words into their roots and affixes. When a word (Sanskrit or Pali or otherwise) is given with a hyphen at the end, it indicates merely the base form, to which other additions of suffixes or inflexions were made. Prefixes similarly have a hyphen after them, and suffixes and inflexions before them.

‘ ’: names of books are given within inverted commas.

« » have been used in all *transliterated* forms, except when they occur by themselves within ordinary brackets ( ).

[ ] square brackets enclose words in *phonetic transcription* (and in some cases also ordinary English words, and transliterated forms, occurring within ordinary brackets).

( ) in a transliterated or phonetically transcribed word shows that the letter or sound occurs optionally, and can be omitted either in writing or in pronunciation.

TRANSLITERATION

Transliteration of Bengali.

অ has been transcribed as « å », when the original sound of [ɔ] (see below, under *Phonetic Transcription*) is retained ; as « å' » or « ō » indifferently, when as a result of Umlaut and loss of following « i » or « u » the sound is altered to [o] : when the spelling is kept in view, « å' » has been used, and when the pronunciation, « ō ». The letter « å » represents a long অ « å » sound which seems to have resulted in OB. and MB. from an earlier group « ăă, ăẘă, ăhă ». A quiescent অ, not indicated in the Bengali spelling by ্ (= the « virāma » or « hasanta »), is transcribed « ∅ », i.e. a deleted « a » : *e.g.*, অনল = « ånål∅ », but চ'ল্ল « cå'llå (cōllō) ». In a final য় « yå », where it represents an earlier « -ē », the « å » has not been noted : য় = « -y ». In personal names and names of books, simple « a » has been used for অ, and not « å », and the symbol « ∅ » also has not been employed.

আ, ই, ঈ, উ, ঊ have been transcribed respectively as « ā, i, ī, u, ū ». As results of « sandhi », « â, î, û » also have been employed. ই ঊ forming separate syllables, in writing at least, are denoted by « ï, ü ».

ঋ » have been transcribed as « ṛ, ḷ », with a vertical bar below, the commoner « r, l » being retained respectively for the so-called 'cerebral r' (ড়, ঢ়) and for the 'cerebral l' (= ळ, not found in Bengali).

এ ঐ ও ঔ = « ē, åi, ō, åu » ; « Sandhi » এ, ও = « ê, ô ».

ং = « ṅ » or « ṁ » ; ঃ = « ḥ » ; ঁ = « ˜ » on the top of the vowel (*e.g.*, অঁ = ã, আঁ = ã̆, ইঁ = ĩ, ঈঁ = ī̃ ; উঁ = ũ, ঊঁ = ū̃ ; এঁ = ẽ, ওঁ = õ).

ক, খ, গ, ঘ, ঙ = « k, kh, g, gh, ŋ ».

চ, ছ, জ, ঝ, ঞ = « c, ch, j, jh, ñ ».

ট, ঠ, ড, ঢ, ণ = « ṭ, ṭh, ḍ, ḍh, ṇ » ; ড়, ঢ় = « ṛ, ṛh ».

ত, থ, দ, ধ, ন = « t, th, d, dh, n ».

প, ফ, ব, ভ, ম = « p, ph, b, bh, m ».

য = « j » in *tadbhavas* mainly ; and in some cases in *tatsamas*, য = « y ». See below, under য়.

র, ল = « r, l ».

ব = « b » when initial, intervocal and final, « w » when post-consonantal.

শ, ষ, স = respectively « ś, ṣ, s ».

হ = « h ».

য় = « y ». য or য়, subscript or post-consonantal (= ɟ) is transcribed « y ». য় has in some cases been ignored, where it stands for the « w » glide. Glide য় has been occasionally transcribed as « ẏ » and also as « ẇ » (see text, pp. 338-342). The group ত্য় has generally been transcribed as « w », (or « ẇ » to indicate its character as a glide sound).

ক্ষ = « kṣ » ; জ্ঞ = « jñ ».

Transliteration of Sanskrit.

On the lines for Bengali as above. Practically the Geneva System has been followed.

« ē, ō » have invariably been used for ঀ, ও, to emphasise upon their long quantity ; and the long diphthongs ঐ, ঔ are written « āi, āu ». Accent in Vedic has been denoted by « ′ » on the vowel bearing it : *e.g.*, « á, í, ṛ′, ā́, ū́ ».

The « anusvāra » has been indicated by « ṅ » or by « ṁ » following the etymology.

ঋ = « ṛ » ; ৠ = « ṝ » (i.e., « r̄ ») ; ঌ = « ḷ » ; ৡ = « ḹ » ; ৡ্হ = « ḷh ».

ব has been denoted by « v » as usual, but in some cases, « w » has been employed, to emphasise upon the bilabial pronunciation.

For « ə », see under *Phonetic Transcription* below.

Transliteration of Prakrit.

« ă, ĕ, ŏ » have been used to emphasise on their short quantity before double consonants. Disyllabic groups—« aï, aü ».

The « anusvāra » = « ṅ, ṁ ».

The « ya-śruti » has been denoted by « ẏ », and « ẇ » has been used for a similar « w » glide.

In some cases, spirant pronunciation has been indicated by « ɣ, ɹ, ð, ƀ ».

For « ə », see under *Phonetic Transcription* below.

Other Indian Languages.

Quiescent « ă » has not as a rule been indicated in languages other than Bengali by « ঁ » as it has been done in Bengali, except to make clear the derivation of a form or word in a particular case.

Ōṛiyā and Assamese « å », as in Bengali.

Bihārī « å̇ », a rounded vowel sound as in Middle Bengali.

Small « ᵃ, ⁱ, ᵘ », at the top of the line, indicate the attenuated final vowels of Maithilī, Sindhī, etc.

The diphthongs are written « å̆i, å̆u » for Oṛiyā and Assamese, and « ăi, ău » for the rest. The nasalised diphthongs are « ăĩ, ăũ ».

The stops with simultaneous glottal closure, as for instance in East Bengali and in Sindhī, have « ' » after them: *e.g.*, « g', b' ».

Generally « ṛ, ṛh » have been used for intervocal ড(ড়), ঢ(ঢ়) « ḍ, ḍh » where these letters are pronounced as the 'cerebral r, rh.'

For the letter ৱ, « v, w » have indifferently been used: generally « w » for Hindōstānī. Assamese and Ōṛiyā follow the Bengali way—« b-, -b », « -b- » (intervocal), « -w- » (post-consonantal).

Tamil palatals have been indicated by the italic « *n*, *r*, *ṭ* », and the Tamil voiced cerebral spirant by « ḻ ».

« ź » is the voiced form of the sibilant « ś » = ষ of Skt., which occurred in Indo-Iranian.

« ç » has been used for the palatal fricative sound, unvoiced, of Indo-Iranian.

Persian and Arabic.

For the transliteration and phonetic transcription from these speeches, see under 'Phonology of the Foreign Element: Persian,' forming Chapter VI. of *Phonology*, pp. 559 ff., esp. p. 573.

« x » has generally been employed to indicate the letter خ: the usual transcription is « kh » or « k̲h̲ ».

« š » = ش, *sh* of English; « ž » = ژ, or *s* as in English *pleasure* = French *j*.

PHONETIC TRANSCRIPTION

The symbols are those employed by the International Phonetic Association. An introduction to this system is to be found in 'The Principles of the International Phonetic Association' London, 1912, and 'L'E'criture phonétique international,' London, 1921 publications of the Association. See also G. Noël-Armfield's 'General Phonetics,' 3rd ed., Cambridge, 1924. The symbols occurring in the present book are given below.

[:] after a symbol denotes length of the sound indicated by it, whether a vowel or a consonant; [˜] on the top of a vowel indicates nasalised pronunciation; and [ˈ] before a syllable indicates stress upon it and [ˈˈ] indicates strong stress. The little vertical bar [ˌ] beside a stop sound shows that it is unexploded, *e.g.*, [pˌ, tˌ, kˌ].

[a] : 'front *a*,' as in North English *man, cat*, heard in dialectal West Bengali pronunciation of a word like কা'ল [ka:l] *yesterday, tomorrow*, as opposed to কাল [kɑ:l] *time*. Nasalised form = [ã].

[ɐ] : a central vowel occurring in Modern Portuguese : see pp. 621-622.

[ɑ] : 'back' or 'central' *a*—as in Standard Bengali কাকা [kɑkɑ] *uncle*, আমি [ɑmi] *I*. Nasalised form = [ɑ̃].

[æ] : the sound of *a* as in Southern English *man, cat* = West Bengali sound as in কেন [kæno] *why*, ত্যাগ [tæ:g] *abandonment*. Nasalised form = [æ̃].

[ɒ] : the sound of *o* as in Southern English *hot, lot* : it occurred in Old Bengali for the later অ = [ɔ] (see below) : see Text, p. 258. It is a kind of [ɔ] without lip-rounding.

[b] : as in English = the Bengali ব.

[b'] : made with simultaneous glottal closure, as in Sindhī, or in dialectal East Bengali, *e.g.*, [b'ɑ:t] *boiled rice* = Standard ভাত [bʰɑ:t].

[bfi] : the भ of Sanskrit and Hindī etc.: the voiced labial stop aspirated.

[β] : bilabial fricative, the same as [v] for which see below.

[c] : palatal stop, unvoiced—the old sound of Skt. च—resembling in acoustic effect a fronted or palatalised « k », i.e., a sort of « ky »

[ch] : the same aspirated = the old sound of Skt. छ.

[c͡ɟ] : palatal affricate, unvoiced = the West Bengali চ.

[c͡ɟh] : unvoiced palatal affricate, aspirated = West Bengali ছ.

[ç] : unvoiced palatal fricative, the sound of *ch* in German *ich* : the old value of the Skt. श.

[d] : interdental stop, voiced = দ of Bengali. (In OIA., this sound was alveolar).

[d'] : the same, with accompanying glottal closure, as in dialectal East Bengali [d'ɑ:n] *paddy* = Standard Bengali ধান [dʱɑ:n].

[dfi] : voiced interdental stop, aspirated = ধ of Standard Bengali.

[*d*] : voiced alveolar stop, as in English and Assamese.

[ḍ] : voiced cerebral or retroflex stop made with curled-up tongue-tip = ড of Sanskrit. The Bengali ড is of the same class, but it is pronounced at a lower position, approaching the alveolar region.

[ḍ'] : the above, with accompanying glottal closure : found in Sindhī, and in dialectal East Bengali, *e.g.*, [ɖ'ɑ:k] *drum, tom-tom*; *to cover* = Standard Bengali ঢাক [ɖʱɑ:k].

[ḍfi] : voiced cerebral stop aspirated = Sanskrit ढ, West Bengali ঢ.

[ð] : voiced interdental spirant = *th* in English *this* [ðɪs], *then* [ðɛn], same as ذ of Arabic as in ذات [ðɑ:t], نذر [naðr] etc.

[đ] : voiced dental or alveolar stop, velarised, i.e. made with simultaneous raising of the back of the tongue : occurring in Arabic (see Text, pp. 567ff).

[đɬ] : voiced alveolar unilateral, velarised : occurring in Arabic (see p. 568).

[d̪z] : voiced dental or alveolar affricate = dialectal East Bengali জ.

[d̪ʒ] : voiced supra-alveolar or palatal affricate, as in English *judge* = [dʒ͡ʌdʒ͡].

[e] : high-mid front vowel, as in West Bengali দেশ [de:ʃ] *land, country*. Nasalised form = [ẽ].

[ŏ] : 'semi-vowel e,' the Bengali য় as in মায়া [maĕa] (Skt. माया = [ma:ĭa:]).

[è] : a sound intermediate between [e] and [ɛ] (see below).

[ə] : the 'neutral vowel' or 'shĕvā'—a central vowel as in English *again* [əgeĭn], Hindōstānī मूरत [mu:rət] *image*, रतन [rʌtən] *gem*, etc.

[ɛ] : low-mid front vowel, as in dialectal East Bengali কেবল [kɛbəl] *only*, or in English *get* [gɛt]. Nasalised form = [ɛ̃].

[ɜ] : a central vowel, as in English *bird*, *her* [bɜ:d, hɜ:(ɹ)].

[f] : unvoiced denti-labial spirant, as in English. Often heard in Bengali for ফ = [ph].

[ꜰ] : unvoiced bilabial spirant, the puffing sound made in blowing out a candle : commonly heard in Bengali for ফ = [ph] (in dialectal East Bengali also for প = [p]).

[g] : velar stop, voiced = English *g* in *go*, Bengali গ. (The symbol generally used for this sound in the IPA. alphabet is [ɡ]).

[g'] : the above, with glottal closure : found in Sindhī, and in dialectal East Bengali, as in [g'ɔ:r] = Standard Bengali ঘর [gɦɔ:r] *house*.

[gɦ] : voiced velar stop, aspirated = Skt. घ, West Bengali ঘ.

[ɣ] : voiced velar fricative = غ of Persian : found in dialectal East Bengali in an intervocal position.

[ɢ] : voiced uvular stop (the IPA. symbol commonly used is [ɢ]).

[ɣ] : voiced uvular fricative = Arabic غ.

[h] : unvoiced glottal fricative, 'unvoiced h,' the *h* sound of English, as in *hat*, *happy*. This is the Skt. and Bengali « visarga », and the « prāṇa » or aspiration in the « aghōṣa mahā-prāṇa » or unvoiced aspirated sounds—[kh, ch (c͡ɧ), ṭh, th, ph].

[ɦ] : voiced glottal fricative, or 'voiced h' = English *h* as in *behind* [bəɦaĭnd], *perhaps* [pəɦæps] ; = Sanskrit ह, Bengali হ, Arabic ه.

[ḥ] : a whispered *h*, = ح, the so-called 'emphatic h' of Arabic.

[i] : high front vowel, unrounded, as in Bengali দীন [di:n] *poor*, দিন [di:n] *day*, English *seen* [si:n, siĭn]. Nasalised form = [ĩ].

[ɪ] : high front vowel, retracted and brought down very near high-mid position = English *i* as in *pit* [pʰɪt].

[ĭ] : 'semi-vowel or consonantal i' : the old value of Skt. व.

[j] : voiced palatal fricative, like English *y* in *yes* [jɛs].

[ɟ] : a stronger form of the preceding, with greater audible friction, approaching [ʒ], for which see below, after [z].

[ɟ] : voiced palatal stop = Skt. জ (the old pronunciation of which was like that of a fronted or palatalised গ = « gy »).

[ɟʒ] : palatal affricate, voiced = West Bengali জ.

[ɟʒ'] : palatal affricate, voiced, with glottal closure, found in dialectal East Bengali for the next sound, [ɟʒɦ], of Standard Bengali.

[ɟʒɦ] : palatal affricate, voiced = West Bengali ঝ.

[k] : unvoiced velar stop = Bengali ক, English *k* as in *baker* [beĭkə].

[kʰ] : the same, aspirated slightly = the English sound in *cap* [kʰæp], *king* [kʰɪŋ].

[kh] : the same, aspirated strongly = Skt. খ, Bengali খ.

[l] : 'clear l,' as in South English *long* [lɒŋ], = Bengali ল.

[ɫ] : 'dark l,' or velarised l, pronounced with simultaneous raising of the back of the tongue towards the soft palate, as in South English *well* [wɛɫ], *Bill* [bɪɫ].

[l̢] : 'cerebral l,' made with the curled-up tip of the tongue against the dome of the palate = Vedic ळ. The same aspirated, ळ় = [l̢ɦ].

[l̩] : 'vocalic l'—forming a syllable with another consonant = Skt. ল্; like the *l* in English *bottle* [bɒt̪l̩, bɒt̪ɫ].

[lʲ] : slightly palatalised l as in dialectal West Bengali (see p. 539).

[ʎ] : ' palatal l,' pronounced with simultaneous raising of the front of the tongue towards the hard palate : a sound found in dialectal French, Italian, Spanish, Portuguese, etc.

[m] : bilabial nasal = the Bengali ম.

[m̩] : 'vocalic m,' as in English *bottom* [bɒt̪m̩].

[ɯ] : high back unrounded vowel = an [u] made with spread lips : found in Tamil, in Japanese, and in other languages.

[n] : alveolar nasal = the Bengali ন.

[ɳ] : retroflex or cerebral nasal = the Sanskrit ণ.

[n̩] : 'vocalic n,' as in English *button* [bʌt̪n̩].

[ŋ] : velar nasal : the Skt. ঙ, Bengali ঙ, ং, English *ng* as in *sing* [sɪŋ].

[ɲ] : palatal nasal : the Skt. ञ, Bengali ঞ, French and Italian *gn*, Spanish *ñ*.

[o] : high-mid back vowel, rounded, = Bengali ও in লোক [lo:k] *person, world*. Nasalised form = [õ].

[ŏ] : 'semi-vowel o,' *e.g.*, Bengali ওয় in খাওয়া [khaŏa].

[ò] : is a sound intermediate between [o] and [ɔ] (see below).

[œ] : low-mid front vowel, rounded, = the French sound as in *œuf* [kœʀ].

[ɔ] : low-mid back vowel, rounded : the sound as in English *law* [lɔ:], = Bengali অ. Nasalised form = [ɔ̃].

[ɸ] : high-mid front vowel, rounded, = the German *ö* as in *schön* [ʃɸ:n], French *eu* as in *peu* [pɸ].

[p] : bilabial stop, unvoiced : Bengali প.

[pʰ] : the same, slightly aspirated : English *p* in *pat, pick* [pʰæt, pʰɪk].

[ph] : the same, strongly aspirated : Skt. ফ, proper sound of Bengali ফ.

[q] : uvular stop, unvoiced, = Arabic ق.

[r] : alveolar trilled, voiced : Bengali র, Scots English *r*.

[ɾ] : flapped r, or so-called 'cerebral r' = Bengali ড়, Hindī ड़.

[ɽ] : 'vocalic r' : = Skt. ऋ.

[ɹ] : 'fricative r,' alveolar, as in South English.

[ɻ] : retroflex fricative r, = the Tamil sound often transliterated « ḷ ».

[rʲ] : slightly palatalised r, as in dialectal West Bengali (see p. 539).

[ʀ] : trilled 'uvular r,' as in Northern French.

[s] : dental or alveolar sibilant, = Skt. स, East Bengali ছ, English *s*.

[ʂ] : unvoiced dental or alveolar sibilant, velarised, = Arabic ص.

[ʃ] : palatal sibilant made with the blade of the tongue, with slight lip-rounding, = English *sh*, Arabic and Persian ش (in *transcriptions* written « š »).

[ʃ̣] : palatal sibilant made with the front of the tongue = Bengali শ, ষ, ঽ.

[ʂ̣] : cerebral or retroflex sibilant made with the tip of the tongue curled-up against the dome of the palate = Sanskrit ष.

[t] : unvoiced inter-dental stop = Bengali ত. (The Skt. त was originally « danta-mūlīya » or alveolar, like the English *t*.)

[th] : the same, aspirated strongly = Sanskrit थ, Bengali থ.

[ɾ] : alveolar *t* as in English *better* [bɛɾə].

ɾ[ʰ] : the same slightly aspirated = English *t* in *tap, tip* [ɾʰæp, ɾʰɪp].

[ʈ] : retroflex or cerebral stop, unvoiced, = ट of Skt. The Bengali ট is of the same class, but it is pronounced at a lower position, approaching the alveolar region.

[ʈh] : the same aspirated = Sanskrit ठ, Bengali ঠ.

[ʇ] : unvoiced dental or alveolar stop, with velarisation, = Arabic ط.

[ʦ] : unvoiced dental or alveolar affricate = East Bengali ৎ.

[t͡ʃ] :supra-alveolar and palatal affricate, unvoiced = English *ch* as in *church* = [t͡ʃɜ:t͡ʃ].

[u] : high back rounded vowel = Bengali উ, ঊ. Nasalised form = [ũ].

[ʊ] : high back rounded, slightly advanced and approaching the mid position, = English short *u* as in *put, book* [pʰʊt, bʊk].

[v] : voiced denti-labial fricative, = English *v* ; frequently heard in Bengali for ভ = [bfi].

[ʋ] : voiced bilabial fricative : it is the common Indian value of the « antastha va » = ব : very commonly heard in Bengali for ভ = [bfi].

[ʌ] : a central vowel (or rather, a low-mid back vowel), considerably advanced, found in English, as in *sun, enough* [sʌn, ɪnʌf] = the Hindī stressed অ as in রতন [rʌtən], and very probably also the Sanskrit « saṁvṛta » অ.

[w] : bilabial semi-vowel, or 'consonantal u' (= [ŭ]), as in English *wet, win*, the old value of the Skt. « antastha va » = ব.

[w̃] : bilabial semi-vowel, or fricative (= [ʋ]), nasalised, occurring in Apabhraṅśa, in Hindī, in Middle Bengali.

[x] : velar spirant, unvoiced = German *ch* in *ach*, Persian خ : found in dialectal East Bengali. Occurs also in Slav, in Germanic: cf. pp. 243, 246, 387 : see also p. 558. Ordinarily transcribed « kh »

[χ] : uvular spirant, unvoiced, = the spirant form of [q].

[y] : high front vowel, rounded — an [i] pronounced with rounded lips = French *u*, German *ü*.

[z] : alveolar voiced spirant = English *z*, Persian ز.

[ʒ] : the same sound, velarised, occurring in Arabic (= ظ)

[ʒ] : voiced palatal fricative = French *j*, Persian ژ, (in *transliterations* from the Persian written « ž »).

[θ] : inter-dental fricative, unvoiced = English *th* in *thin*, *thank* [θɪn, θæŋk], Arabic ث.

[ʾ] : the 'glottal stop,' = Arabic 'hamzah' (أ, ء).

[ʿ] : the 'laryngal fricative' = Arabic 'ʿayn' (ع).

(In *transliteration*, the above two are denoted respectively by « ' » and « ‘ »).

[n, ŋ, ñ, ṇ, m] are respectively the nasals [n, ŋ, ɲ, ɳ, m] pronounced very brief : see pp. 360 ff.

[a, i, u] are the vowels [a] or [ɑ], [i] and [u] respectively, pronounced very brief.

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INTRODUCTION

INTRODUCTION

1. Bengali is a member of the Indic group of the Indo-Iranian or Aryan branch of the Indo-European family of languages. With its sister-speech Assamese, Bengali forms the easternmost language in the IE. linguistic area, just as the Celtic Irish and the Germanic Icelandic are the westernmost. It has been in existence as an independent and characterised language, or, rather, as a distinct dialect group, for nearly ten centuries.

2. Among the languages and dialects of India, Bengali is the speech of the largest number of people,[1] 48,367,915 persons having returned it as their mother-tongue during the census of 1911. Bengali is spoken by 92 per cent. of the population of the province of Bengal; and portions of Assam and of Bihar and Orissa linguistically form parts of Bengal. Bengali shades off into its sister-languages Oṛiyā, Magahī and Maithilī in the west, and into Assamese in the north-east. Apart from other Indo-Aryan speeches, notably Hindōstānī (which is spoken with varying degrees

[1] Of course, a modified form of Western Hindī (Hindōstānī, Hindī or Urdū) is the *lingua franca* of all Aryan-speaking India, and is the established language of literature, of education, of the law-court and of public life in the Bihārī, Eastern Hindī, Panjābī and Lahndī, Central and Western Pahārī, and Rājasthānī tracts. From this, Hindī or Hindōstānī is often loosely regarded as the language of the people of all Aryan India excluding Sindh, Gujarat, the Mahratta country, Orissa, Bengal and A n, Nepal, Kashmir, and to some extent the Panjab,—of a tract with a population of o 112 (including the Panjab, over 133) millions. Hindī or Hindōstānī is unquestionably the most important language of India, and the only speech which can be said to be truly national for all India; but it, together with other forms of Western Hindī, like Braj-bhākhā, Kanaujī, Bundēlī, etc., is the *mother-tongue*, the *home-language* of a little over 41½ millions only (according to the census of 1911). Taking into consideration the number of people speaking it as their mother-tongue, Bengali is the seventh language of the world, coming after Northern Chinese, English, Russian, German, Spanish, and Japanese; although as a great world-speech, Hindōstānī alone of Indian languages can rank with English, French, Spanish and Arabic.

of purity), which are brought into the province by immigrants from the north-west and the west, Bengali has, within recent years, come in contact with Khas-kurā or Parbatiyā (the so-called Nēpālī) at Darjeeling in the north.

On its borders, it meets with several aboriginal languages and dialects. Within the western boundary of Bengali is found Santali (Sāõtālī), a dialect of the Kōl[1] (Muṇḍā) group (of the Austro-Asiatic branch of the Austric family of speeches); and Hō and Muṇḍārī, also Kōl speeches closely related to Santali, are found to the west of Bengali. Besides, two Dravidian dialects, intimately connected with each other, are found to the west of Bengali: Malto, which is spoken in the Rāj-mahāl Hills, and Kurukh (Kũrukh) or Oraon (Orāõ), which just touches Bengali at its extreme western fringe. In the north and the east, Bengali comes in touch with a number of speeches which are members of some six different groups of the Tibeto-Burman branch of the Tibeto-Chinese family. To the north, we have Lepca or Róng, a dialect of the Tibeto-Himalayan group; Dhīmāl, Limbu and Khambu, which are 'pronominalised' speeches

[1] I have a preference for the old, familiar and accurate 'Kōl,' used by the Aryan-speaking neighbours of the Kōl peoples, as an ethnic and linguistic term, to 'Muṇḍā.' 'Kōl' comes from a Middle Indo-Aryan 'Kōlla,' which is found in Sanskrit (also as 'Kōla'); and obviously in Sanskrit it referred to the aboriginal people of Central India. (Cf. New Indo-Aryan 'Bhīl' from earlier 'Bhilla,' found in Sanskrit and Prakrit.) The word 'Kōlla, Kōl' itself seems to be of Kōl origin, and in all probability it is an early Aryan transcription of the source-form, in what may be called 'Old Kōl,' of the modern Kōl words for *man*—Santali [hɔ:ɽ], Muṇḍārī [hoɽɔ], Hō [ho:], Korwā [hoɽ], Kūrkū [ko:ro:]. There is no contempt implied in the use of the word among those who employ it, whatever the Sanskrit 'kōla,' never a popular word, might mean. A tract in Singbhum District in Chota Nagpur is known as Kolhan (<* Kōllānām)=(*the land*) *of the Kōls*: cf. Bhōṭān=(*the land*) *of the Bhōts or Tibetans*. The term 'Kōl' has an extensive employ, whereas 'Muṇḍā' is the designation of only one section of the Kōl people. Besides, it was used by Hodgson to denote this particular group of speeches, which, however, he classed as 'Tamulian,' *i.e.*, Dravidian. (A. Nottrott and P. Wagner, 'A Grammar of the Kol Language,' Ranchi, 1905, pp. 2, iii; LSI., IV, pp. 7, 8.) 'Muṇḍā' has not been able to drive out 'Kolarian' entirely; 'Kōl' seems to be least objectionable, and it is near enough the unmeaning but popular 'Kolarian.'

belonging to the same group, and are spoken by small numbers in the extreme north; Dänjong-kä or Sikkimese, and Lho-ke or Bhotanese, which are closely related forms of Tibetan. To the north-east and east, Bengali meets dialects of the Boḍo group: Boḍo (Bāṛā) or Kacārī (also known as Kōc, Mēc and Rābhā), Garo, and Dīmā-sā, as well as Mrung or Tipurā; it touches the area of the dialects of the Naga group; and dialects of the Kuki-Cin and Burma groups, like Meithei (or Maṇipurī) and Lušai, and Aracanese. Another aboriginal language, not related to the Tibeto-Burman dialects mentioned above, is spoken on the eastern frontier of Bengali, namely, Khasi, belonging to the Mōn-Khmēr group of the Austro-Asiatic languages, and thus connected with the Kōl speeches of West Bengal.

Bengali, like other Aryan languages of India, has spread, and is still spreading, at the expense of the aboriginal tongues.

3. The living Indo-European languages can be arranged and classified under eight branches, which are as follows:

(I) The Indo-Iranian, or Aryan, falling into three [1] groups:

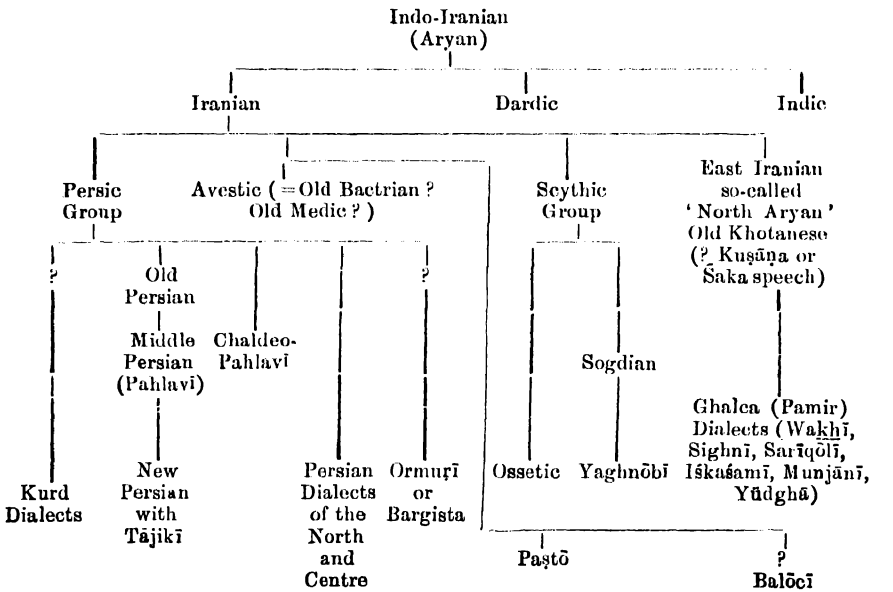
(i) The Indic, Indian or Indo-Aryan group, under which come Vedic, classical Sanskrit, the old Prakrits of the early inscriptions, Pali, and the various Prakrits and Apabhraṁśas of old documentary remains and of extant literature; the modern Aryan languages ('vernaculars') of India; Eḷu, or Old Sinhalese, and modern Sinhalese; and the Gipsy speeches of Armenia, Syria and Turkey, and of Europe.

The inter-relation of the various Aryan languages, so far as it seems likely, is given in the Table under § 5.

[1] I accept Grierson's division of Indo-Iranian into three groups, although this is not admitted by all. (Sten Konow, 'Notes on the Classification of Bashgali,' JRAS., 1911, p. 1, ff., where Dardic is relegated to the Iranian group; Jules Bloch thinks it possible that the source-dialects of present day Dardic, together with the Indian Prakritic speeches of the north-west [and the source-forms of the Gipsy dialects of Armenia and Europe?], formed a distinct Indian dialect-group; JA., 1912, i, p. 336. Another view is that the Dardic speeches are 'ancient Āryan (Vedic) dialects which have been overlaid with Irānian as the result of later invasion' in the time of the Achæmenids, or earlier: E. J. Rapson in the Cambridge History of India, 1922, p. 52.) See below, § 25.

(ii) Dardic, or Piśāca: embracing the languages of the extreme north-western frontier of India, and falling into these subgroups: (a) Kāfir—Bašgalī; Wai-alā; Wasī-veri or Prēsun; and Kalaša, Gawar-batī and Pašai; (b) Khō-wār, or Citrālī; and (c) Šiṇā—Šiṇā proper (7 dialects); Kōhistānī (3 dialects); and Kaśmīrī.

(iii) The Iranian group, which is represented by a number of speeches, ancient and modern, beginning with Avestic (from c. 600 B. C., the generally accepted period for Zaraθuštra, to whom are attributed the oldest portions of the Avesta, the Gāθās), and Old Persian of the Achæmenian cuneiform inscriptions (about B.C. 520—350) and spreading from the Black Sea region to Central Asia. The relationship among the various Iranian speeches seems to be as in the Table below (A. Meillet, 'Grammaire du Vieux Perse,' Paris, 1914, § 5; Sten Konow in A. W. R. Hoernle's 'MS. Remains of Buddhist Literature found in Eastern Turkestan,' Oxford, 1916, pp. 237-238; LSI., X).



The subgroups other than Persic are sometimes classed together as 'Medic,' in the sense of 'non-Persic.'

(II) The Armenic Branch; (III) The Baltic-Slavic Branch; (IV) The Albanian Branch; (V) The Hellenic Branch; (VI) The Italic Branch; (VII) The Celtic Branch, and (VIII) The Germanic or Teutonic Branch.

4. Besides the above eight branches, members of which are living languages at the present day, there were a number of speeches both in Europe and in Asia, now extinct, which were members of the Indo-European family; *e.g.*, the languages of the Ligurians, the Iapygians and Messapians, and the Veneti of Italy; the languages of the Illyrians and Dacians, and of the Thracians; Phrygian, spoken in Ancient Asia Minor, a speech related to Thracian, and connected by some with the Armenian; the remains in the above are extremely scanty, and it is impossible to find out their proper relationship within the family. Within recent years have been discovered, from Chinese Turkistan, Buddhist and other documents, in Indian Brāhmī characters, of an Indo-European speech, spoken up to the end of the first millennium A.C. in the Tarim Valley, in the cities of Kucha (Dialect B) and Qara-shahr and Turfan (? Dialect A); and this speech, to which the names Kuchean and Tokharian have been given, and which has some unique points of interest, agreeing more with the Indo-European languages of the west (Celtic, Italic, and Slav and Armenian) than of the east (its neighbour speeches of the Aryan group), has been relegated to a branch by itself. (A. Meillet, 'Le Tokharien,' Indogermanisches Jahrbuch for 1913; Sylvain Lévi, 'Le "Tokharien B," Langue de Koutcha,' JA., 1913, ii, pp. 311-380). The language of the Hittites of Asia Minor has been declared to be Indo-European by Friedrich Hrozny' ('Die Sprache der Hethiter,' Leipzig, 1917) and J. S. Marstrander ('Caractère indo-européen de la Langue hittite,' Christiana, 1919); but although this has been disputed or regarded as not established with certitude by some, there can be no question about the Indo-European character of the language. (Cf. also ZDMG. for 1922: Johannes Friedrich, 'Die hethitische Sprache,' pp. 153-173; E. Forrer, 'Die Inschriften und Sprachen des Hatti-Reiches,' pp. 174-269; both these writers agree as to the Indo-European character of the speech, which is named 'Hethitisch,' or 'Kanisisch' by Forrer, as the language of an

'Indo-European' ruling class, in contradistinction to the non-IE. speech of the people of the Hittite kingdom, called 'Chattisch' or 'Proto-ḫattisch.')

Also see below, § 25.

5. The inter-relation between the various languages and dialects of the Indo-Aryan group may be indicated by a Table as in the opposite page, following mainly Grierson in the 'Linguistic Survey of India.'

This Table seeks to indicate merely the general lines of development of Aryan in India. There has been a very large amount of mutual influence among the various local speeches, and above all, the dominant influence of the literary languages, or *koinēs*, which has frequently overlaid the normal line of development of a local dialect, and in this way has obscured to a considerable extent its original character.

6. Of the various modern Indo-Aryan languages or groups of dialects, some have been quite important and dominant as literary languages or as languages of inter-provincial intercourse from very early times, while others have been nothing but forms of local *patois*. Short notes on their respective extent, importance and antiquity are given below. For maps, exact figures, and details, Grierson's 'Linguistic Survey of India' is our great authority.

7. Beginning from the extreme north-west, we have the Dardic languages, which, although they do not belong to the Indo-Aryan group, may be noticed in this connection. These languages are spoken in the Kashmir valley, and in the region to the north and north-west of Kashmir, namely, Dardistan (Gilgit etc.), Chitral and Kafiristan, with the Hindu Kush as its north-western boundary. The Dardic languages, or, rather, ancient dialects of the same group, influenced Indo-Aryan dialects of the north-west and the west, of which Western Panjābī (Lahndī) and Sindhī are typical examples. (See §§ 11, 12, 25.) Excepting Kaśmīrī, the Dardic languages, although philologically important, have no exalted position. The number of people speaking them does not exceed 2 millions, of which Kaśmīrī alone takes up over 1 million. The Dardic speeches of the present day, barring Kaśmīrī, were never cultivated, and were written down only in the 19th century, so that no specimens of an earlier period are available. From the earliest times Kashmir was a

part of the Indo-Aryan world in culture and religion as well as in politics, whereas the other Dardic tracts, because of their inaccessibility, were never completely brought under Indian influence and organisation, so that the people retained more or less their primitive ways. Kaśmīrī consequently has always been exposed to the influence of the Indo-Aryan speeches, Sanskrit and the Prakrit vernaculars, from which the other Dardic speeches are free. There was literary cultivation of Old Kaśmīri, and probably the lost 'Bṛhat-kathā' of Guṇâḍhya, written in the 'Paiśācī' language, was in Old Kaśmīrī, if it was in any Dardic speech at all. We may be quite certain that Kaśmīrī was cultivated before 1000 A.C. There is some Middle Kaśmīrī literature. The earliest specimens of Kaśmīrī that have been made accessible to us are the poems of Lallā, a mystic poetess of the Śaiva Tāntrika cult, of the 14th century ('Lallā-vākyāni,' ed. by Grierson and Barnett, RAS., London, 1920). Kaśmīrī used to be written formerly in the Śāradā character, allied to the Dēva-nāgarī, but at the present day, since over 90% of its speakers are Moslems, the Perso-Arabic character is used, although a modified Dēva-nāgarī has been devised and employed, for philological purposes mainly. Kaśmīrī was at first regarded as a Sanskritic or Indo-Aryan language, owing to the large Indo-Aryan element in it, but its Dardic affinities have been fully established (Grierson, 'Linguistic Classification of Kashmīrī,' IAnt., 1915, p. 270).

8. Western Panjābī or Lahndī, also known under various other names (Hindkō, Jaṭkī, Mūltānī, Cibhālī, Pōṭhwārī etc.), is a group of dialects current among nearly 5 millions of people in Western Panjab, who employ for literary purposes Urdū and to a slight extent Hindī and Eastern Panjābī. Western Panjābī does not possess much literature, except some Sikh prose narratives like the 'Janam-sākhī,' and some popular ballads and songs, of which the language is often mixed with eastern forms of speech. The native system of writing for Western Panjābī, with the 'Laṇḍā' characters, a variety of Śāradā, is in comparatively little use now, Persian characters being commonly employed when the language is put in writing.

9. Eastern Panjābī, or Panjābī, is the language of nearly 16 millions (according to the census of 1911). This speech is only one form of a Common Panjābī, extending from the west of the Western Hindī to the region of Paṣtō; only it has from early times come under the influence of the Midland speech of the west Gangetic region. There are various dialects of Eastern Panjābī, a noteworthy form of it being Ḍōgrī, which is spoken in the state of Jammu and in the district of Kangra. There is a slight literary culture in it, the oldest extant specimens being a few Sikh hymns dating from the 16th century. Sikhs at the present day use E. Panjābī to some extent for literary purposes, employing the Gur-mukhī character, which is a reformed kind of Laṇḍā; but Hindōstānī (Urdū or Hindī) has always been the dominant language among E. Panjābī speakers. The Persian character is also sometimes used to write E. Panjābī.

10. Sindhī is the language of the lower Indus valley and of Kachh, and is spoken by a little over 3½ millions. It has 5 dialects—Vicōlī, Siraikī, Lāṛī, Tharēlī and Kacchī. Sindhī is written in an elaborated form of the Perso-Arabic alphabet, but the Laṇḍā character, proper to it, is in common use among merchants, and Gur-mukhī is occasionally employed. In its grammatical forms, Sindhī retains many archaic features, and in its phonetics it is remarkable in possessing four peculiar sounds not found in any other Indian language, Aryan, Dravidian, Kōl, or Tibeto-Chinese, *viz.*, [g'], [ɟ' or ʄ'], [ḍ'] and [b'], which are only [g, ɟ, ḍ, b] pronounced with simultaneous closure of the glottis. In phonetics and morphology there are points of agreement between Sindhī and Panjābī (W. and E.). Sindhī has a little literature of ballads and prose tales, and of compositions in the Persian style.

11. The dialects of the Rājasthānī group (Mārwāṛī, Jaipurī, Mēwātī, Mālavī and others) are spoken by over 14 millions, and they seem to form, with Gujarātī, a separate branch of the Indo-Aryan family, which has as its basis the early IA. dialect (or dialects) current in Malwa and Gujarat, strongly modified by the neighbouring Śaurasēnī speech of the Midland (§ 13), and in times *post* 500 A.C., also to some extent influenced by the language of the Gurjara tribes (possibly Dardic in origin), who came from

the north-west and settled in Rajputana and Gujarat and became the rulers there. The Western or Mārwāṛī form of Rājasthānī is in reality the immediate sister of Gujarātī, the eastern dialects agreeing more with Western Hindī. The exact affiliation of the Eastern Rājasthānī dialects (Mēwātī, Jaipurī and Hāṛautī etc., Mālavī and Nimāṛī), whether they are more intimately connected, in their origin, with Western Hindī or with W. Rājasthānī-Gujarātī, cannot be determined, in the absence of genuine ancient remains in them; but it has been found out that W. Rājasthānī and Gujarātī are derived from the one and same source-dialect, to which the name 'Old Western Rājasthānī' has been given (L.P. Tessitori, 'Notes on the Grammar of Old Western Rājasthānī,' IAnt., 1914-1916: Introduction). This OWR. is represented by a respectable literature, mostly by Jain authors, and this literature dates from the 14th century and earlier to the end of the 15th century. Gujarātī must have differentiated from OWR. in the 16th century into a separate language, which is now spoken by over 10 millions. The first great poet of Gujarat, Narasiṅh Mēhtā, belongs to the 15th century, but the language of his poems, which are very popular, has been modernised in the course of centuries. The dialects of Rājasthānī are not much used for literary purposes now. The language of the Midland has always been dominant in Rajputana. In the earlier days, the Śaurasēnī Prakrit and Śaurasēnī Apabhraṅśa had spread their influence over the original Indo-Aryan dialects spoken in Rajputana and Gujarat; and the literary dialect of the Old Western Hindī period, Avahaṭṭha or 'Piṅgala,' was as much cultivated by the bards of Rajputana as 'Ḍiṅgala' or the local Rājasthānī dialects, especially Mārwāṛī; and at the present day, Hindī is almost the sole literary language. There is, however, a rich literature in Rājasthānī, mostly in Mārwāṛī, and to some extent in Jaipurī, consisting mainly of bardic poems and chronicles. This literature has been explored, and its nature made known, by Tessitori, who edited, before his lamented and untimely death, some fine Mārwāṛī poems (Journal and Proceedings of the ASB., 1914, 1916-17-19-20; Bib. Ind., Rājasthānī Series).

12. The Pahāṛī or Khaśa dialects present a linguistic complication. According to Grierson, the original speech of the Khaśa tribes, who spread

from Western Himalayas into the eastern montane tracts, was of Dardic origin, and like the Darús, the Khaśas were Aryans outside the pale of Hindu society. Indo-Aryan speakers from the plains, mostly from Rajputana, migrated north into the Himalayas among the Khaśas, and Hinduised them, from the early centuries of the Christian era; and the Indo-Aryan dialects they brought completely killed off the original speech of the Khaśas, and became transformed into the present-day Pahāṛī dialects; which are thus forms of south-western (Rājasthānī) IA., carried to the Himalayas at a late period, and modified more or less by Dardic whose place they took, the traces of Dardic being stronger in the west. A nearly analogous case is that of Kaśmīrī, which is Dardic profoundly modified by Indo-Aryan (from the Panjab), only it did not give up its native character and become absorbed by IA.

Khas-kurā (called also Parbatiyā, Gōrkhālī or Nēpālī) is the most important Pahāṛī speech. The other Pahāṛī dialects are interesting philologically, but otherwise they have not much importance. Excluding Khas-kurā, for which exact figures are wanting, the Pahāṛī dialects are spoken by less than 2 millions. Khas-kurā seems to be ousting rapidly the Tibeto-Burman speeches of Nepal. It originally spread from Western Nepal, and its oldest remains do not go beyond the latter part of the 18th century. Maithilī seems to have been current in South-eastern Nepal before the advent of Khas-kurā; in any case, Awadhī, Maithilī and Bengali were used as languages of culture in the court of the (Tibeto-Burman speaking) Nēwārī kings, who ruled before the Gurkhas, as is evidenced by a number of dramas written in the above languages in Nepal, right down to the middle of the 18th century (*e.g.*, A. Conrady, 'Hariścandra-nṛtyam,' Leipzig, 1891; Nonī-Gōpāl Banerjee, 'Nēpālē Bāṇgālā Nāṭak,' VSPd., 1324 San, Introduction; C. Bendall, 'Cat. of Buddhist Skt. MSS. in the Univ. Libr. of Cambridge,' 1883, pp. 83-84, 183; 'Kat. der Bib. der DMG.', referred to by Bendall and Conrady). Kumāūnī and Garhwālī, and other forms of Central Pahāṛī, and the various dialects grouped together as Western Pahāṛī, have no literature worth mentioning. Hindī is the established language of literature in the Central Pahāṛī region.

13. The Central Indo-Aryan language, Western Hindī, is spoken by over 41½ millions. Its chief forms are (i) Braj-bhākhā, the dialect spoken round about Bareilly, Aligarh, Agra, Mathura, Dholpur and Kerauli; (ii) Kanaujī, in the upper Doab, east of the Braj-bhākhā area; (iii) Bundēlī, in Bundelkhand and part of Central India; (iv) Bāṇgarū or Hariānī in South-eastern Panjab; and (v) the dialects to the north of Braj-bhākhā, from Ambala to Rampur, to which the name 'Vernacular Hindōstānī' has been given, as they approach nearest Hindōstānī as now written (Hindī or High Hindī and Urdū). The oldest remains of W. Hindī extant are in the 'Prithīrāja-Rāsau' of Canda Bardāī (12th-13th centuries). The language there is much under the influence of literary Prakrit and Apabhraṅśa of the earlier periods. The 'Prākṛta-Paiṇgala,' which is a treatise on Apabhraṅśa versification, compiled, in its present form, towards the end of the 14th century, gives in illustration of the metrical rules, a number of poems and couplets, most of which are in a dialect which is essentially Old Western Hindī. The Apabhraṅśa verses quoted in the Prakrit Grammar of Hēma-candra (1088-1172 A.C.) are in a Śaurasēnī speech which is archaic for the time of Hēma-candra, and which represents the pre-modern stage of Western Hindī.

The dialect of Braj is the most important and in a sense the most faithful representative of the old Śaurasēnī speech, the source of the W. Hindī dialects, which was current in the Midland (Madhya-dēśa) of Aryan India, corresponding roughly to South-eastern Panjab, the western districts of the United Provinces (Rohilkhand, Agra and Meerut Divisions), and the tract immediately to the south. Braj-bhākhā has a rich literature, mainly in verse and partly in prose; and it and Awadhī, an Eastern Hindī dialect, formed the common literary vehicles for poetical composition in the Upper Ganges Valley (Hindostan proper), until recent times, when standard Hindōstānī came into being. Hindōstānī is in its origin based on the Western Hindī dialects spoken in and around Delhi, dialects which were strongly influenced by the contiguous Panjābī and Rājasthānī; and as the speech of the capital, it gradually came to be adopted by the Turkī, Persian and Paṣtō speaking nobility of the

Moslem court. Originally a mixed *patois* of the bazaar and the camp («urdū» <Turkī «ordu» *camp*), it came to have a prestige as the language of the capital city and of the Moslem conquerors who settled down in India; and under the successive Moslem dynasties, officials and others from Delhi helped its spread into the provinces, east and west and south, as a convenient *lingua franca*, a natural successor to the Śaurasēnī Avahaṭṭha of the Rajput courts of Northern India immediately before the Musalman conquest. For some time, when it was in a fluid state, with its grammar not yet fixed, and its vocabulary mainly native Indian, it was only a spoken language, the Moslems of foreign origin who spoke it at home using Persian for literary and epistolary purposes, and the Hindus and converted Moslems employing the vernaculars, Braj-bhākhā and Awadhī. It was first used seriously for literary composition only towards the end of the 17th century, by North Indian Musalmans sojourning in the Deccan; although, it is said, it was taken up earlier for poetical composition in Delhi itself by Amīr Khusrau in the 14th century (Bāl-mukund Gupta, 'Hindī-bhāṣā,' Calcutta, Saṁvat 1964, pp. 9 ff). From the 18th century onwards, Hindōstānī became a serious rival of Braj-bhākhā and Awadhī as a literary language. Persian words were being adopted by all Indian dialects from after the Musalman conquest, and poems of Kabīr (15th century) and others in the dialects, with a large Persian vocabulary, have been found long before the establishment of Hindōstānī. Hindōstānī was already the home language of an influential Moslem nobility and gentry in Northern India, and as such, it had gradually taken up a large number of Persian words; it was already the accepted standard speech, «khaṛī-bōlī», for all Northern India; and by the beginning of the 19th century, it was well established as a literary language; and as most of its writers were Musalmans, it was written in the Persian character, and a large Persian element became its great characteristic. Hindu writers (beginning with Lallū-lāl and Sadal Miśra) then took it up, at first at the suggestion of some English scholars in Calcutta, and used Hindōstānī with as few Persian words as possible, and wrote it in the national script, the Dēva-nāgarī. The resultant style of Hindōstānī, known as Hindī or High Hindī, has become established

in all Upper Gangetic India, in the Panjab (among many Hindus), in Rajputana, in Central India, in the Central Provinces, as it admirably met the necessity for a convenient dialect for prose. It has been experimented for poetry in the old Hindu style as well, although Braj-bhākhā still holds its own. The Musalman style of Hindōstānī, known as Urdū, has developed greatly, and in versification and other matters has completely shaken off the Indian tradition and adopted those of Persian and Arabic.

Hindī and Urdū have their common form in the colloquial Hindōstānī: and this form of Western Hindī, as the dominant language of modern Aryan India, has exerted a tremendous influence on all the Aryan languages of the country; the Kōl languages have been touched and influenced by it, and the Dravidian languages of the south have not been free from the influence of this great northern tongue. The Upper Gangetic Valley has been the centre of culture and political life in India since the dawn of history, and it is in the nature of things that its language, successively as Sanskrit, as Pali, as Śaurasēnī Prakrit and Apabhraṅśa, as Avahaṭṭha, as Braj-bhākhā and as Hindōstānī, should be a force throughout the history of India.

14. Eastern Hindī (called 'Purabiyā' by the speakers of W. Hindī) is the name given to a group of three dialects, Awadhī (called also Kōsalī and Baiswārī), Baghēlī and Chattis-gaṛhī, spoken by over 22½ millions in the United Provinces, Central India and the Central Provinces, to the east of the W. Hindī area. Baghēlī is almost identical with Awadhī, but Chattis-gaṛhī is different in some respects. Awadhī has a rich literature. The earliest great work in it is the 'Padumāwatī' of Mālik Muhammad Jaisī (middle of the 16th century), but its literary cultivation undoubtedly goes back several centuries earlier. Tulasī-dāsa wrote mostly in Awadhī. Baghēlī and Chattis-gaṛhī have a little literature, some of which has been printed. Hindī and Urdū, however, as successors to Braj-bhākhā, which was formerly much cultivated in the Eastern Hindi area, have been adopted by the speakers of Eastern Hindī as their literary language.

15. Marāṭhī is the language of nearly 20 millions in the Deccan, along the Bombay coast and in Berar, Haidarabad and the Central Provinces. Marāṭhī has 3 dialects—Dēśasth or Dēśī, the central and standard dialect spoken in the Deccan tract; Kōṇkaṇī or coast dialect; and Varhāḍī-Nāgpurī or eastern dialect. The language round about Goa, called also Kōṇkaṇī, is a sister-dialect of Marāṭhī, and has some peculiarities of its own. The oldest specimens of Marāṭhī are epigraphical, consisting of a number of short inscriptions, the earliest of which dates from 1118 A.C. (J. Bloch, 'Langue Marathe,' pp. 279 ff; Vināyak Lakṣmaṇ Bhāvē, 'Mahārāṣṭra-Sārasvat²,' Poona 1919, pp. 9 ff.). The earliest writers of Marāṭhī whose works are extant are Mukunda-rāja (end of the 12th century: cf. Bhāvē, *op. cit.*, pp. 25-26); Jñāna-dēva, whose 'Jñānêśvarī,' a translation with commentary of the Bhagavad-gītā, was written c. 1290; and Nāma-dēva, a contemporary of Jñāna-dēva, a few of whose poems are preserved in the Sikh 'Ādi-Granth.'

16. We now come to the Eastern or Magadhan group of speeches, of which Bengali is a member. The westernmost is Bhōjpuriyā, spoken by nearly 20½ millions. It is spread, roughly, from the east of the towns of Mirzapur, Jaunpur and Faizabad to the Son and the Gandak rivers, and makes a sort of a wedge in the south-east, south of the Magahī area. Magahī is the dialect of over 6½ millions, in Gaya, Patna, Munger and Hazaribagh districts, as well as of some settled communities of South Bihar people in the west of the Maldah district of Bengal. Maithilī is spoken by over 10 millions in Bihar to the north of the Ganges, and in the districts of Munger, Bhagalpur and Santal Parganas to the south of the river. In the north, it shades off into Bengali in Eastern Purnia. Oṛiyā, the language of over 10 millions, is current in a corner of South-western Bengal, in Orissa, and in part of Chota Nagpur, the Central Provinces and Madras Presidency. Assamese is spread in the Assam valley, among a population of 1½ millions.

The oldest specimens of these languages, and their relationship with each other, are discussed later.

17. There are some curious dialects current in Bastar and the Central Provinces, which are a mixture of Chattis-garhī, Oṛiyā and Marāṭhī. These

are spoken by tribes who originally had Goṇḍī and other non-Aryan languages, and came simultaneously under the influence of three slightly different forms of Indo-Aryan. The most important of these dialects is Halabā or Halabī (LSI., VII, pp. 330 ff).

18. Sinhalese is another Indo-Aryan language which was cut off from its sisters and cousins from c. 5th century B. C., when, according to tradition, Indian emigrants under Prince Vijaya went to the island and settled there. Vijaya's homeland was Lāḷa: it is mentioned in connection with Vaṇga (East Bengal) and Magadha; and Suppāraka and Bharukaccha (Sopara and Bharoch or Broach on the Bombay coast) are said to have been visited by Vijaya in course of his wanderings. Lāḷa is identified by some with Rāḍha or West Bengal, by others with Lāṭa or the Gujarat (and Sindh) coast country. The latter identification seems more likely: the first immigrants who carried the Indo-Aryan speech to Ceylon seem to have been from the Western India coast (W. Geiger, 'Litteratur und Sprache der Sinhalesen,' in the Grundriss der Indo-Arischen Philologie und Altertumskunde, pp. 90, 91). Later, from the 3rd century B.C. downwards, Ceylon seems to have come in touch with Magadha, through Bengal, and traditions of intimate relations between Bengal and Ceylon are preserved in medieval Bengali literature. The Middle Indo-Aryan ('Prakrit') period is represented in Ceylon by numerous inscriptions, and there is evidence regarding the existence of a literature in what may be called a 'Siṁhala Prakrit' going as far back as the 3rd century B. C. But this literature is entirely lost. The oldest specimens of Sinhalese extant go back to the middle of the 10th century. The older form of Sinhalese is known as Eḷu (=Heḷu,<Hiaḷu<Sīhaḷu=Siṁhala), which is a sort of 'Apabhraṁśa' for Sinhalese. Sinhalese, by virtue of its position, has developed along its own lines, unlike the Indo-Aryan speeches of the mainland, which have always influenced each other very strongly, and have not allowed entirely independent progress of any one of these. After its development as a modern Indo-Aryan speech, however, it has been influenced by Pali and Sanskrit. Closely connected with Sinhalese is the language of the Maldive Islands, which is derived from Old Sinhalese of the 9th-10th

centuries (W. Geiger, 'Maldivische Studien, III,' Sitzungsberichte der philos.-philol. und der histor. Classe der kgl. bayer. Akademie der Wissenschaften, 1902, Heft I, p. 114).

19. The Gipsy dialects of Western Asia (Armenia, Turkey, Syria) and of Europe fall into two classes, one European, and the other Armenian. The Gipsy speeches are derived from Prakrit dialects spoken in the north-west of India, and these dialects had some connection with the Dardic speeches. The ancestors of the Gipsies seem to have dispersed from India for the first time as early as the 5th century A.C.; and the earlier bands went to Europe by way of Persia, Armenia and the Byzantine empire, arriving in Eastern Europe in the 12th century, and thence spreading to Western and South-western Europe. A later band stopped in Armenia, where their language is more faithful to the Middle Indo-Aryan forms, but seems to be more impregnated with Armenian. (F. Miklosich, 'Über die Mundarten und die Wanderungen der Zigeuner Europa's,' I-XII, Vienna, 1872-1880; F. N. Finck, 'Lehrbuch des Dialects der deutschen Zigeuner,' Marburg, 1903; *ibid.*, 'Die Sprache der armenischen Zigeuner,' Memoires de l'Academie imperiale des Sciences, VIII, Petrograd, 1907; Encyclopædia Britannica[11]). The connection between the modern Indo-Aryan languages and the Gipsy dialects is, from point of view of origin, very close; but as these have developed entirely on their own lines, they are not usually considered in discussing the history of Modern Indo-Aryan; they throw valuable light on some points of Middle and New Indian phonology and morphology, however.

20. Taking into consideration the main phonetic and morphological trend of the Indo-Aryan speech as a whole, its history has been conveniently divided into 3 broad periods: (1) *Old Indo-Aryan* (OIA.), when the language was most copious in both its sounds and forms; (2) *Middle Indo-Aryan* (MIA.), when there was a movement towards simplification of older consonant groups, and a general curtailment of grammatical forms. The MIA. period may further be subdivided into an *Early*, a *Second* and a *Late* stage, with a *Transitional* stage between the Early and the Second; (3) *New Indo-Aryan* (NIA.), when the old simplifying tendencies inaugurating the

second period had worked themselves out; the old inflectional system having been worn down to a few meagre forms, grammar had to be eked out with a number of new help-words, so that the whole character of the language became altered, and the modern IA. 'vernaculars' came into being. Vedic and Sanskrit form the typical or representative languages of the first period. For the second period, we have the various Prakrits of the earlier inscriptions beginning with those of Aśōka, Pali, and the Prakrits of literature. At the confluence of the second and the third periods we have the literary Apabhraṅśas; and these Apabhraṅśas of literature are mainly based on hypothetical spoken Apabhraṅśas, in which the earlier Prakrits die and the Bhāṣās or modern Indo-Aryan languages have their birth. The terms 'Vedic' or 'Sanskrit,' 'Prakrit' and 'Bhāṣā' may be used as short and convenient, though rather loose, terms for the three periods of Indo-Aryan; and the transitional stage between 'Prakrit' and 'Bhāṣā,' properly forming a part of the 'Prakrit' or MIA. period, can be conveniently called 'Apabhraṅśa.'

Definite dates cannot be laid down in language history, but the period from the time of the composition of the Vedic hymns (? 1500 ? 1200 B.C.) to the times immediately preceding Gautama Buddha (557-477 B.C.) may be regarded as the OIA. period. The MIA. period may be said to have extended from 600 B.C. to about 1000 A.C.; of which 600 B.C. to 200 B.C. would be the Early or First MIA. stage, 200 B.C. to 200 A.C. the Transitional MIA. stage, 200 A.C. to 500 or 600 A.C. the Second MIA. stage, and 600 A.C. to 1000 A.C. the Third or Late MIA. stage. The first few centuries after 1000 A.C. would be an Old NIA. period, during which the NIA. languages enter into life.

The main characteristics of IA. during the three periods, affecting most of the dialects, may be briefly noted.

[1] OIA. Period: 1500 B.C.—600 B.C. (Vedic as type). *Phonetic*: r̥, l̥, āi, āu; consonants retained in full; final consonants (surd stops, visarga, some nasals); consonant groups like kr, kl, kt, gd, tr, sm, hm, rt, rk, etc. in full force; 'root-sense' fully present, at least in the early stages; variable pitch accent. *Morphological*: Declension—complicated systems: root-nouns, and derived nouns ending in vowels and consonants; 3 genders, 3 numbers, 8 cases; special suffixes for masculine and neuter, and feminine, and a special pronominal

declension. Conjugation—elaborate systems of tenses (present and imperfect, aorist, perfect and 'pluperfect,' future and conditional); moods (indicative, subjunctive, optative, imperative); participles (present, perfect and future); athematic and thematic roots, classified by Indian grammarians into 10 gaṇas; 2 voices—active and reflexive and some special forms for the passive (present tense, 3 pers. singular aorist); causative, desiderative and intensive forms; passive participles; verbal nouns (infinitives) and gerunds, and indeclinable participles. *Syntactical*: wide use of finite verbal forms in the various past tenses, of the subjunctive mood, in the earlier period; position of particles not fixed; word-order free.

[2] MIA. Period: 600 B.C.—1000 A.C.

(i) Early stage: 600 B.C.—200 A.C. (Aśōkan Prakrit and Pali as types). *Phonetic*: r̥, l̥, lost; āi, āu, also aya, ava > ē, ō; simplification of consonant groups, by assimilation, etc. (kk, dd, tt, mh, etc.); final consonants and visarga dropped; tendency towards cerebralisation of dental stops and aspirates in connection with r; ś ṣ s reduced generally to one sibilant, s or ś; intervocal single stops retained. (In the North-west and the West, and possibly also in the Midland, the cerebralising tendency was resisted, in the early period, but it showed itself as a characteristic of the eastern dialects very early, even as early as the OIA.; the dialects of the North-west preserved a great deal of the phonetics of OIA.,—*e.g.* occurrence of r in consonant groups, retention of 3 sibilants ś ṣ s —right down to the end of the transitional MIA. period, but gradually through the influence of other dialects, yielded to the pan-Indian tendencies.) The old 'root-sense' grew obscured. A fixed stress accent, in the place of the earlier free pitch, seems generally to have been established. *Morphological*: considerable simplification of the declensional system: move towards standardising the -a declension; the dual lost; the dative merged into the genitive; the forms of the pronominal declension were extended to the noun. Conjugation: imperative and optative remain, but the subjunctive, found in a few rare cases, is lost; perfect system becomes less and less used, and is confined to a few verbs only; aorist and imperfect fall together, and are less and less used; middle voice, preserved as a relic in the earlier period, disappeared; of the derived forms, causative alone a living form; verbal nouns and gerunds become fewer, but more used; wider use of the passive participle for the past tense; fewer prepositional particles.

(ii) Transitional stage: 200 B.C.—200 A.C. (The Prakrits of the earlier inscriptions,—Kharōṣṭhī and Brāhmī—as types). Changes mainly phonetic: single intervocal unvoiced stops and aspirates became voiced, and fell together with original voiced stops and aspirates; these, except -ḍ(h)-, became open consonants, and came to be lost entirely in the next period.

(iii) Second MIA. stage: A.C. 200—600 A.C. (Dramatic Prakrits—Śaurasēnī, Mahārāṣṭrī and Māgadhī, and Jaina Ardha-māgadhī as types). *Phonetic*: the process of turning original single stops to zero completed during this period; original intervocal aspirates (except -ṭh-, -ḍh- > -ḍh-) became spirants aspirated, probably, and then weakened

to -h-: (the above processes were carried on in all the dialects, but seem to have been completed first in the southern speeches, *e.g.*, Mahārāṣṭrī—while in some of the northern dialects—Śaurasēnī and Māgadhī—the voiced [and spirant] stage was maintained longer; Ardha-māgadhī in this seems to have agreed with its neighbours): -p-, however, commonly found as -v-; intervocal -s- becomes -h- in some cases; sandhi between udvṛtta vowels. *Morphological*: Declension—further advance towards simplification, but masculine and feminine declensions preserved; beginning of the use of help-words in forming cases of nouns and pronouns—kēra<kārya, kaa<kṛta; (in the transitional stage, -santaka and one or two others can be noted). Conjugation: reduced to indicative present and future, imperative, optative present, perfect for a few stray verbs, and passive present; use of the passive participle to indicate the past becomes the rule; a number of verbal nouns and participial forms. *Syntactical*: Word-order becomes stereotyped; preference for the nominal rather than the verbal phrase.

(iv) Third MIA. stage (Apabhraṁśa): c. 600 A.C.—1000 A.C. (Type—Western or Śaurasēnī Apabhraṁśa). *Phonetic*: in the main, the state of things as in second MIA., but there was further decay: weakening of final vowels— -ā>-a, -ē, -ō>-i, -u; in many dialects, -s- -ss- of earlier periods became -h-; intervocal single -m- > nasalised -v- or -w-; nasalisation of vowels commences. *Morphological*: all declensions practically reduced to one; survivals or relics of the feminine and neuter declensions in some places; typical case forms—nominative, singular -u, -i(?), and plural -a; instrumental— -ēṁ, -hiṁ; ablative — -ahu; genitive, singular — -aha, -āha, -assu, -ā, plural -ṇa, -haṁ; locative— -i, -ahiṁ, -ahu, -asu; establishment of inflected help-words to emphasise case relations —kara, kaṇṇa, kicca, maha, kaccha or kakkha, ṭhāma, sama, anta, antara, etc., generally added to the genitive or some other form; also of verb forms like (a)hanta, sanda, thakkia, dia, etc.; these help-words became the inflections and post-positions of the next period. Conjugation: indicative present and future, passive present; optative tending to be less and less used; imperative; the other moods and tenses entirely lost; the use of the passive participle for the past tense establishes the passive and neuter constructions; employ of fortifying affixes, pleonastic, like -ill- or -all-, -ḍ-; compound-verb constructions coming into use more prominently.

Use of rime in versification comes into being, wider use of jingles and onomatopoetic forms in ordinary language, noted already in the preceding stage. Loan-words (new tat-samas and semi-tat-samas) from Sanskrit; influence of both Sanskrit and the literary Prakrits of the earlier stage.

[3] NIA. Period: after 1000 A.C. Common characteristics in the oldest period: *Phonetic*: reduction of earlier double consonants to single ones, with compensatory lengthening of preceding vowel, except in the North-west and West; existence of intervocal euphonic -y- -w- between uncombined udvṛtta vowels, excepting -aï -aü in certain cases. *Morphological*: Declension—distinction of feminine; nominative and oblique bases—the latter an earlier oblique case-form; formation of plural by new methods

(agglutination, use of the genitive, etc.); inherited inflections very few ; no accusative-dative for inanimate names ; use of post-positions ; Apabhraṁśa (inherited) forms for the nouns of number (no new combinations). Conjugation: use of the present participle as a tense-form commences ; beginning of compound tenses by combination; passive construction, with the passive participle qualifying the object, for the past tense of the transitive verb; adjectival (and neuter) construction for the intransitive verb past; use of inflected passive, present tense, in -i- or -ij- ; establishment of analytical passive form with roots jā, paḍ, etc. ; causatives in -ā(v)- ; some verbal nouns ; wide use of the conjunctive participle (indeclinable) in adverbial and other senses. *Syntactical* : compound verb constructions are established.

21. Each of the three stages of IA. forms a subject by itself. The first stage especially, as represented by Vedic and Sanskrit, has been studied with conspicuous success in Europe and in America, thanks to the ancient and medieval Indian grammarians on the one hand and to the historical and comparative methods of modern times on the other. With the help of Avestic, Greek, Latin, Old Irish, Gothic, Old Slavic, and other IE. languages, a great deal of the obscure points in the history of the origin and development of Vedic and Sanskrit has gradually been cleared up. The Aryan came to India, assuredly not as a single, uniform or standardised speech, but rather as a group, or groups, of dialects spoken by the various 'Aryan' tribes who entered into the land and settled down there. Only one of these dialects, or dialect groups, has mainly been represented in the language of the Vedas. But there were undoubtedly other dialects, not very different from Vedic, which might be expected to have continued and to have been ultimately transformed into one or the other of the various NIA. languages and dialects. The mutual relationship of these OIA. dialects, their individual traits and number as well as location, will perhaps never be settled; NIA. forms, remote as they are, do not help us here much, and from a study of the MIA. records, and of OIA. (Vedic and Sanskrit) itself, we can only suspect that there were marked dialectal differences in Indo-Aryan of 3000 years ago. (See § 32.) The true significance of the various Prakrits as preserved in literary and other records, their origin and inter-relation, and their true connection with the modern languages, forms one of the most baffling problems of Indo-Aryan linguistics, owing to a

three-fold reason, that the Prakrits (and Apabhraṅśas) are literary and to a great extent artificial languages, standing to some extent off from the general current of development of MIA. as spoken; that our other authorities, the Prakrit grammarians, are not reliable guides, themselves influencing as much as being influenced by the texts and theories; and that there has been intermixture among the various dialects to an extent which has completely changed their original appearance, and which makes their affiliation to forms of MIA. as in our records at times rather problematical.

22. Common forms and inflections, as well as common habits of phonetics and syntax show that the dialects of Bengali, as well as Assamese and Oṛiyā on the one hand, and the dialects of the Bihārī group on the other, must have originated from some early form of IA. current in the eastern part of Northern India. To this mother-dialect, the name 'Māgadhī' has been given; and Māgadhī, with its immediate neighbour 'Ardha-māgadhī,' the source of E. Hindī, formed the 'Prācya' or eastern group of dialects in the late OIA., and MIA. periods. Some of the phonetic characteristics of Māgadhī, *e.g.*, «ś» for «ś ṣ s», «l» for «r», noticed from a very early period, are preserved or can be traced in its descendants; and some time before its break-up into Bhōjpuriyā, Maithilī and Magahī, and Oṛiyā and Assamese-Bengali, which continued along their own lines since then, it developed certain morphological features and syntactical tendencies (*e.g.*, use of «kaa» and «kēra» or «kara» with the genitive, of «-ill-», «-ell-» or «-all-» with the passive participle, of the verbal noun in «-ebba-» or «-abba-» for the future, of an active construction for the past tense), which were new in its history, and which have been inherited by its descendants. This late form of Māgadhī, when these peculiarities originated, can be described as 'Māgadhī Apabhraṅśa.' We have no remains in this immediate source-form of the modern Māgadhī languages preserved for us, but we can form some idea of it from a comparison of the oldest specimens of Bengali, Oṛiyā and Maithilī, and their sister-languages, as well as of Śaurasēnī and other Western Apabhraṅśa dialects of the same period, of which we have records. The Prācya speech, including Māgadhī, originally differed remarkably in its phonetics, and to some

extent in its morphology, from the other forms of IA. which prevailed to its west (§ 39).

23. The history of the Aryan language in India, especially with reference to the development of the modern 'vernaculars,' has been narrated by Grierson (in the volumes of the LSI. ; in the 'Languages of India,' Calcutta, 1903 ; in the 'Bulletin of the School of Oriental Studies,' London, Vol. I, Nos. 2 and 3 ; also R. G. Bhāṇḍārkar, 'Wilson Philological Lectures,' 1877, reprinted Bombay, 1914 ; P. D. Guṇē, 'An Introduction to Comparative Philology,' Poona, 1918). The life-long labours of Grierson in the field of New and Middle Indo-Aryan have finally established the grouping of the NIA. languages in their origin and their history; and it seems the monumental LSI. will remain the final authority on the broad lines of classification of the modern Aryan languages of India, although many details will necessarily be modified with increasing knowledge. An account of the origin of the NIA. languages must necessarily be based on the facts and hypotheses established by Grierson and others.

Some of the almost universally accepted hypotheses are—the existence of various kinds of 'spoken Prakrits and Apabhraṁśas,' as the 'missing links' between the NIA. languages and OIA. dialects ; the derivation from one kind of 'spoken Prakrit' of a number of current NIA. languages and dialects grouping themselves together by virtue of common traits ; the literary and artificial character of Sanskrit when compared with the early MIA. spoken vernaculars, in the eastern part of Northern India at least as early as the time of Buddha and even of the Brāhmaṇas, and in the North-Western, Western and West-Midland tracts probably from slightly later times ; and the domination of one form of MIA. over the rest as a *Koinē* or a literary or official speech (it was the language of Buddha, and of the Jain teachers, and Aśōka's court-dialect, forms of an eastern [Ardha-māgadhī] speech, in the earlier centuries of the MIA. period; and a Western Midland [and perhaps for a period, under the Kuṣāṇas, a North-western] speech, subsequently).

A sketch of the early history of IA., with reference to the origin of Bengali, is attempted below, as a preliminary to a study of the Phonology and Morphology of the language.

24. Aryan speakers are admitted by most scholars to have come to India at some period not very much anterior to 1500 B.C., which is the date usually given to the commencement of the age when the Vedic hymns were composed. The Aryanisation of North-western India (Panjab) was a gradual process, and started as an overflow from what is now Afghanistan, where Aryan speakers were sojourning for some time before they turned to India, along the rivers Kubhā (Kabul), Krumu (Kuram) and Gōmatī (Gomal) and the passes of the western frontier. The original people among whom the primitive Indo-European speech, the ultimate source of Vedic and Avestic, of Greek, of Italic and Celtic, of Slavic and of Germanic, was characterised, were, according to testimony of language, pastoral, and perhaps nomadic, with some knowledge of agriculture, but their home and race-type are matters of dispute. Panjab and Kashmir, Central Asia, South Russia, Poland and Lithuania, Hungary, North Germany, and Scandinavia, among other places, have been proposed by different writers as the original Indo-European home. But it seems that there cannot be much objection in regarding the wide tract of land extending from the west and south of Russia (possibly also from east Germany and Poland) to the Altai and Thien Shan mountains of Central Asia, as the 'area of characterisation' of primitive Indo-European language and culture. In the central and eastern parts of this tract now live various Tatar peoples, speaking dialects of the Turkī and Mongol groups (of the Ural-Altaic family), side by side with the Russians. North of this tract was the original home of the Finno-Ugrian peoples, remnants of whom are still found there. It is probable that the wide grass lands of Eurasia were shared by primitive tribes, both Indo-European and Ural-Altaic (Altaic and Finno-Ugrian) in speech, and that there was some amount of intermingling among them. The connection between the Indo-European and Finno-Ugrian languages, as advocated by Henry Sweet ('History of Language,' London, 1900, Chapter VII) might be a genetic one, and it may yet be proved that the Indo-European and Finno-Ugrian (and consequently also the Altaic) speeches have a common origin in the language of the prehistoric dwellers of the Eurasian plains. There is again, no proof

that the primitive Indo-Europeans, the *Wiros*, as P. Giles proposes to call them ('Cambridge History of India,' Vol. I, p. 66), were a pure and unmixed race. Many scholars, mostly German, assumed the original Indo-European type as being tall, long-headed, straight-nosed, with fair complexion and golden wavy hair, the Nordic type of Europe; others, like Sergi, regarded them as having been a medium round-headed race, fair, with black hair, the Alpine type; while a third view suggests with greater plausibility that the Indo-European speakers were 'a conglomerate of peoples of different origins who in prehistoric times were welded together into an ethnic unity' (A. H. Keane, 'Man Past and Present,' revised and re-written by A. H. Quiggin and A. C. Haddon, Cambridge, 1920, p. 505). Marked dialectal differences were present among the primitive Indo-Europeans, as can be seen from the derived languages. Primitive IE. dialects have been classed into two broad groups from point of view of phonetics and vocabulary, a Western and an Eastern. In the former group, original IE. gutturals, stops and aspirates, were preserved as stops and aspirates, and in some cases they seem to have been pronounced with rounded lips, and so developed a «w» quality; and in the latter, some of the original gutturals were palatalised, and then turned into fricatives; the former dialect group developing into the 'centum' languages—Celtic and Italic, Germanic, Greek, and the latter into the 'satəm' languages—Indo-Iranian, Armenic, Albanian and Baltic-Slavic. (See § 33.) The presence of Tokharian (Old Kuchean), which is a non-palatalising speech, akin to the 'centum' languages of the west, within the eastern area is an ethnic and linguistic problem, a likely explanation of which is that it is due to the migration of a western IE.-speaking tribe into the east in some unknown epoch.

25. Some of the IE. tribes speaking a dialect of the palatalising and spirantising class had come down south-east, into the eastern part of the plateau of Iran, and became established there by 2000 B.C. The route by which they came from the problematic IE. homeland, which so far as India is concerned was certainly in the north-west, is unknown. It was generally thought that they came through Transoxiana, before they passed down south into Bactria and Arachosia. But the finding of the Boghaz-köi

records, with the names of the Vedic deities Indra (in-da-ra), Varuṇa (a-ru-na or u-ru-w-na), Mitra (mi-it-ra) and the Nāsatyas or the Aśvins (na-ša-at-ti-ia) worshipped by the chiefs of the Mitanni, who ruled in the north-western part of Mesopotamia, in the 15th century B.C., and who bore Aryan names like Artatama, Artamanya, Šauššatar, Šutarna, Šubandu, Dušratta, Šuwardata and Yašdata, has inclined some scholars to regard Mesopotamia and the lands north and west of it as lying in the track of the Aryans in their progress from their home in Eastern Europe, through the Caucasus or the Balkans and Asia Minor, east to India. The presence of Šuriaš (= *Sun*, Skt. « Sūrya ») and Maruttaš (= Skt. « Marut »?) among the gods—« bugaš »—(compare Skt. « bhaga », Avestic « baga », Slav « bogŭ » *god*) worshipped by the Kassites, who conquered Babylon in the 18th century B.C., and who also had names which have an Aryan look, *e.g.* Indabugaš, has also been similarly explained. The Manda or Mada people, mentioned in the early Babylonian and Hittite records, who spoke an Aryan language, and were probably the ancestors of the later Medes of Iran, were similarly an Aryan tribe stopping in Mesopotamia and Kurdistan and Western Iran during the migration of the Aryans to the east towards India (P. Giles in the 'Cambridge History of India,' Vol. I, Chap. III; H. R. Hall, 'Ancient History of the Near East,' [2] 1913, p. 201; E. Forrer, ZDMG., 1922, pp. 247 ff.; Sten Konow, JRAS., 1911, pp. 42-47).

Be it as it may, these IE. speakers were settled for some time in Eastern Iran before they came into India; and long before that event, their language had entered into a stage of development which has been called Indo-Iranian or Aryan. This Indo-Iranian form of IE. is the immediate source of the dialects brought by the 'Aryans' into India. In Eastern Iran, it is likely that the Aryan speakers absorbed the original peoples, who must have differed from them in race, speech and culture. The influx of the Aryans into the Panjab from what is now Afghanistan seems to have been brought about by gradually extending the Aryan pale in the east; parts of Eastern Afghanistan—the Gandhāra (Kabul Valley) region—always formed an integral part of Aryan India down to Moslem times. It was not a national movement, a folk-wandering, on a large scale,

to a distant land in search of new homes; in any case, it did not leave such an impression in the mind of the Vedic people. The reasons for Aryan migration into India are not known, but probably it was the land-hunger of a primitive half-nomadic people, accentuated possibly by divergences in cults and dialects which were manifesting themselves in Eastern Iran. The tribes that moved into India, with their special cults, became the founders of the Hindu civilisation, gradually taking up elements from the culture of the peoples already in the land. Of those who were left in Iran, some remained in their primitive state, and became the Iranian-speaking Scythians, of Central Asia and the Black Sea regions; while others, also Iranian speakers, developed the Magian religion and culture, and coming in touch with the Sumero-Semitic people of Babylon and of Assyria and with the Elamites, founded the great and powerful civilisation of Persia; and others again, not developing any great culture of their own, became in course of time the Baloches, Afghans and other Iranian peoples. A third group sought homes in the bleak and inhospitable mountain regions east-south of the Hindu Kush: it is thought they parted company with the rest before the split had occurred among the Indo-Iranians, leading to their bifurcation into Indo-Aryans and Iranians. The speech of this third group, now represented by the Dardic or Piśāca dialects (§ 3), holds an intermediate position between Iranian and Indian. Dardic speakers peopled Kashmir; and it would seem numbers of them settled in the plains of India as well, where they have been absorbed among their Indo-Aryan kinsmen, and their characteristic dialects have naturally died out, but these have left their marks on the Indo-Aryan speeches which came in touch with them and ousted them from the plains. (LSI., VIII, Part II, Introduction.)

26. Two peoples,[1] speaking languages belonging to two different and unconnected families of speech, and having originally different types of

[1] P. Srinivas Iyengar would have it that the Aryan speech came to India without an Aryan people; he would explain the introduction of the Aryan speech into a densely populated and civilised non-Aryan (Dravidian) Panjab and Northern India as a culture drift, in the wake of a religious cult ('Life in Ancient India in the Age of the Mantras,' Madras, 1912, pp. 3, 4, 10, 11, 14-16). But the *theory* of an Aryan invasion is borne out

culture, have built up the ancient civilisation of India. These two peoples are the Aryan and the Dravidian, and the complex and composite civilisation which is the result of a synthesis of these two cultures is known as 'Hindu civilisation.'

It seems that there were Chaldæan (Sumerian as well as Semitic) and Western Asiatic, and possibly also Aegean elements in the oldest stratum of Indian Aryo-Dravidian culture. These Western elements might have been pre-Aryan, having been already present in Proto-Dravidian, before the advent of the Aryans into India ; or what is equally likely, these elements might have been absorbed by the Aryans into their own culture as a result of their contact with Western peoples in the course of their migration into India from their primitive home in Eastern Europe. Some cults, as that of a great Mother-Goddess, and probably of some of the Vedic deities, and some old myths (like that of the deluge), as well as some astronomical knowledge, and a few objects and ideas of material culture, seem thus to have been introduced into India at a very early period.[1]

by the general outlook upon life as presented by the Vedic poems, which is that of a war-like and conquering people establishing themselves in a country previously inhabited by another people, by the character of the Vedic speech, which in its habits differentiates itself from later forms of Indo-Aryan, and associates itself with Greek and others in preserving a pure Indo-European structure ; and by the totally different form of culture and ideas presented by the Rig-Veda on the one hand and the oldest Tamil poems on the other—poems which, according to competent authority, represent the Dravidian spirit at its purest and most ancient form. The wide difference in racial type between the South Indian Dravidians and the North-west Indians is note-worthy ; and we have also to take into consideration the parallel cases of Persian, Greek and Italic Indo-European cultures.

[1] Cf. 'Hinduism,' by W. Crooke, in Hasting's Cyclopaedia of Religion and Ethics, Vol. VI, p. 688 ; E. Forrer, 'Die Inschriften und Sprachen des Hatti-Reiches,' ZDMG., 1922, i, p. 252 ; B. G. Tilak, 'Chaldæan and Indian Vedas,' in Comm. Essays presented to R. G. Bhāṇḍārkar, Poona, 1917, pp. 29-42 ; A. Weber, 'Indian Literature',' London, 1904, pp. 2, 247-248. The 'Asuras' as the enemies of the Gods in old Sanskrit literature may be a reminiscence of hostile contact between Assyrians and Aryans outside India : F. W. Thomas, in the JRAS., 1916, p. 364. The latest theory about the origin of the Dravidians is that they belong to the Mediterranean race, that they lived for some time in Mesopotamia, and by the pressure of the Akkadians or Semites, they pushed into India, by way of Baluchistan (where the Brahui language marks their presence), and spread along the Indus and Ganges valleys,

The stronghold of Dravidian culture was in the South, probably in the basin of the Kaveri; and among the Dravidians there were tribes in various stages of civilisation, from the civilised ancestors of the Kannaḍa, Telugu and Tamil-Mālayalam peoples to the wild forefathers of the Brahuis and the Gonds, Khonds and Oraons. These latter may represent earlier pre-Dravidian stocks, like the Kōls, who adopted Dravidian speech, and who might originally have been (as they are now) quite distinct from the civilised Dravidians. It is regarded as certain that Dravidian speakers were at one time spread over the whole of Northern India as well, from Balochistan to Bengal.

27. The other elements in the Aryan-speaking peoples of Northern and North-eastern India may be briefly noted.

Beside the Dravidians there were the Kōls, whose speech is a member of a linguistic family extending through Indo-China and Malay Peninsula to Indonesia, Melanesia and Polynesia—the Austric family (P. W. Schmidt, 'Die Mon-Khmer Völker, etc.,' Brunswick, 1906). Kōl speakers are now confined roughly within the region between the Ganges, the Tapti and the Godavari (West Bengal, Chota Nagpur, North-east Madras

before passing into the South and absorbing there the primitive Negrito and proto-Polynesian population: James Hornell, 'The Origins and Ethnological Significance of Indian Boat-designs,' Memoires of the ASB., 1920, Vol. VII, No. 3, pp. 225-226. The Vedic word 'manā' *a weight*, is regarded as being of Babylonian origin (='mina'), and 'paraśu' (=Greek 'pelekus') *axe* and 'lōha' <'*rōdha' *iron* have been connected with Sumerian 'balag' (Akkadian 'pilakku') and 'urudu' *copper* respectively: cf. A. B. Keith, 'The Early History of the Indo-Aryans' in the Bhāṇḍārkar Comm. Volume, p. 87. The finding of a Babylonian cylinder of c. 2000 B.C. in Central India (Rākhāl-Dās Banerji, 'Bāṅgālār Itihās,' Part I, Calcutta, 1321 San, pp. 20-22), and of the Harappa seals from the Panjab, with the unmistakable Cretan bull and Cretan-looking symbols (Annual Progress Report of the Supdt. Archaeological Survey, Hindu and Buddhist Monuments, Northern Circle, for the year ending 31st March, Lahore, 1922, Plate IX; Cambridge History of India, I, Plate XI, 22, 23), are probably among direct evidences of early contact between the Indo-Aryans or Dravidians and the people of the West. Cf. also 'Some Ancient Elements in Indian Decorative Art' by Ananda Krishna Coomaraswamy, in the Ostasiatische Zeitschrift, quoted in the Modern Review (Calcutta) for August 1914, where the influx of decorative *motifs* from the Aegean region into pre-Aryan India is established.

Presidency, the Central Provinces), but on linguistic and ethnic grounds it has been surmised that at one time they lived in the Gangetic plains, up to the foot of the Himalayas.[1]

The presence of the Khasis in Assam, as well as the early history of the Mōns and the Khmērs (who were spread all over Burma and Indo-China before they were subdued and assimilated by the Tibeto-Chinese tribes, like the Burmans and the Tai), may warrant the assumption that in very ancient times, the Kōl-Mōn-Khmēr race was spread from Central India and the Ganges valley to Cambodia. The Kōl race undoubtedly forms an important element in the present-day Aryan-speaking masses in Northern and Central India. The Kōls never evolved any great culture, and they apparently had nothing to contribute in the formation of the Indian civilisation; they were simply absorbed within the Hindu (Brahmanical and Buddhistic) fold when they adopted Aryan speech.

28. The speakers of the Tibeto-Chinese languages, the Tibeto-Burmans and others, who settled in Tibet and in the southern slopes of the Himalayas as well as in Assam and North and East Bengal in comparatively recent times, seem not to have moved much further to the east of their primitive home round about the sources of the Yang-tsze-Kiang at the time of Aryan penetration into India (1500 B. C.). When the Tibeto-Burmans, forming one branch of the Tibeto-Chinese race, came to the Indian side of the Himalayas, to Nepal and North Bihar, Bengal and Assam, they

[1] Census Report (India) for 1911, p. 327, § 412. Sarat Chandra Roy, 'The Mundas and their Country,' Ranchi, 1912, Chap. II, pp. 30-32, 43, 44, 47 ff., 61, 70 ff. Mr. Roy's attempts to identify names of non-Aryan chiefs in the Rig-Veda with Muṇḍārī names, pp. 47-49, are rather fanciful. All that we can be fairly certain of is that the Kōls lived in the Upper Gangetic Valley, and were considerably influenced by their more civilised neighbours the Dravidians, among whom they might have been absorbed, at least in the plains; and when the Aryans came, they, in common with the Dravidians, took up the Aryan speech and were brought within the fold of the Brahmanical social order. Those Kōls, who, living in the remoter parts of Central India, did not come in contact with the Gangetic Aryans or Aryanised people in ancient times, are now represented by the Santals, the Muṇḍās, the Hōs, the Kūrkū, the Savaras, the Gadabas, etc., and possibly also by the Bhīls (now Aryan in speech).

possibly mingled with the Kōl and Dravidian peoples already established there; and this amalgam rapidly became Aryanised in contact with Gangetic culture. The other branch of the Tibeto-Chinese peoples, the Tai or Shan, carried on its incursions in North-eastern India in successive waves, of which we know in detail one only, the Ahom invasion of Assam in the 13th century. The Tibeto-Chinese peoples who came to India were rude tribes without any high culture, and their contribution to Indian civilisation seems to have been nil; although one branch of this race, the Chinese, built up one of the greatest material civilisations of the world, the foundations of which go back to the beginning of the second millennium B. C.

29. Hoernle had postulated the incoming of the Aryans into India in two groups or bands, one earlier, and the other later. According to this theory, a group of Aryans first came into India and settled in the Western Gangetic Doab or the Midland country. They were followed by another group, and these new-comers dispossessed their kinsmen, who had come earlier, from their original settlements, and forced them into tracts west, north, east and south of this Midland region. The new-comers thus became the 'Inner' Aryans; and their predecessors, who had to retreat into the outlying tracts, became the 'Outer' Aryans. It was among these 'Inner' Aryans that Vedic culture and Brahmanical ideas grew up. This view of a two-fold Aryan immigration, or rather, of the advent into India of two separate and antagonistic groups of Aryan-speakers, both equally important, has been endorsed by Grierson, and the theory has been further elaborated by him. According to Grierson, the 'Outer' Band of Aryan invaders, who were closely connected with the Dardic speakers, and were probably but a branch of them, settled in the Panjab, in Sindh, in Gujarat and Rajputana, in the Maratha country, in the Eastern Hindi area, and in Bihar (whence their language was taken to Bengal, Assam and Orissa), and in the north, along the slopes of the Himalayas. Thus, the 'Inner' Aryan speech is now represented by Western Hindi; whereas the other current forms of Aryan speech developed from the dialects used by the 'Outer' Aryans ('History of India' by A. R. Hoernle and H. A. Stark, Calcutta, 1904, pp. 12, 13; Grierson, BSOS., Vol. I, No. 3, p. 52).

The reasons adduced by Grierson are mainly linguistic. He notices that there are certain points of disagreement between the Midland Aryan language, Western Hindī, on the one hand, and the other Aryan languages, *viz.*, Lahndī, Sindhī, Gujarāti, Marāṭhī, Bengali, Bihārī and the Pahāṛī dialects, on the other. These disagreements in points in which the outer languages agree are inherited, as Grierson is inclined to think, from the two ancient groups of Aryan languages spoken by the 'Inner' and the 'Outer' Aryans respectively. Not only do the 'Outer' languages agree with each other in those very points in which they differ from the Midland language, but what is more, the Dardic languages share with the 'Outer' speeches most of these very characteristics. Consequently, the NIA. languages fall into two main classes: (i) 'Inner,' or Midland, or Śaurasēnī class: classical Sanskrit is believed to be specially connected with this group, being based on the early Midland dialects; Western Hindī is its modern representative; and (ii) 'Outer,' or non-Vedic, or non-Sanskritic, the so-called 'Māgadhī' of Hoernle, to which fall practically all the other NIA. speeches; as also Sinhalese, and the Gipsy speeches outside India. The 'Outer' group is closely connected with Dardic, according to this classification. Grierson has brought together (in the BSOS., Vol. I, No. 3, pp. 78-85) those points of linguistic similarity among the 'Outer' speeches on which he has based this connection among the various 'Outer' languages, and their differentiation from the 'Inner' or Midland language.

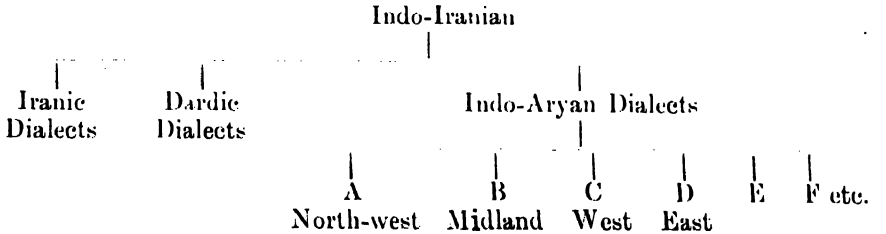
30. What Grierson has suggested from linguistic reasons has been sought to be established on anthropological and ethnological grounds by Ramā-Prasād Chanda ('Indo-Aryan Races,' Part I, Rajshahi, 1916). Chanda, however, differs from Grierson in some of the details of the theory. According to Chanda, the 'Outer' Aryans were a brachycephalic race, derived from a stock totally different from the 'Inner' Aryans, who were dolichocephalic. This difference in race went hand in hand with a difference in dialect. The dolichocephalic 'Inner' Aryans were the ancestors of the people of the Panjab, of the Rājpūts, and of the Brahmans of the Upper Ganges Valley (Hindostan): among them

grew up the Vedic institutions and culture and the system of the four castes. The brachycephalic 'Outer' Aryans, who originally knew nothing of the Vedic cults, and from whose religious notions ultimately developed Vaiṣṇavism and Śāktism, were, in later times, profoundly influenced by the religion and ideas of the 'Inner' Aryans, but only after they had been settled for centuries around the latter in Western Panjab, in Sindh, in Gujarat and Mahārāṣṭra, and in Bihar and Orissa and Bengal, where they crossed over from Western India through the forest country of Central India. The Gujarātīs, Marāṭhās as well as the Bengalis, Bihārīs and Oṛiyās have a preponderance of brachy- and mesaticephals : they are the result of a mixture of the round-headed 'Outer' Aryans with the long-headed Dravidians and Kōls, as well as with the long-headed 'Inner' Aryans who migrated from the Midland into the outer tracts. Such, in brief, is Chanda's view ; and this also takes cognisance of the linguistic arguments put forward by Grierson.

31. The problem presented by the above theory is a most important one, and impossible withal to solve. The linguistic data brought forward by Grierson is admittedly late ; and they might very well be the result of independent development in the various 'Outer' languages, not of inherited tendencies. A consideration of the points raised by Grierson is made in *Appendix A* to the *Introduction*. The anthropometric data of Chanda need not be questioned, and what he says about the influence of Magadhan and East Midland ('Outer' Aryan) peoples upon the 'Inner' Aryans of the West Gangetic Doab ('Indo-Aryan Races,' p. 54 ff.), is note-worthy. It may be that the Gujarātīs and the Bengalis, with most Bihārīs, present a type which is the result of the mixture of Dravidian, Kōl and 'Inner' Aryan long-heads with a race of broad-heads, akin to the *Homo Alpinus*, from Central Asia, who came to India in some prehistoric period : but what evidence is there that these broad-heads were Aryan or Indo-European speakers ? The linguistic basis for Chanda's theory is weakened a great deal when the Lahndī-speaking Western Panjābīs, who by their dialect are 'Outer' Aryans, according to this 'Inner' and 'Outer' theory, and whose ancestors at least in certain tracts used to be regarded by the

'Inner' Aryans of the Midland as being equally degraded and out of the Brahmanical pale as the Magadhan and other eastern peoples (§ 37), are proved racially to be of the same stock as the Kanaujiyā Brahmans of the Midland. Besides, the evidence of anthropometry based on cephalic index alone is not regarded as conclusive. For aught we know, and it is not necessary to digress into questions of anthropology, which as a science is still in its infancy, the hypothetical brachycephalic hordes from Central Asia, who are regarded by Chanda, with the concurrence of A. C. Haddon, as forming one of the elements in the Gujarātī, Marāṭhā, Koḍagu, Kannaḍa, Telugu, Oṛiyā, Bengali and Bihārī peoples, might never have been Aryan speakers. It is to be noted that the Telugu, Kannaḍa and Koḍagu peoples, who are supposed to be the result of exactly the same ethnic mixture as the Gujarātis and the Bengalis, never spoke Aryan. Again, there is not the slightest tradition in Bengal favouring the assumption of the migration of (brachycephalic 'Outer') Aryans from Western India or Gujarat into Bengal and Bihar. On the other hand, the traditions of Aryandom everywhere refer to the Midland as the nidus. The attempt to establish on anthropometrical and ethnological grounds a ring of 'Outer' Aryandom round an 'Inner' Aryan core is as unconvincing as that on linguistic grounds

32. Instead of regarding the Aryan dialects of Ancient India as falling into two great classes or branches, as Hoernle and Grierson have postulated, we may, with Weber and others, think of them as forming more than two groups, some of these agreeing with each other more than with the rest, by virtue either of a genetic connection, or of development along similar lines, or again of mutual influence. This sort of classification may be thus illustrated :



The existence of intermediate dialects, between Iranic and Indian as well as Dardic and Indian, is exceedingly probable.

The speech of the Rig-Veda, which is our sole representative for all these dialects, A, B, C, D, E, F etc., is a kind of literary language, a bardic speech, based primarily on one of these dialects only, but admitting forms from other dialects as well, specially when towards the end of the Rig-Vedic period the mass of Vedic hymns became the common property of most Aryan tribes. The basic dialect upon which this composite Vedic bardic speech was gradually built up, and quite unconsciously too, as is the case with all similar bardic languages, was probably of the extreme West, when the Aryans were as yet confined to the Panjab; and we can trace some of its salient phonetic characteristics which marked it off from the other dialects. Thus, for example, it was a dialect which had only « r », and no « l »; it spirantised internal voiced aspirates like « gh jh dh bh », ultimately to change them to « h »; and turned intervocal « ḍ ḍh » to the liquids « ḷ ḷh » (cf. A. Meillet, 'Les Consonnes intervocaliques en Védique,' IF., XXXI, pp. 120 ff.). In its preference for « r », this basic dialect of the Rig-Veda speech agreed with Iranian, possibly its immediate neighbour to the west. From forms preserved in classical Sanskrit (which, again, is a later literary dialect, also of composite origin, based on the spoken forms of OIA. current from Gandhāra or Peshawar frontier to the Midland, uptil the middle of the first millennium B. C., but approximating to the dialects of Western Panjab in its rather archaic phonetic character), and also from forms preserved in the MIA. dialects (or Prakrits), we can conclude that there were other OIA. dialects of the Vedic age which did not agree with this basic dialect. Thus, certain Aryan dialects, probably of the central region, preserved both « r » and « l »; and others, undoubtedly of the east, had only « l »: *e.g.*, genuine Vedic « -śrī-ra- » (cf. Avestic « srī-ra- ») *prosperous*, beside « śrī-la- » and « śli-la- », both preserved in Sanskrit (= Indo-Iranian « * ćrī-la- », IE. « * krəi-lo- »). The later, younger portions of the Rig-Veda show forms in « l » also; which indicates the influence of an « l » dialect. The other dialects, which are represented by Sanskrit and forms of MIA., did not favour the

change of the voiced aspirates to « h »; and it was through the influence of these, that the habit of the basic dialect of the Rig-Vedic speech was not allowed to have full play; so that we find in the poems of the Rig-Veda (as much as in Sanskrit) very many instances where the old aspirates were retained, or restored. While some of the OIA. dialects, including the basic dialect of the Rig-Veda, changed intervocal « -ḍ- » to « -ḷ- », other dialects, as shown by Sanskrit, retained the « -ḍ- ». In other points too, the presence of a varied dialect group in the oldest Indo-Aryan stage is very well attested. A form « guru » *heavy, important* is found in Vedic and Sanskrit, but that another form « garu », corresponding to the Greek « barús », existed dialectally, is attested by the Pali and later Prakrit « garu »; cf. also Skt. « gar-īyas, garīṣṭha ». The Vedic and Sanskrit « pūruṣa, puruṣa » *man* was only dialectal Indo-Aryan; the common Indo-Aryan form seems to have been « * pūrṣa » from « * pu-vṛṣa » (J. Wackernagel, 'Altindische Grammatik,' I, Göttingen, 1896, p. xix; C. C. Uhlenbeck, 'Etym. Wörterbuch der altind. Sprache,' Amsterdam, 1899), which is found as « pōsa, purisa, pōrisa » in Pali. Inflected forms, roots and words not preserved in Vedic and classical Sanskrit are occasionally found in MIA. dialects, and these often indicate their presence in OIA. dialects other than the Vedic or classical Sanskrit literary speeches. Vedic and Sanskrit have a form « syāt » (= « √ as », 3 sg. optative), corresponding to the Latin form « siet > sit »; but the Pali « assa » represents an OIA. dialectal form « * asyāt », in which the vowel of the original root is strengthened and preserved, and which corresponds to Greek « eíē » (for « * ehĭēt » = IE. « * esĭēt »). IA. « √ dā » occurred in the present tense both in the reduplicated and simple forms; the former, « dadāti » *gives*, « datta » *given*, were more current in the dialect or groups of dialects on which Vedic and Sanskrit were based; but the latter, « dāti », « dita » had apparently an equally wide or even wider currency in the other dialects, and in the NIA. languages it is these latter forms which have held on (« dāti » > « dēti » in a Bharhut inscription, through analogy of « nayati » > « nēti » *takes*; « dēti » > NIA. « dēi, dēy »; « dita » > NIA. base « dia », as in Hindī « dī-ā », Bengali দিল « di-lâ » etc.).

The common NIA. root « āch, ach, ch » *be*, present in Bengali etc., in Gujarātī, in Pahāṛī, comes from an OIA. « * acch » ; this « * acch » is not found in Vedic and Sanskrit, and must have been quite common in other OIA. dialects, being only a thematic form of « √ as » : IE. « * es-sko-ti » would give « * acchati » in OIA. ; « * es + sko- » is found, beside the athematic « √ es », in Greek, in Latin and in Kuchean. The MIA. word « adhigiḍhya » *commencing*, in the Bhabra edict of Aśōka, long wrongly read as « adhigicya », is explained as preserving an OIA. root « * gṛdh » *step, walk*, agreeing with Avestic « garəd », Latin « gradior », Lithuanian « giridiu », Old Church Slav « grędǫ » etc., and different apparently from the Vedic « gṛdh » *be greedy* (Truman Michelson in the IF., XXVII, p. 197).

These and similar divergences between Vedic and Sanskrit and the 'Prakrit' dialects, and divergences within one single form of speech like Vedic itself, sufficiently demonstrate the existence of dialects in OIA. other than the basic speech of the Rig-Veda. But after all, these differences are not great, and the position of Vedic and Sanskrit as representatives of all or most OIA. dialects is not assailed. The remarkable agreement of Vedic with Avestic and Homeric Greek shows its right to be regarded as the typical OIA. language, with which comparison can be made of MIA. and NIA. as with the original standard or norm ; and although MIA. and NIA. languages are not, strictly speaking, derived from the language of the Rig-Veda, or from classical Sanskrit, they can very well be referred to the latter, for *types* of their *source-forms*, in phonetics and in such old inflections as are not the result of later, independent development.

33. The Vedic language, then, as typical of OIA., may be taken to represent the arche-type from which later IA. speeches spring. This language belongs to what has been called by the philologists the « satəm » class of Indo-European tongues, namely, those which have changed the original IE. front gutturals (the so-called 'palatals') « k kh, g gh » into palatal fricatives and sibilants « ç, ź » (later « ś, j » or « s, z »). This palatalisation occurs in Baltic-Slavic and Albanian only among the IE. languages of Europe : the other European speeches of the IE. family, Greek, Italic, Celtic

and Germanic, did not change these original front gutturals into palatal spirants or sibilants (although that change has resulted in most of the modern forms of the above speeches, *e.g.*, dialectal Greek, Italian, French, English, during the last thousand or fifteen hundred years). The Primitive IE. word for *hundred*, « *kṃtóm », became « śatam » in Sanskrit, « satəm » in Avestic, « šiñtas » in Lithuanian, and « sŭto » in Old Church Slavic; while the guttural was retained in Greek « (he)-katon », Latin « centum » (pron. kentum), Primitive Celtic « * kanton » whence Old Irish « cēt » (pron. kēd) and Welsh « cant », Primitive Germanic « * xundám » whence Old English « hund ». Two typical words, Avestic « satəm » and Latin « centum », representing two varieties of transformation of the IE. « *kṃtóm », are employed as convenient labels to mark off the two kinds of IE. from each other. The consonant system of IA., as represented by Vedic, is remarkably full, and is most faithful to the Primitive IE., especially as to its characteristic aspirate sounds, which are preserved nowhere else. But it is particularly poor in its vowels—IE. « a e o, ā ē ō » having already in the Indo-Iranian stage fallen together into « a, ā ». The languages with which Aryan came into contact in India, of which we have belated specimens only, namely Kōl and Dravidian, influenced it a great deal in its phonetics, and determined the character of the subsequent phonetic history of IA. on some note-worthy points. The simple and primitive vowel system such as characterises Vedic was continued in Common IA. down to recent times, and it has been modified but slightly. It is to be noted that Kōl and Dravidian possess an equally simple vowel system. The aspirates of IA., however, have succeeded in imprinting themselves on all non-Aryan languages with which it came in direct touch, *e.g.* Kannaḍa, Telugu, Santali. The Vedic literary speech is lacking in spirants, except in the case of the rare guttural and labial breathing, the 'jihvā-mūlīya' [x] and the 'upadhmānīya' [F], as variants of the 'visarga.' The palatal spirant [k>ç] was changed to the palatal sibilant « ś » =[ṡ] in India, and [g>ź] to the palatal stop « j »=[ɟ]. This is remarkable, when we find that the sister and probably the nearest neighbour of IA., namely Iranian as in the Avesta, is particularly rich in spirants. This lack of spirant sounds in IA.

might have been due to the very early influence of Dravidian (and perhaps also Kōl). Besides, the cerebral sounds «ṭ ḍ ḷ ṇ», which are preëminently Dravidian,[1] have already been imposed upon the earliest IA.

The morphology of Vedic is as luxuriant as it can be, and it retains most faithfully the inflections of Primitive IE. Much of the vigour and grace of the Vedic speech is due no doubt to its highly inflectional character. But the modifications its roots undergo, and the very elaborate nature of its declinational and conjugational forms have made it one of the most complicated of languages, although all that was easily understandable in Primitive IE. with its agglutinative character. Compared with OIA. (Vedic), Old Dravidian must have been simplicity itself. The conjugational system of Old Dravidian, with the nominal nature of the verb, with its two tenses, a past with a definite sense and an 'aorist' or 'future' with an almost universal applicability, its want of modal and derived forms like the causative (cf. Julien Vinson, 'Le Verbe dans les Langues dravidiennes,' Paris, 1878, pp. 56, 57), was nowhere before IA.; but undoubtedly it sufficed, by periphrasis no doubt, to express all simple ideas. The Kōl scheme of declension and conjugation, with its regular array of suffixes and infixes added to the root, is an extremely simple thing even in modern Kōl, although it looks formidable in its polysynthesis. (J. Hoffmann, 'Mundari Grammar,' Calcutta, 1903, Introduction; LSI., Vol. IV, Introduction to the Muṇḍā languages and to Santali.) The result of the contact between the speakers of the highly inflectional and complicated Aryan, and those of the comparatively regular, agglutinative Kōl and Dravidian, when the latter took to speaking the language of the former, we see in the later history of the Aryan speech in India, in the process of its transformation to the NIA. languages. The whole system of Vedic has been simplified to that of the

[1] The following is the reconstruction of the Sound-system of Primitive Dravidian by K. V. Subbayya ('Dravidian Phonology,' IAnt., June, July, August 1909): *Vowels*: a, ā, i, ī, u, ū, e, ē, o, ō; and long a (simple and nasalised); *Consonants*: p-, -b-; t-, -d-: -ṯṯ-, -ḏ-; k'-, -g'- (=front gutturals of IE., k, g); k- -g- (=velars of IE., q, g): m, n, ṉ, ñ; r, l, ṛ (trilled), ḷ, l̤ (=spirant cerebral l, or r, or z), and probably also a bilabial spirant, w, both voiced and unvoiced, and the palatal semi-vowel y; and there was no sibilant.

modern vernaculars, and this simplification has been carried out to a great extent along the lines of Dravidian (cf. *Appendix B*).

34. The first coming of the Aryans into India was, we may presume, as the extension into North-western India of the Aryan pale from what is now Eastern Afghanistan. There was progress towards the east, along Northern Panjab; and in the Rig-Vedic period, commencing from about the middle of the 2nd millennium B. C., Aryandom in India, at least the Aryandom of which the Rig-Veda is the religious and literary expression, extended from the Kabul and the Swat rivers to the Ganges. Probably at this time there were two centres of Aryan life: at least it was so during the earlier part of the next period: Gandhāra (Peshawar and Rawalpindi), and the tract which came to be known as 'Brahmâvarta, by the river Sarasvatī (Patiala, Ambala, Karnal). The distinctly Indian character of the Vedic religion seems to have taken shape in the eastern part of the area. Here one section of the Aryans developed the Vedic cult of fire, of Indra and of the great Gods of the Rig-Veda; here probably the later, Brahmanic ideas of sacrifice first took shape, and the beginnings of the old Aryan monarchical institutions were made. The hymns of the Rig-Veda, the bulk of them, were composed in the Panjab, but it is quite imaginable that a number of them were brought into India from outside by the Aryans: witness, for instance, the common metres and strophes found in both the Rig-Veda and the Avesta. The particular group of Aryans who created the Vedic religion, and systematised its literature and its ritual, seem to have made the Midland (the Upper Ganges Doab) their home, where they developed the system of the four castes, and in general laid the foundations of Brahmanistic culture and religion of later times (1000—600 B. C.). From their position in one of the richest parts of India, from their high culture and their organisation, these Midland Aryans became the most dominant people in Northern India, and their intellectual people, the Brahmans, and their aristocracy, the Kṣatriyas or Rājanyas, were able to influence all surrounding peoples by their superior mentality; and they extended the Midland institutions right up to Benares and Mithilā in the east, and also into the south and the west.

All Aryan speakers, however, were not 'Vedic' in their religion and general outlook. There is evidence in the Rig-Veda that the Vedic Aryans fought not only with the non-Aryans, but also with other Aryans, whose ideas and ways of life were probably dissimilar. Some of these non-Vedic Aryans seem to have preceded the Aryans of the Vedic cults in the east, along the Ganges, where the latter followed them from their Midland head-quarters. Other bodies of Aryans, keeping themselves equally aloof from the Vedic Aryans of the Eastern Panjab, were settled in Western and South-western Panjab. These Aryans of the eastern tracts seem to have differed from the Midland or Vedic Aryans in many respects—in religious observances, in many practices, in dialect.

The non-Aryans, Dravidians and Kōl, fought with the Aryans, both Vedic and non-Vedic, and made peace with them. Many of the non-Aryans remained unaffected by Aryan culture and language for quite a long time: the presence of Dravidian (or Kōl)-speaking peoples in Northern India, including the Panjab and Upper Ganges Valley, down to late MIA. times, is not an unlikely thing, considering that the Brahuis are flourishing in Balochistan at the present day. The evidence from literature seems to show this also: and toponomy in Northern India would probably support it. The Gōṇḍs, a Dravidian-speaking tribe of Central India, for instance, seem to give their name to Gōṇḍā district in the United Provinces. But from the advent and settlement of the Aryans, large numbers of non-Aryans were finding a place in Aryan society, either as serfs and slaves, or as free cultivators and labourers and artisans, although they were looked down upon as « Śūdras » by the Aryan settlers, the « Viśas ». The Dravidians were possessed of a material culture not much inferior to that brought by the Aryans (cf. R. Caldwell, 'Comp. Gramm. of the Drav. Langs.[3],' London, 1913, pp. 113-114; P. T. Srinivas Iyengar, 'Life in Ancient India in the Age of the Mantras,' Madras, 1912, p. 15). They seem to have been clever agriculturists and artificers, and they had their own deep-seated ideas on world and man, which also affected the Aryans. The contact between the two peoples which began possibly as a shock of strife at first in the Panjab, and became friendly and intimate in the

Ganges Valley, resulted in a compromise in which outwardly the Aryan triumphed, for his language superseded Dravidian in Northern India, and in later times even became the vehicle of thought and culture among the Dravidians of the South. Through this victory of his language, the Aryan gave a distinct colour to the culture with which it became associated. This synthesis took nearly a millennium to complete in the plains of Northern India.

35. Even as early as the Vedic period, when the thoughts and notions, the social institutions and mental outlook of the Aryans in India, in fact, their culture as a whole, had many more things in common with the primitive Hellenes, Italians, Celts, Germans and Slavs than with their descendants the later Hindus of Northern India,—at a time when characteristic Hindu ideas did not develop among them, Dravidian cults and Dravidian language had begun to influence their religion and speech. No trace of the doctrine of transmigration, for instance, is found in the Rig-Veda, and yet no other doctrine is so peculiarly Indian; it may have had its origin in non-Aryan animism, but it became established among the Aryans quite early. Some of the cosmic notions seem to be Dravidian; Dravidian gods[1] were being added to the Aryan pantheon; or rather, their attributes and natures, and sometimes

[1] *E.g.*, a Dravidian god of the mountains and wastes, a *Red God*, probably had his name translated into Aryan as '*Rudhra,' and then identified with the Aryan god 'Rudra', *the Roarer*, and later on, his Dravidian names (cf. Tamil 'śivaṉ' *red*, 'śembu' *copper*) seem to have been adopted as 'Śiva' and 'Śambhu'; and this synthesis, sublimated by Hindu thought, in later times gave rise to the Puranic Rudra-Śiva or Mahādēva, one of the grandest conceptions of mythology. The Dravidians probably had a monkey-god, whom they called the *Male Monkey*; he seems to have been introduced into the Aryan pantheon as 'Vṛṣā-kapi,' not without opposition from some Aryans; and later, his Dravidian name seems to have been adopted into the language of the Aryans, and Aryanised as 'Hanūmant' (cf. Tamil 'āṉ-mandi' *male monkey*). The Aryan Viṣṇu seems to have been identified with a Dravidian Sky-god (Dravidian 'viṇ' *sky*). But other Dravidian cults, like the worship of serpents, or of the liṅga, did not make any impression on the Aryans at this time. (Cf. 'Dravidian Religion', in Hasting's Cyclopaedia of Religion and Ethics; F. E. Pargiter, 'Vṛṣākapi and Hanumant,' JRAS., 1913, p. 400; P. T. Srinivas Iyengar, *op. cit.*, pp. 125-126; M. Collins' Remarks on S. A. Pillai's 'Sanskrit Element in the Vocabularies of the Drav. Langs.' Madras University Dravidic Studies, III, 1919, pp. 61-62.)

even their names, were transferred to the Aryan gods, and a new and composite creation resulted gradually from this sort of union.

The language of the Rig-Veda is as yet purely Aryan or Indo-European in its forms, structure, and spirit, but its phonetics is already affected by Dravidian; and it has already begun to borrow words from Dravidian (and from Kōl): not only names of objects previously unknown to the Aryans, but also a few words of ideas; among words of probable Dravidian origin in the Rig-Veda being, to give a few examples, « aṇu » *particle*, « araṇi », *rubbing wood for fire*, « kaṭu-ka » *sharp*, « kapi » *monkey*, « karmāra » *smith*, « kalā » *small part, art*, « kāla » *time*, « kitava » *gamester*, « kuṭa » *hut*, « kuṇāru » *withered-armed*, « kuṇḍa » *hole*, « gaṇa » *band*, « nānā » *several*, « nīla » *blue*, « nīhāra » *cloud, snow*, « puṣka-ra » *lotus*, « puṣpa » *flower*, « pūjana » *worship*, « phala » *fruit*, « bila » *hole*, « bīja » *seed*, « mayūra » *peafowl*, « rātri » *night*, (?) « rūpa » *form*, « sāyam » *evening*, « valgu » *handsome*. As we proceed, the non-Aryan words are on the increase: in the Brāhmaṇas, for instance, we come across words like « aṭavī » *forest*, « alarka » *a kind of flower*, « āḍambara » *drum*, « kambala » *blanket*, (?) « kulāla » *potter*, « khaḍga » *rhinoceros*, « taṇḍula » *rice*, « tila » *sesamum*, « phaṇa » *froth, scum*, « maṭacī » (?) *locust*, « marka-ṭa » *ape, monkey*, « valakṣa, balakṣa » *white*, « vallī » *creeper*, (?) « vrīhi » *rice*, « śava » *corpse*, mostly names of objects; and as the Aryan speech gets in strength, words of ideas seem to be borrowed no longer, but a respectable number of concrete terms are adopted into the old vernaculars and in Sanskrit. (For References, see under *Appendix B.*)

36. Among the various OIA. dialects, those of the tribes of the West, contiguous to Iranian, might show points of agreement with the latter; and those of the East might reasonably be expected to have come more and more under the influence of the non-Aryan languages, as they penetrated deeper and deeper into the heart of India. As an increasingly large non-Aryan population adopted the Aryan speech, we may expect changes to creep into it, and its words and forms to be modified, to suit the ways of the people that adopted it. By 1000 B.C., the Aryan tongue seems to have become well established or dominant in Northern India up to Bihar, which

becomes 'Āryâvarta' or Aryan land. Certain Aryan tribes seem, from the evidence of the Brāhmaṇas, to have been nomadic at this time. The Vedic Aryans from Eastern Panjab and Western Doab advanced eastwards, in the wake of their eastern kinsmen. Rich and powerful states, like those of the Kurus (Bhāratas) and the Pañcālas, the Vaśas and the Uśīnaras, the Matsyas and the Śālvas, the Śūrasēnas, the Kōsalas and the Kāśis, and the Vidēhas, were established in the Midland and in the Ganges Valley, the last three states being the easternmost. These are among the states mentioned in the pre-Buddhistic Brāhmaṇas (1000—600 B.C.), with which the early traditions of India in history and romance, poetry and philosophy, religion and social institutions are connected. The population of these states consisted of Aryans, Vedic and non-Vedic, of a mixed population of Aryans and non-Aryans, and of non-Aryans more or less Aryanised in language and culture.

The Aryan dialects of the preceding generations, which were contemporaneous with the speech of the Rig-Veda, changed, so that the latter became slightly archaic, and, although studied in the poems of the Rig-Veda, forming the *corpus* of a national literature, it could no longer remain a current, every-day speech; and a new literary speech, a slightly simplified Vedic, grew up, among the descendants of Vedic speakers and among those who adopted the Vedic cults. This *Sanskrit of the Brāhmaṇas* is the literary form of the dialects spoken by those Aryans and Aryanised people who originally followed the Vedic cults, and were now spread from Western Panjab to Bihar. The Aryan tribes of the Panjab, like the Gandhāras, the Kēkayas, the Madras, and the Kurus and Pañcālas of the Midland were the people among whom the Vedic culture had its proper home. By the time that the Aryan speech had penetrated into what is now Bihar, *i.e.*, after 1000 B.C., some distinct tendencies in pronunciation were manifesting themselves in the eastern Aryan dialects, spoken by the non-Vedic Aryans. But it may be presumed that in spite of the difference between the dialects of the extreme West and those of the extreme East becoming greater and greater, through the 'Prakritic' tendencies developing in the latter, there was a general intelligibility among them, through

the medium of the language of the Brāhmaṇas ; although it represented in its phonetics and its general spirit the dialects of the extreme West and of the Kuru-Pañcāla tract. Despite the presence of at least two antagonistic or differing sets of Aryans, the Vedic Aryans and those who did not follow Vedic customs and religion, Northern India of the first four centuries before Buddha, presented one cultural whole. In the ' Śatapatha Brāhmaṇa ' (700 B. C.?), the colonisation of North Bihar by Panjab (Vedic) Aryans is described : cf. the story of Māthava Vidēgha (ŚB., I, 4, 1). But the Western Panjab or Udīcya peoples, according to the testimony of one of the Brāhmaṇas, spoke the Aryan tongue with greater purity than the people of the Midland : this statement is corroborated by the north-western inscriptions of Aśōka (Shahbazgarhi and Mansehra) several centuries later, where the language agrees with Sanskrit (=OIA.) in its phonetics very closely, whereas the language of the eastern inscriptions of the same monarch shows the greatest possible deviation from the Sanskrit norm. (' Śāṅkhyāyana ' or ' Kauṣītakī Brāhmaṇa,' VII. 6 : « tasmād udīcyāṁ diśi pra-jñāta-tarā vāg udyata, udañca u ēva yanti vācaṁ śikṣituṁ, yō vā tata ā-gacchati, tasya vā śuśrūṣanta iti » *in the northern quarters is speech uttered with more discernment, and northward go men to learn speech ; he who comes thence, to him men hearken* : A. B. Keith's translation, Harvard, 1920, p. 387). With this opinion of the Midland scholars about the purity of the speech of the North-west, their view about the debased speech of the ' Vrātyas ' or non-Vedic Aryans of the East (p. 47) may be contrasted. There cannot be any question that the dialects of the Aryan language were losing their purity in the East, at a time when the West had preserved it better. The influence of the East is seen in some of the words of Yajur and Atharva Vedas, and in the Brāhmaṇas ; nay, even in the Rig-Veda. Instances are « vikaṭa » *deformed* < « vikṛta », « mlēccha » *barbarian* < « * mlāikṣa », « daṇḍa » *stick* < « * dandra », cf. Gk. « déndron », « kuru » *do* (imperative) for « kṛṇu », « √paṭh » *read* < « prath », « kāṭa » *depth* beside « karta » *pit*, « āḍhya » *wealthy* = « * ārdhya » < « √ṛdh », « nāpita » *barber* < « √snā », cf. Pali « nahāpita » ; in addition to these cases of cerebralisation in connection with « r » and assimilation of consonant groups,

prevalence of « l » forms is possibly to be referred to the influence of this eastern dialect, as also those cases where earlier « s » is changed to « ś ». (Cf. A. A. Macdonell, ' Vedic Grammar ' in the Grundriss der Indo-arischen Philologie u. Altertumskunde, under Phonology ; J. Wackernagel, ' Altindische Grammatik,' I, liii, and under cerebrals ; also cf. Vidhu-śēkhara Śāstrī, ' Saṁskṛtē Prākṛta-prabhāva,' in the Bengali journal Pravāsī, Calcutta, for Phālguna, 1317 Bengali Year.)

37. A few centuries before Buddha, Vedic cults and literary tradition were introduced into North-eastern India, as far as Benares and North Bihar. When Buddha flourished, Magadha or South Bihar, hardly known in pre-Buddhic times to the Aryans of the West, was already a member of the Aryan group, and a strong member too. The Rig-Veda mentions only once (III, 53, 14) a country called « Kīkaṭa », which Yāska (VI, 32) describes as a country which is the home of non-Aryans, « dēśō' nārya-nivāsaḥ ». Kīkaṭa is identified by later Sanskrit writers with Magadha. (Cf. Hēm-Chandra Rāy-Chaudhurī, ' Political History of Northern India from the Accession of Parikshit to the Coronation of Bimbisara,' Journal of the Department of Letters, Calcutta University, Vol. IX, 1923, p. 56.) In the Atharva-Veda, the Aṇgas and the Magadhas are mentioned as far-off or strange peoples among whom the Midland Aryan would gladly spirit away the malarial fever which troubled him (V, 22, 14). The ' Śatapatha Brāhmaṇa ' describes the easterners as being « āsurya » or demoniac (hostile ?) in nature (XIII, 8, 1, 5). The orthodox Brahman spirit found something antagonistic in the eastern peoples, « Prācyāḥ », among whom the Magadhas are to be numbered. Magadha was quite outside the Aryan, or rather Vedic, pale in the Brāhmaṇa period ; so, too, according to Yāska; yet when Buddha flourished, during the age immediately following that of the Brāhmaṇas, Magadha is a powerful Aryan state. Magadha, then, must have received the Aryan language and settlements of Aryans long before Buddha. What is very likely is that these Aryans were distinct from those other Aryans of the West among whom the Vedic culture grew up, distinct in dialect, in religion, and in practices, at least in the Brāhmanic period. We do not know how far, or whether at all, they differed from each other in race, but

they certainly differed in dialect and in religious practices. Possibly these eastern Aryans, or Aryan speakers, were a mixed people, with an Aryan element which had fallen under the spell of non-Aryan ideas, but had not given up its Aryan tongue: just as at the present day Russian colonists in the remoter parts of Siberia are being considerably influenced by Mongol (Buriat) and Turki (Yakut) peoples (cf. E. J. Dillon, 'Siberia in our own Time,' in Harmsworth's History of the World, p. 700).

The Aryans of the Vedic cults called these non-Vedic Aryans 'Vrātyas,' *outcasts*, or *riteless people*. The Vrātyas could obtain admission into the Vedic community by the performance of a ceremony or sacrifice, « vrātya-stōma ». (Cf. Ramā-Prasād Chanda, *op. cit.*, p. 39; Weber, 'Indian Literature,' pp. 67, 68, 79.) The tract where these Vrātyas were most numerous seems to have been Magadha. Their priests were probably bards as well, so that after the absorption of the Vrātya communities, or of sections of them, into the Brahmanic fold, the word « māgadha » was retained in Sanskrit to mean a *bard*. The rise and progress of the anti-Brahman and the anti-sacrificial ideas of the Buddhists and the Jains among the eastern peoples—and these heterodox schools also called their teachings 'Aryan truths,'—perhaps shows that other traditions were established before the Brahmans came, and the Vedic institutions or ideas brought by the Brahmans from the Midland and the North-west (Madhyadēśa and Udīcya) sat lightly on the masses. (Cf. Weber, *op. cit.*, p. 79.) The Vrātya hymns of the Atharva-Veda (XV), in which there is a deification of a wandering Vrātya priest, with his strange paraphernalia and his cortege, are a puzzle: they suggest the presence of a Śaiva cult among the Vrātyas, and certainly a cult quite different from that presented by the Vedic world. The extravagant respect paid to the Vrātya in these poems either shows the hand of the followers of Vrātya cults themselves; or they are the work of Vedic Aryans who felt fascinated by the Vrātyas with their non-Midland practices, and perhaps by their wild mysticism, for the Atharva-Veda hymns are highly mystic in this connection. There are, however, similar passages of mystic and supernatural treatment of the idealised priest or mendicant elsewhere in Vedic literature (P. T. Srinivas Iyengar, *op. cit.*, pp. 77-78).

The general Brahman attitude towards the Vrātyas was anything but sympathetic. But they admitted that the Vrātyas were Aryan in speech. The 'Tāṇḍya' or 'Pañcaviṅśa Brāhmaṇa,' in speaking of the Vrātyas, says (XVII, 4) that *they call an expression which is not uttered with difficulty as being uttered with difficulty*, and also *they speak the language of the initiated* (*i.e.* into Brahmanism), *although they are not initiated*: «a-dur-ukta-vākyaṁ dur-uktam āhur.....a-dīkṣitā dīkṣita-vācaṁ vadanti». Weber's explanation of the first statement is that it 'probably refers to prákṛitic, dialectic differences, to the assimilation of groups of consonants, and similar changes peculiar to the Prákṛit vernaculars' (Weber, *op. cit.*, pp. 67, 68); and Weber is undoubtedly right: here we have the oldest contemporary notice of a Prakritic habit of speech in India. The 'Śatapatha Brāhmaṇa' (III, 2, 1, 23) makes the Asuras, *i.e.*, anti-Vedic people, presumably of the East (cf. the expression «āsuryāḥ prācyāḥ» in the ŚB., referred to at p. 45), cry out «hēlavō, hēlava» when they were deprived of speech (ātta-vacasaḥ) and vanquished; and this word is given by Patañjali (I, i, 1) as «hēlayaḥ», and it is the Asura pronunciation, according to traditional explanation, of the words «hē arayaḥ» *O, the foemen!* A form like «alayō» or «alayaḥ» for «arayaḥ», with «l» for «r», is characteristic of the Prācya or eastern speech, of which that of Magadha is a variation. (Weber, *op. cit.*, p. 180; Ramā-Prasād Chanda, *op. cit.*, p. 222.) Taking into consideration the linguistic state of the country during the time of Aśōka (middle of the 3rd century B.C.), it is evident that the Prakritic or 'Māgadhī' forms developed quite early, and in the East. The Sohgaura copper plaquette inscription is perhaps the oldest Brāhmī record, and may date from the 4th century B.C.; it belongs to the Gorakhpur district in the United Provinces, within the Prācya area, and we find here forms like «bhaṅḍagalani»=«bhāṇḍâgāra-», «bhala»=«bhāra», «mathula»=«Mathurā», with «l» instead of «r» (J. F. Fleet, 'The Inscription on the Sohgaura Plate,' JRAS., 1907, pp. 509 ff.). And the statement in the 'Tāṇḍya Brāhmaṇa' may be reasonably construed to mean that the simplification of the consonant groups in the East was noticed by the people of the Midland or the North-west as early as, say the 8th century B.C.

It would thus seem that the real Prakrit stage was first attained by IA. in the East, among the Prācyas, in Kōsala and in Magadha, and specially among the Vrātya Aryans who were established there. Prakritic habits of speech gradually spread themselves from the East to the West; but as it is shown by the inscriptions of the North-west and the West (*e.g.*, the Shahbazgarhi and Mansehra inscriptions, the Besnagar inscription, the Mathura lion capital inscription, etc.), in the earliest homes of Aryan speech in India, the habits of the easterners, although ultimately victorious, were resisted long. By the time of Aśōka, the popular dialects of the West Midland probably had succumbed, and abandoned OIA. traits; but these traits (*e.g.*, retention of « r » with consonants, of the three sibilants « ś ṣ s ») continued in the North-west till Kuṣāṇa times, and later. Greek forms like « Prasioi » = « Prācyāḥ », « Amitrokhatēs » = « Amitra-ghātaḥ », or « -khādaḥ », « Sandrokuptos » = « Candra-guptaḥ », « Palibothra » = « * Pāḍaḷī-butra, Pāṭalī-putra, * Pāṭalī-purta » (cf. Jarl Charpentier, ZDMG., LXX, pp. 216-250), « Erennesis » = « Vārāṇasī » and « Erannoboas » = « Hiraṇya-vāhaḥ », are really western, although they are names of persons, peoples, and places of the East; and the Greeks first heard these names, from the 4th century B.C., from speakers of the western and north-western dialects which retained the « r ».

38. The Aryan language entered the second stage of its development some time before Buddha, for by the time that Buddha flourished (c. 500 B.C.), the spoken language of Kōsala and Magadha had progressed from the OIA. stage sufficiently far to become a distinct language from the earlier literary forms, « chandas », which obtained, namely, Vedic and Brāhmanic Sanskrit. In addition to fundamental changes in phonetics and modifications in morphology, old words were being replaced by new or foreign ones, or were being modified in their meaning. This was more noticeable in the second MIA. stage, when old and almost universally used IE. words, like « aśva » *horse*, « aśman » *stone*, « śvan » *dog*, « vṛṣa » *bull*, « avi » *sheep*, « anaḍvān, ukṣan » *ox*, « rōhita, aruṣa » *red*, « vāha, ratha » *wagon, chariot*, « rāis, rādhas » *wealth*, « sahas, taviṣī » *strength*, « udan » *water*, « √ad » *eat*, « √gṛbh » *seize, take*, « √dṛś » *see*, « √gṛdh » *be greedy*, « √han » *strike, kill*, « √vakṣ » *grow*, « √yaj » *worship, sacrifice*, « √vij »,

√vēj » *tremble*, « √pṛ-ṇ- » *fill*, « ut-√pat » *fly*, « √sū » *give birth to*, « dama, vēśa » *house*, « dru » *tree*, « puṣkara » *lotus*, etc., etc. gave place, respectively, to words like « ghōṭa-ka », « prastara », « kukkura », « ṣaṇḍa, gōṇa », « mēṣa, ēḷa-ka », « balīvarda », « rakta », « śakaṭa, *gaḍ-ikā », « dhana », « bala », « pānīya, jala », « √khād, √jam », « pra-√āp », « pra-√īkṣ, √dṛk-ṣ- », « √lubh », « √mār-aya- », « √vṛdh », « √pūj-aya- », « √kamp », « √pūr-aya- », « uḍ-√ḍī-ya- », « √jan-aya- », « vāṭ-ikā < √vṛt » beside the old « gṛha », « vṛkṣa, gaccha, piṇḍa », « kamala, padma », etc., which are the sources of the words actually in use in NIA.

When all Aryan India became or tended to become Prakritic in speech, even in the Midland and in the Brahmâvarta of the Vedic Rishis, there was an attempt on the part of the Brahmans—possibly they were not conscious of it—to establish for use in their schools, a form of speech as near the older dialects of the Vēdas and the Brāhmaṇas as possible. It may be expected that when Prakritic habits were becoming the rule among the masses in Central Āryâvarta, the upper classes, the Brahman priests and scholars and the Kṣatriya aristocracy, who were of Midland Aryan blood, tried to preserve purity of speech, at least in all formal affairs, if not in their private life ; and they were probably the last to be affected by Prakritic habits, since they, more than any other section of the people, were born Aryan speakers ; and they kept themselves aloof from the vast majority, which was a mixed group of Vedic « Viśas », or Vrātyas, and Dravidians and other full-blooded non-Aryans. As it has been pointed out before, the speech of the North-west was nearest the Vedic in phonetics ; and the North-west was, from its geographical position, the stronghold of Aryan speakers in India. The pronunciation of the North-west was the acknowledged standard in Brahmanic schools in the Midland, and further east, during the period of the Brāhmaṇas (p. 14). The north-western tracts (Gandhāra etc.) were famous for their learning, and both Brahman and Buddhist tradition agree in making Takṣaśilā in Gandhāra a great cultural and educational centre for all Aryan India, where pupils from the farthest east of Aryandom used to resort. Towards the close of the Brāhmaṇa period, then, another literary speech, practically a younger development of the speech

of the Brāhmaṇas, was growing up in the Brahman schools, and possibly also in the courts of the Kṣatriya chiefs who followed the Vedic religion. It was a polite form of speech based on the language of the aristocracy and the priesthood of the Midland, *perfected* or *improved*, « saṁskṛta », in the sense that in its phonetics and in a great deal of its grammar it was made to adhere to the OIA. (Vedic and Brāhmaṇa speeches) ; and as such, it very closely agreed with the speech of the North-west as well. It seems the speech of the upper classes in the Midland was substantially the same as that of Gandhāra during the period 7th—6th centuries B.C.

This new literary speech must have arisen about this time ; and much as Hindōstānī or « khaṛī-bōlī » (§ 12) of the present day, it was used and studied by the followers of the Vedic faith from Gandhāra to Benares and Pāṭaliputra. Patañjali in the 2nd century B. C. describes it as the language of the « śiṣṭa » or *cultured* people, chiefly Brahmans, of Āryâvarta. After the language of the Vedas, this speech became an object of serious study with Brahmans : and differences of opinion naturally arose as regards correct usage in this language. In the 5th century B.C., the great grammarian Pāṇini wrote his ' Aṣṭâdhyāyī,' the oldest systematic grammar of this new language that we possess. (For the date of Pāṇini, I accept the views of Hēm-Chandra Rāy-Chaudhurī in his ' Materials for the Study of the Early History of the Vaishnava Sect,' Calcutta University, 1920, pp. 14-18.) Pāṇini was an inhabitant of the North-west, of Gandhāra ; and this literary speech, (in contradistinction to the speech of the earlier literature, « chāndasa », which he also treated of in his book), was, in his time, sufficiently close to his own Udīcya dialect to be described by him as « lāukika » or *current speech*. In later times, this very speech, Sanskrit, attained a sanctity and came to be called « dēva-bhāṣā » or *the Speech of the Gods*. Before Pāṇini, several schools of grammarians had arisen. In addition to the views of individual scholars, two important regional schools are noted by Pāṇini : the Northern, *i.e.*, Northern and Western (Udīcya), and Eastern (Prācya),—in the western and eastern tracts of Aryan India, during the closing centuries of the OIA. period. These tracts were separated from each other, according to tradition, by a river Śarāvatī, which was somewhere in the Midland, and it has been

sought to identify it with the Śatadrū or the Satlaj (Hārāṇ-Chandra Chakravartī, 'Prācya O Udīcya' in the VSPdP., 1319, No. 1). In the 'Kāśikā' Commentary on Pāṇini (middle of the 7th century A.C.), the Vidēhas, Aṇgas, Vaṇgas, and Magadhas, as well as the Pañcālas of the Midland, which is curious, are included under the Prācyas. The Śarāvatī river is perhaps the Sarayū (Śarāvatī=a medieval Sanskritisation of a Prakrit «Saravū» for «Sarayū»; cf. the Greek transcription «Sarabos», and «Sarwa» in the work of Al-Bērūnī), which is within the tract dividing the West and the Midland from the East.

Pāṇini gave this new literary language a fixity for all time. But during his age, it was a living language, current as a sort of Hindōstānī of the upper classes, and as such it had local variations, and approximations to local vocabularies and idioms, which it was impossible to bring under rule. During the earlier centuries of the MIA. period, the masses throughout Aryan India certainly understood it, even in the East, where Prakrit was already fully developed. Ancient Indian drama (the earliest fragments of which that we possess date from 1st cent. A.C., the period of the Kuṣāṇas), in making the aristocracy and the Brahmans speak Sanskrit, and the lower classes and the women the Prakrits, surely in this respect adheres to a tradition which has its origin in an actual state of things at the transition of the OIA. to MIA. in the Midland. The historical traditions as well as the ballads and songs which were current among the Aryan settlers (the Kṣatriyas and others) of the Vedic faith, in the Panjab and the Midland, and possibly also in the East, in the various dialects, were collected and arranged, and their language was emended into Sanskrit. These collections formed the *nuclei* of the Sanskrit Mahābhārata and the Purāṇas, and possibly, also of the Rāmâyaṇa; though the last named work looks more like a *Kunstepos* than real popular ballad poetry such as the Mahābhārata unquestionably preserves. In many cases, old dialectal forms were retained in these ballads, and these did not agree with the standard as laid down in Pāṇini's grammar; and later Sanskrit grammarians accepted these dialectal forms, as preserved in the Sanskrit of the Mahābhārata and the older Purāṇas, and politely called them «ārṣa» forms—forms

employed by the Rishis. The Sanskritising process for these specimens of OIA. saga and legend seems to have continued down to the Gupta period. (Cf. F. E. Pargiter, 'The Dynasties of the Kali Age,' Oxford, 1913, Appendix, on metric evidence to show that a great many passages in the Purāṇas were originally written in early MIA.) A mass of ritual literature began to be written in Sanskrit, and in all these ways, the foundations of classical Sanskrit literature were laid towards the end of the OIA. period.

As the distance between the vernaculars (of the North-west, Midland, East and South) and this newly risen Sanskrit grew greater and greater, the latter became an artificial language. It could be held up to show what OIA. was like, in its sound-system and in most of its forms. Its grammar grew hide-bound, and prevented any change or growth that is characterstic of a living language. But throughout the long course of artificial existence it entered upon, almost immediately after its birth, we can see that it was not entirely unaffected by change in its spirit. Sanskrit literature, like Latin literature of medieval Europe, was the creation of scholars, who used in daily life various vernaculars, MIA., NIA., Dardic, and Dravidian. The Sanskrit language as employed by them took its colouring from the vernacular speeches of the writers of the successive periods, from 500 B. C. down to the present day,—in vocabulary, in syntax, in idiom. At the hands of certain writers, it developed some cumbrous qualities, like the use of long compounds, which came to be regarded as a stylistic embellishment. But the influence of the vernaculars it never escaped. Prakrit roots and forms were ever on the increase in Sanskrit, and occasionally words from the Dravidian and Kōl, (and from foreign languages like Greek, and Old, Middle and New Persian), which were first adopted in the vernaculars. Its syntax was gradually based on the Prakrit vernaculars, and, like the latter, it came to discard gradually the OIA. inflected past forms of the verb, ultimately relying almost entirely on participles. (Cf. J. Bloch, 'La Phrase nominale en Sanskrit,' MSL., XIV, Paris, 1906.) In this way, from vocabulary, from syntax and from style, it is possible to trace a development in this great literary language of India.

Sanskrit as written at the present day also suffers from importation of vernacular (and even foreign) words and vernacular constructions in the hands of indifferent writers.

When the MIA. stage was fully on its way, Sanskrit became almost identical with Prakrit, remaining true to OIA. only in phonetics and inflection. It would seem that at first Sanskrit was confined to the Brahman schools, and courts of Aryan chiefs in the Panjab and the Midland; and with the spread of Brahman influence, Sanskrit came to have an exalted position in the East as well. But Buddhism and Jainism, two religions which had their origin in the East, at first employed languages based on eastern vernaculars, or on a *koinē* that grew up on the basis of the Prakritic dialects of the Midland, and was used in the early MIA. period (B. C. 500 downwards) as a language of intercourse among the masses who did not care for the Sanskrit of the Brahman and the Rājanya; and these languages for some time checked a wide employ of Sanskrit. There was a certain amount of success in setting up rival literary languages like Pali and Ardha-māgadhī. But the spirit of conservatism, which is never absent from literary effort, saw that Sanskrit did represent a standard which transcended the apparently erratic course of the vernaculars; and quite early, Sanskrit became triumphant, and obtained the homage of the Buddhists and the Jains as well. The Buddhists for a time (2nd cen. B. C. —3rd cen. A. C.) almost side by side with their literary work in Pali, sought to approximate the Prakrits they were familiar with to Sanskrit as used by the Brahmans; and this resulted in the curious dialect called « Gāthā » or *Mixed Sanskrit*, or *Buddhist Sanskrit*, from its very nature a most artificial mix-up, often with false Sanskritisation of Prakrit forms; and this is the language which is found in works like the 'Lalita-vistara,' the 'Mahā-vastu' and the 'Divyâvadāna.' The same thing was done in the chanceries of kings and in the public recording of events, as is evidenced from inscriptions of the period. But Sanskrit gradually came to its own entirely, and the oldest Sanskrit inscription, the Rudra-dāman inscription at Girnar, dates from the middle of the 2nd century A. C., when, in parts of India at least, Sanskrit began to oust the vernaculars from formal

documents. It thus came to have a position which it did not have before: it became both the official as well as the cultural and sacred language of almost all sections of people in India. Although it admitted vernacular and foreign words by the back-door, once its prestige being established Sanskrit became the reservoir from which the vernacular streams were frequently fed. OIA. words had their natural change in MIA., and in that case they represented the original, basic stratum of the language. But with the general recognition of Sanskrit as the undisputed representative of an earlier stage of IA., borrowing from it freely began in MIA. (especially in the Second and Third stages); and thus fresh elements were added to the vernaculars, which became naturalised, and were subjected to the subsequent phonetic modification of the dialect into which they were introduced. This process of borrowing from Sanskrit was repeated at various times in the later history of IA.; and this fact of Sanskrit interfering with the natural development of the language by being always ready to supply new words by the hundred, and occasionally a new form here and there, is a note-worthy thing in the development of Middle and New Indo-Aryan.

39. The people known to the Kurus, Pañcālas and other tribes of the Midland and the West as Prācyas or *Easterners* consisted of the Kōsalas (in Oudh), the Kāśis (round about Benares), the Vidēhas (North Bihar) and later, the Magadhas and the Aṇgas (South Bihar). The term « Prācya » has its modern counterpart in the word « Purabiyā », by which the speakers of the Western and Midland speeches, Panjābī and Western Hindī, designate their eastern neighbours in Hindostan, the Eastern Hindī and Bihārī speakers. The Prācya dialect seems to have developed two forms, a Western and an Eastern. The following were among the salient characteristics of the Prācya speech: in phonetics, « l » alone was used, and there was no « r »; and there was a tendency towards cerebralisation of « t, d » in connection with « r »; OIA. « -vy-, -ty- » etc. became « -viy-, -tiy- », but « -ly- » became « -yy- »; and there was one dental « s » for « ś ṣ s »; in morphology, OIA. singular nominatives of « -a » nouns, « -aḥ, -am », took the form « -ē » (in the West it became « -ō- »); the accusative plural of masculine « -a » nouns had the affix « -āni », and the locative singular « -assi » (or « -assiṁ » ?). In the eastern

form of Prācya, a *patois* which advanced further from the western norm, the sibilants « ś ṣ s » were represented by the palatal « ś » and not by the dental « s ».

Following the nomenclature of the Prakrit grammarians describing MIA. of the second period, Western Prācya can be called Ardha-māgadhī and Eastern Prācya, Māgadhī; and these dialects as they were during the first MIA. period can be described as Old Ardha-māgadhī and Old Māgadhī. Old Ardha-māgadhī as spoken in Kōsala was undoubtedly the speech of Buddha[1]; on it was based a current speech of Eastern Aryan India, in which Buddha and Mahāvīra gave their discourses, and which

[1] The languages and dialects current in Northern India during the first MIA. period (600-200 B.C.) were probably the following (see Table, opposite p. 6; and T. W. Rhys Davids, 'Buddhist India,' London, 1903, pp. 153-154):—

[i] Spoken dialects of IA., current from Gandhāra to Bengal in the east and the Deccan in the south, which probably formed the following 5 groups: (1) North-western —Gandhāra, Panjab, possibly Sindh; (2) South-western—Gujarat, W. Rajputana; (3) Midland; [Malwa the meeting ground of (2) and (3).] (4) Eastern—(*a*) Old Ardha-māgadhī, or Kōsala, and (*b*) Old Māgadhī; and (5) Southern—Vidarbha, Mahārāṣṭra.

Probably there were other dialects as well. (1) resembled OIA. most: (4) had deviated from OIA. more than any other. (3) and (4) were both current in the Ganges Valley, and during this period, (4*a*) had greater prestige, as the language of the leaders of anti-Brāhmanic thought, and of the courts of the powerful monarchies or republics of the East; but (3) seems to have been understood as a *lingua franca* everywhere in Aryandom, being between the two extremes of (1) and (4)

[ii] Two literary languages: (*a*) the ancient bardic dialect—chāndasa—preserved in the Vedic hymns; this was based on the OIA. dialects current in the Panjab before 1000 B.C.; a younger form of this dialect is found in the Brāhmaṇas, which is intermediate in age between (*a*) and (*b*); (*b*) a 'reformed' literary speech—saṁskṛta—which was crystallising in the Brahman schools and in the courts of princes in the Midland and the North-west. This latter was based on archaic forms of (1) and (3) above, agreeing more with (1) in preserving the OIA. phonetic character when it was systematised in the beginning of the MIA. period by the grammarian Pāṇini of the North-west.

Towards the end the first MIA. period, when it had already lost all OIA. characteristics in phonetics etc, (3) began to take shape as a literary language, and became Pāli.

[iii] Dardic dialects, spoken in the Western Himalayas, and also probably by settled communities of Dardic people in the plains of Northern India, who were rapidly coming under Indo-Aryan influence.

became the language of the court and administration in Eastern India. Aśōka's court language, as in the Midland and eastern inscriptions, present varieties of this speech. (Cf. T. W. Rhys Davids, 'Pali Text Society's Pali Dictionary,' 1921, Foreword, pp. 1, 2; cf. also S. Lévi, 'Sur une Langue précanonique du Bouddhisme,' JA., 1912; H. Lüders, 'Bruchstücke Buddhistischer Dramen,' Berlin, 1911, pp. 40, 41.) Ample testimony is borne to the political power of the Prācyas ('Prasioi') in the 4th century B.C. by Greek writers. There is no wonder that their dialect would have some prestige, and cast into shade for a time the Midland and other western speeches. During the time of the Mauryas, and specially of Aśōka, this 'standard East Indian' was dominant as the official language practically all over India; and, as is evident from the presence of eastern forms—the so-called 'Māgadhisms'—in the language of the Girnar, Shahbazgarhi and Mansehra inscriptions, it exerted a great influence on other forms of MIA. (Truman Michelson, American Journal of Philology, 1909, pp. 284 ff.; JAOS., 1909, i, pp. 77 ff.). The oldest records in this dialect are the Brāhmī inscriptions down to Aśōka (the Piprahwa vase inscription, the Sohgaura inscription, and the eastern inscriptions of Aśōka), and the fragments from the Buddhist Sanskrit drama found in Central Asia (early Kuṣāṇa period).

The discourses of Buddha and of Mahāvīra were originally in this Prācya speech. Those of Buddha later (*i.e.* after Aśōka) were rendered

[iv] Foreign tongues—*e.g.*, Persian and other Iranian (from c. 500 B.C.), and Greek (from end of the 4th cen. B.C.), spoken by small communities in the North-west.

[v] Non-Aryan dialects: Dravidian and Kōl, spoken by many among the masses in the Panjab, in Central India, in the Ganges Valley, who were in the process of being Aryanised. These seem to have been the language of the people in general in Bengal, Orissa, and other parts. Dravidian had its strong-hold in the South, and literary cultivation of Dravidian must have commenced already, to blossom into the Old Tamil literature of the early centuries after Christ. The Tibeto-Chinese speeches, if they had at all come within Indian frontiers by this time, were confined to the Assam side, and had not descended on the Indian side of the Himalayas as yet.

Possibly there were in the wilder parts of India the pre-Dravidian and pre-Kōl speeches of remnants of primitive Negroid and other tribes, which have since entirely disappeared.

into a Western dialect, undoubtedly that of the Midland (an old form of Śaurasēnī); but as it happens in such cases, when a text is rendered from one dialect into another, a great many forms of the original dialect remained, and showed themselves as a substratum. (Cf. W. Geiger, 'Pali Grammatik' in the Grundriss, § 80; H. Lüders, 'Epigraphische Beiträge, III,' in the Sitzungsberichte der König. preuss. Akad. der Wiss., 1913, LIII, pp. 994, 1003 ff.). This western dialect into which Buddha's teachings were translated came to be known as 'Pāli,' which simply means *texts*, and its grammar amply shows that at its basis it is a Midland speech. Pali became a sort of a sacred language for some Buddhists; and because Buddha was connected with Magadha and obtained his enlightenment there, Pali, as the speech in which the sayings of Buddha were enshrined, came to be known as 'Māgadhī,' probably first among the Buddhists of Ceylon. The connection with Magadha suggested by this name has considerably confused our notions regarding the home of the dialect on which Pali was based. The essentials of Pali phonology and morphology agree with Śaurasēnī of the second MIA. period more than with any other form of MIA. A *koinē* akin to Pali of the Buddhist documents was established as early as the beginning of the 2nd century B.C., as can be seen from the language of the Khāravēla inscription (cf. Kāshī-Prasād Jāyaswāl's edition of the inscription in the JBORS., 1917, Part IV, 1918, Part IV). Pali as a literary language seems to have been established during the transitional MIA. period (200 B.C.—200 A.C.), retaining, however, a generally archaic (*i.e.*, early MIA.) type. Based on a Midland speech, which as a current language was a sort of a junior rival of Sanskrit during the transitional and second MIA. stages, it became powerful with the prestige of a literature when the folklore of Northern India was embodied in it in the 'Jātakas,' and when the philosophy of Buddha was rendered in it. It was studied in Buddhist monasteries in North-western and Western India, as well as in the Midland; with the fall of the Mauryas, the prestige of its eastern rival, Ardha-māgadhī, was at an end, and it became probably the only important vernacular speech of Northern India, like its modern counterpart Hindōstānī. During

the Kuṣāṇa period (1st cen.—4th cen. A.C.), the dialects of the extreme North-west, Gandhāra, seem to have had some prestige, both as the language of the tracts where the ruling family had its stronghold as well as the language of the culture and university centre of Takṣaśilā. Pali was used also by the speakers of the north-western dialect; and thus it came to have a number of north-western words and forms, showing characteristic Dard or Piśāca influence (cf. O. Frankfurter, 'Handbook of Pali,' London, 1883, p. 9; G. A. Grierson, 'The Home of Literary Pali' in the Bhāṇḍārkar Commemoration Volume, Poona, 1917, pp. 118 ff.). There were also words and forms from other Aryan dialects, from the Gujarat and Malwa side, as well: *e.g.*, the forms in «-b-» for «-dv-», «-pp-» instead of «-tt-» for «-tm-», etc. Pali was for some time cultivated in Ceylon, and it is quite possible there was some 'Sīhala' influence in its formative period: the «-b-» and «-pp-» forms may be from Ceylon: the Aryan language of Ceylon was a form of the old Gujarat dialect of the first MIA. Period. (§§ 18, 45). When Pali was established as a literary language, it came under the influence of Sanskrit, which to some extent became its model; and Pali after the 5th century entered into a career of artificial literary existence in India, in Ceylon, and later, in Burma (among the Mōns and the Burmese) and in Siam, which can be compared only with that of Sanskrit.

The 'Western' Prācya speech of Buddha has thus been completely ousted from Buddhistic literature by its rival, the Midland speech which became Pali. The Jains preserved the original Western Prācya language of the teachings of their master Mahāvīra to a greater extent than the Buddhists. The oldest Jain texts are in the dialect called Ardha-māgadhī: it represents the IA. speech in the second MIA. stage, and thus it is younger than Pali; it is already strongly influenced by western dialects (in its «r» forms, for instance), but, on the whole, it may be said to represent the old speech of Kōsala fairly well, at least in some of its characteristics.

The Eastern Prācya speech, or Māgadhī properly so called, seems to have developed out of the Prācya dialect. Its special characteristic, «ś» for

all the sibilants of OIA., might have developed as a dialectal variation of Prācya as early as the late OIA. period, but it is recorded first in the Śutanukā inscription, contemporaneous with the Aśōkan documents; although the language of the Aśōka inscriptions, even within Magadha itself, ignores this peculiarity. Probably the « ś » pronunciation was regarded as vulgar, and hence the court dialect of the Aśōkan inscriptions does not notice it. This seems to be borne out by the usage in the Sanskrit dramas where the « ś » dialects are reserved for the lowest classes. The drama fragments from Central Asia give specimens of a Prakrit with this peculiarity. We have thus in these texts our earliest examples of the Māgadhī form of Prācya: of an 'Old Māgadhī,' in fact (Lüders, 'Bruchstücke,' pp. 34 ff. 41).

40. The Śutanukā inscription in the Jogimara cave in Ramgarh Hill, in Sarguja State, Chota Nagpur (=South-west Magadha) is the earliest specimen[1] of Māgadhī proper that we possess (Annual Report, Arch. Survey of India, 1903-1904, pp. 128 ff.; Lüders, 'Bruchstücke,' p. 41). It runs thus:

« Śutanuka nāma dēvadaśikyi
taṁ kamayitha balanaśēyē
Dēvadinē nama lupadakhē »

(=« Śutanukā nāma dēva-dāśikyī, taṁ kāmayittha Bālānaśēyē Dēvadinnē nāma lūpa-dakkhē », in Sanskrit—
« Sutanukā nāma dēva-dāsikā: tāṁ akāmayiṣṭa Vārāṇasēyaḥ Dēva-dattō nāma rūpa-dakṣaḥ »)

Śutanukā by name, a handmaid of the Gods (=temple-dancer); her loved he of Benares, Dēvadinna by name, skilled in forms (=painter or sculptor? skilled in figures or accounts?).

[1] Mention may be made of a Brāhmī seal from Patna, dating probably from pre-Maurya times, with the inscription 'Agapalaśa'='Agga-pālaśśa,'='Agra-pālasya'; of the Buddha Gaya seal, c. 2nd century B.C., with the legend 'Mōkhalikaśa'='Maskarikasya'? and of the Naṁdi-vaḍha seal, find-place unknown, c. 200 B.C., with the inscription 'Naṁdi-vaḍhaśa'='Nandi-vardhasya, -vṛddhasya' (O. Franke, 'Pali und Sanskrit,' Strassburg, 1902, pp. 17, 18, 11; 55, 98). Franke notes sporadic cases of occurrence of ś (and ṣ) for s in other epigraphical records, including those of Aśōka.

The above inscription, written in early Brāhmī characters, supplements our knowledge of the dialectal conditions in Aryan India of the 3rd century B.C. as revealed by the inscriptions of Aśōka. In these inscriptions, three main varieties of dialect are represented ; *one*, at Shahbazgarhi and Manschra, is the dialect of the extreme North-west, the phonetics of which resembles OIA. to a remarkable extent ; *two*, the dialect of the South-west, Gujarat country, also retaining many OIA. features ; and *three*, the dialect of the East, presenting some minor variations. This last seems to represent the actual spoken language most faithfully ; the other two have occasionally adopted forms of the eastern dialect, as the standard speech, to the exclusion of their proper local forms. Thus there seem to have been attempts at standardisation on the lines of an official language. (Cf. E. Senart, 'The Inscriptions of Piyadasi,' translation by Grierson, Bombay, 1892, pp. 137 ff. : the latest opinion on the question is Truman Michelson's, in the American Journal of Philology, 1909-1910, in the JAOS., 1909, 1911, and in the IF., 1908-1909.) In the Śutanukā inscription, we have thus the evidence of another variation of the eastern dialect.

The language of the Midland does not seem to be represented in the Aśōka inscriptions found within the Midland tract (Kalsi, Topra, Meerut, and Bairat-Bhabra). Here it is practically only a variant of the eastern dialect, which as an official language thus seems in the 3rd century B.C. to have almost overwhelmed the Midland speech in its own home. But the Midland speech, with its « r » words, and its « -ō » nominatives and « -ē » accusative plurals, seems none the less to have maintained a vigorous existence outside the official circle, and to have slowly ousted the Prāçya speech from its power : witness the growth of Pali, narrated above. The Midland speech had its fullest revenge later ; and from the transitional and second MIA. periods, it is the Midland speech, as Śaurasēnī Prakrit and Apabhraṅśa, as Braj-bhākhā, and at the present day, as Hindōstānī, which has been dominant in the Purabiyā and Bihārī (*i.e.*, eastern) areas. The early epigraphical records, post-Aśōkan, found in the Midland region (Mathurā), in Malwa (Sanchi), as well as in the South (Nasik and Karle caves), show dialects, more or less, but not entirely, free from the Prāçya characteristics ;

local dialectal forms seem to have gradually reasserted themselves. In the Midland, however, there have also been found inscriptions of which the dialect is of the North-west, showing its influence in the former tract through political reasons. But owing to the carelessness of writing and spelling, to the influence of neighbouring dialects or of official speeches, and, as we advance, to a growing desire to approximate to Sanskrit, the MIA. inscriptional records of the transitional MIA. period (200 B.C.—200 A.C.) are very unsatisfactory in determining the lines of dialectal differentiation; and in this respect they fall far below the Aśōka inscriptions, which more or less faithfully reflect the actual dialectal conditions.

By the 1st century A.C., however, the fact of dialectal difference became a noticeable thing in the social life of Aryan India. If the writers in the Midland during the late OIA. period (800—600 B.C.) casually told us about the purity of the speech of the Northerners (Udīcyas), and seemed to have hinted at the Prakritic speech habits of the Vrātyas of the East (pp. 45, 47), dramatists and their audiences from the time of Christ (or earlier) keenly appreciated the variations in local dialects; and in Indian drama the practice of employing a local dialect to suit the social position of the speaker came into being. The Midland dialect, Śaurasēnī, was thought most fitted to be the speech of the best and most cultured classes who did not speak Sanskrit. The Mahārāṣṭrī or southern dialect, with its mellifluous nature brought about by early dropping of the intervocal stops, was utilised as the dialect *par excellence* for songs by those who employed Śaurasēnī in ordinary speech. And Māgadhī, as an uncouth provincial dialect spoken in the extreme eastern frontier of Aryandom, a dialect which showed a wide deviation from the common MIA. norm, was thought suitable for the lowest and least cultured classes. In the Buddhist drama fragments Ardha-māgadhī is also used, but Ardha-māgadhī ceased to be employed in later dramas, Śaurasēnī apparently taking its place. In the main, these three dialects—Śaurasēnī, Mahārāṣṭrī and Māgadhī, became established in drama in the transitional and second MIA. periods. Later, other dialects were sparingly used: and as something resembling a local dialect would satisfy the author or the people, the specimens in the dramas do not have the

importance of genuine dialectal documents. The earliest Prakrit grammarian, Vararuci (5th century A.C. ?), seems already to be actuated by ideas as to what the Mahārāṣṭrī, Māgadhī, Śaurasēnī, and Paiśācī speeches in a drama *ought to be*, rather than what they *actually were* in current usage. Later grammarians are much more influenced by these theories; and later writers of Sanskrit drama follow the grammarians as models, more than anything else.

41. Geographical situation, linguistic evidence, tradition, history, all go to prove that the Aryan language came to Bengal as an overflow from Bihar. It cannot be divined when the Aryan speech first came to Bengal,—to North Bengal probably from Mithilā, and Central and West Bengal from Aṇga. Magadha entered into the community of Aryan states before 600 B.C.; and outposts of Aryan colonisation, or, rather, centres of Upper Gangetic language and culture, would start being established immediately afterwards in the lands of the East, which were inhabited by non-Aryan tribes like the Puṇḍras, the Rāḍhas, the Vaṇgas and others. These peoples were known at least by name to the Midland Aryans of the late OIA. period. The 'Aitarēya Āraṇyaka' mentions the Vaṇgas, the Vagadhas, and the Cērapādas, meaning no doubt the people of Vaṇga or East Bengal, the Magadhan people and the aboriginal Chērōs or Chērūs of West Bihar, who are Kōl in origin; and they are described as *birds* (=birdlike men?), whatever that may imply (Aitarēya Āraṇyaka, II, 1, 1, 5: « prajā ha tisraḥ atyāyam īyur iti, yā vāi tā imāḥ prajās tisraḥ atyāyam āyaṅs tānîmāni vayāṅsi vaṇgā vagadhāś cēra-pādāḥ »: *now three races transgressed (the Vedic path); those three races which did transgress were indeed these birds—the Vaṅgas, the Vagadhas and the Cēra-pādas.* Sāyana explains differently; cf. Ait. Ār., Bib. Ind., 1876, p. 147. Cf. also the article 'Vaṇga' in Macdonell and Keith's 'Index of Vedic Names,' London, 1912). The 'Aitarēya Brāhmaṇa' (VII, 6) speaks of the Puṇḍras, who gave their name to Puṇḍra-vardhana or North Central Bengal, and are now represented by the পুঁড় « Pũṛ » or পুঁড়ো « Pũṛō » caste of Bengal, as an aboriginal people. Some of the early Brahmanical works regard the countries of the East, including Magadha,

as barbarian lands not suitable for Brahmans to settle or sojourn in: penances are prescribed, for instance, in the 'Baudhāyana Dharma-sūtra' (I, i, 32, 33) for Vedic Brahmans who went to Puṇḍra, Vaṇga and other lands. The Rāḍhas are mentioned as a barbarous people in Jain tradition, which goes back to the 6th century B.C. : an opinion which has its echo in Middle Bengali literature. (See below, § 45.)

No inscription of Aśōka has been found within Bengal proper; this is strange, considering the proximity of Bengal to Bihar, the home province of the Maurya empire, and considering also the fact that Kaliṇga was conquered by Aśōka. But we know from the 'Divyâvadāna' that Puṇḍra-vardhana (North Central Bengal) was under Aśōka ('Divyâvadāna,' ed. by E. B. Cowell and R. A. Neil, Cambridge, 1886, p. 427). But the mere presence of an Aśōka inscription in Bengal, even if it were to be found, would be no evidence of the Aryanisation of the people in language. Aśōka inscriptions, for instance, have been found in Dravidian tracts, at Siddapur and at Maski in the Deccan and at Jaugada (Ganjam), where the Aryan tongue was never adopted by the people; and round about Dhauli, Aryan (Oṛiyā) is now spoken, but it is extremely improbable that the Aryan tongue was the vernacular of the people of Orissa (Kaliṇga) at that time. Khāravēla, the Jain King of Kaliṇga in the 2nd centnry B.C., has left a long inscription in an MIA. dialect. But as the Kaliṇga people were the ancestors of the speakers of modern Telugu, no Aryan speech could be adopted by the Kaliṇgas in the 2nd century B.C. The Aryan language, however, often came in the wake of the North Indian religions, Brahmanism, Buddhism and Jainism, and was used by royal patrons of these religions among Dravidian and other non-Aryans, merely as a sort of religious language, in documents of a religious, and often of an administrative, character. The advent of a northern religion in non-Aryan tracts certainly meant the coming of Aryan-speaking Brahmans, Śramaṇas or Yatis from the North. The influence of Aryan was felt in the non-Aryan languages in another way, namely, by the introduction of numbers of Aryan words into the latter. We can see from a few lines in Old Kannaḍa, given as a specimen of an Indian language in the papyrus fragments of a Greek drama from Oxyrrhynchus

in Egypt, how great the influence of Aryan was on Kannaḍa of the 2nd century A.C., when it had already begun to borrow Aryan words in large numbers (E. Hultzsch, JRAS., 1904, p. 399). Like the Andhras or Kaliṇgas, and the Karṇāṭakas, as well as other non-Aryans, it may be reasonably supposed that the pre-Aryan peoples of Bengal began to be influenced by the Aryan (or Upper Gangetic) culture and language immediately after Mithilā and Magadha were Aryanised. This may have taken place before 600 B.C. But for a long time, Bengal remained outside the pale of Aryandom ; and it is hardly likely that there was anything like an appreciable Aryanisation east of Mithilā and Magadha and Aṇga before the time of Buddha. The Mahābhārata (200 B.C.—200 A.C. in its present form) mentions Bengal, no doubt, but there is nothing to show it was part of Aryan India when the original or even the received Mahābhārata was compiled.

42. Is there any evidence about the class of speech that prevailed in Bengal before the coming of the Aryan tongue ? There is, of course, the presence of the Kōl and Dravidian speakers (the Santals, the Maler, the Oraons) in the western fringes of the Bengali area, and of the Boḍo and Mōn-Khmēr speakers in the northern and eastern frontiers. There are, again, some unmistakably Dravidian affinities in Bengali phonetics, morphology, syntax and vocabulary: but these agreements with Dravidian are not confined to Bengali alone, but are found in other NIA. also (see *Appendix B*). Apart from that, local nomenclature in Bengal may be expected to throw some light on the question. Place names in Bengal have not been studied in detail, although individual writers have occasionally touched upon the topic. (Cf. Ram Comul Sen, 'Dictionary in English and Bengali,' Serampore 1834, Preface, p. 9; Rai Bahadur Yōgēsh Chandra Vidyānidhi, 'Bāṇgālā Grāmēr Nām,' in the Pravāsī for Āśvina, 1317, in which there is an able discussion of the *tadbhava* names of places in Bengal; H. Blochmann, 'Contribution to the Geography and History of Bengal, I,' JASB., 1873, pp. 211-244, giving a study of some Moslem place-names ; cf. also F. Hahn, 'Kolarian and Dravidian Place-names,' JASB., 1903, Part III; Bijay Chandra Mazumdar, 'Sonpur,' Calcutta, 1911, pp. 18-19.)

The study of Bengali toponomy is rendered extremely difficult from the fact that old names, when they were not Sanskrit, have suffered from mutilation to such an extent that it is often impossible to reconstruct their original forms; especially when they are non-Aryan. Fortunately for us, Bengal inscriptions, from the 5th century onwards, like inscriptions found elsewhere in India, and occasionally works written in pre-Moslem Bengal, have preserved old forms of some scores of these names. But it is a pity that generally there was an attempt to give these names a Sanskrit look. In other cases, the forms preserved are translations, supposed or real, of vernacular names, due to a Sanskritising tendency which is noticeable in such learned concoctions as as ভট্টপল্লী « Bhaṭṭa-pallī » for ভাটপাড়া « Bhāṭa-pāṛā », যুগ্মসেতু « Yugma-sētu » for যোড়াসাঁকো « Jōṛā-sāṅkō », কালীক্ষেত্র « Kālī-kṣētra » for কলিকাতা « Kālikātā », দগ্ধবাটী « Dagdha-vāṭī » for পোড়াবাড়ী « Pōṛā-bāṛī ». Still, they are of very great importance, as they indicate the line of change in the phonetics of these names, and help us in making guesses at the genuine old forms. If it were not for the forms preserved in the inscriptions and in pre-Moslem works, it would have been impossible for us to find out that বালুটে « Bāluṭē » and মুড়ন্দী « Muṛundī » were something like « Bāllahiṭṭā » and « Mōḍālandī » in the 12th century, পাবনা « Pābḍnā » was something like « Paŵubannā » (written « Paduvanvā ») in the 11th, or ব্রহ্মচাল « Brahma-cāla » was « Barawañcāla » or « Barawañcāla » (written « Varapañcāla ») in the 9th. (Cf. Sītā-hāṭī Grant of Ballāla Sēna; Rāma-carita of Sandhyākara Nandī, ed. H. P. Śāstrī, ASB.; Sylhet Bhāṭērā Grant: see *Appendix C*, in which some of the more interesting names obtained from early inscriptions in Bengal are given.)

In the formation of these names, we find some words which are distinctly Dravidian: *e.g.*, « -jōla, -jōṭa, jōli, -jōṭikā » etc.; « hiṭṭi, bhiṭṭi, -viṭi, -hiṣṭ(h)ī » etc.; « -gaḍḍa, -gaḍḍi »; « -pōla, -vōla »; and probably also « -haṇḍa », « -vaḍā », « -kuṇḍa, -kuṇḍī », and « cavaṭī, cavāḍa » etc.; and besides these, there are many others which have a *dēśī* or non-Aryan look. The first word, as in « Piṇḍāra-viṭi-jōṭikā, Uktāra-yōṭa (=jōṭa), Dharmmāyō-jōṭikā, Naḍa-jōlī, Camyalā-jōli, Sik(ph?)-gaḍi-jōlī, Dijamakkā-jōlī », meaning *channel, water-course, river, water*, is found in modern Bengal place

names: *e.g.*, নাড়াজোল « Nāṛā-jōl॰ », ডোমজুড় « Ḍōm॰-juṛ॰ », ষোড়াসাঁকো « Jōṛā-sãkō » (=*river-bridge*, probably wrongly explained as *double-bridge*, and rendered into Skt. as « Yugma-sētu ») ; cf. also নয়নজুলি « nâyân॰-juli » *conduit*. This word is certainly Dravidian : it is found in Kandh as « jorr », whence the name of the Kāṭ-juṛī river in Orissa (B. C. Mazumdar, ' Sonpur,' p. 19) ; we can compare the Bengali word ঝোল « jhōl॰ » *soup, watery mass*, (also *saliva*, as in নাল ঝোল « nāl॰-jhōl॰ »), and Kannaḍa « jŏllu », Telugu « ʤŏllu » *saliva* ; cf. also Kannaḍa « jōru » *drip, flow, trickle*. « (B)hiṭṭi » occurs in Modern Bengali in the form of ভিটি or ভিটা « bhiṭi=bhīṭi, bhiṭā=bhīṭā » *homestead, homestead land*. It occurs in a number of village names in the old inscriptions : *e.g.*, « Piṇḍāra-viṭi- », « Campā-hiṭṭi, -hiṣṭī », « Hastinī-bhiṭṭa », « Villa-hiṣṭi » (« -ṣṭ- » is an easily explainable Sanskritisation of « -ṭṭ- ») : we can compare Dravidian (Tamil) « vī.'u, viṭṭu » *house* : « bh » « v » and « h » do not present any insurmountable phonetic difficulty. « Gaḍḍa, gaḍḍi », also « guḍi », as in « Āūhā-gaḍ.ḍī, Sura-kōṇā-gaḍḍī, Sila-guḍi » (cf. Modern Bengali শিলিগুড়ি « Śili-guṛi », জলপাইগুড়ি « Jâlpāï-guṛi »), can be compared with the common Telugu affix « gaḍḍa », Kannaḍa « gaḍḍĕ » *lump, mass, clot* ; *bank, brink, edge*. « Pōla, vōla » with which we may compare Telugu « pŏlamu » *field, corn-land*, Kannaḍa « pŏḷal » *field*, common in place names, is found in early Bengal in names like « Jayarāti-pōla, Uṇāi-pōla, Ajhaḍā-cāu-vōla, Dhra-vōla » etc. « Haṇḍa », as in « Tikṣa-haṇḍa », « Kala-haṇḍī » (in the Tārācaṇḍī inscription of Pratāpa-dhavala, c. 1169 A.C., in Shahabad District), might be from Sanskrit « khaṇḍa » : cf. « Tāmra-pathara-khaṇḍa » in the 7th century Lōkanātha inscription from Tippera ; but one may compare Tamil « aṇḍai » *nearness, vicinity, raised side of a field, boundary*. « Vaḍā » is partially the source of New Bengali -ড়া « -ṛā », a common affix in place-names : *e.g.*, বাঁকুড়া « Bãkuṛā »=*Bankurah*, হাওড়া « Hāŏṛā »=*Howrah*, চুঁচুড়া « Cũcuṛā »=*Chinsurah*, ঋষড়া « Riṣ॰ṛā », বগুড়া « Bâguṛā », ইগড়া « Ig॰ṛā », সোমড়া « Sōm॰ṛā », চাপড়া « Cāp॰ṛā » etc. It is found plentifully in older inscriptions out of Bengal as well ; *e.g.*, at Bharhut and Sanchi ; it may be from an OIA. « vṛta-ka », but we may note the common Kōl word for *house*, « oṛak' ». « Kuṇḍa, kuṇḍī », as in « Śrīkṣi-kuṇḍa, Śila-kuṇḍa,

Nandi-haripā-kuṇḍī », seems to be the same word as the New Bengali কুঁড় « kũṛ্ » *heap, little hillock, dunghill*, with which may be compared Telugu « kŏṇḍa » *hill, rock*. The Bengali গুড়ি « -guṛi », as in « Śiliguṛi » mentioned above, may be a variant of কুঁড় « kũṛ্ » ; cf. Bengali গোঁড় « gõṛ্ » *fleshy navel*. « Cavaḍī, cāpaṭi, cavāḍa », as in « Cavaṭī, Kulā-cāpaḍī, Tata-cavāḍa », is the source of the New Bengali word চটী « cāṭī » [cʃoṭi] *lodge, posthouse, caravanserai* ; it is found in other NIA. languages, but it is probably a Dravidian word (=Telugu and Kannaḍa « cāvaḍi »). An investigation of the place-names in Bengal, as in other parts of Aryan India, is sure to reveal the presence of non-Aryan speakers, mostly Dravidian, all over the land before the establishment of the Aryan tongue.

43. Bengal originally did not form one country and one nation. The Ganges (Padmā or Pâddā) with its branch the Bhāgīrathī or Hugli and the Brahmaputra divide the country into four tracts, in which dwelt, several hundred years before Christ, at a time when the riverain system of the country must have been a great deal different from the present one, the tribes of the Puṇḍras (in North Central Bengal, roughly in the tract bounded by the Ganges to the south, and the Karatōyā in the east), the Vaṇgas (in Bengal east of the Brahmaputra and north of the Padmā), and the Rāḍhas and to their south the Suhmas (west of the Hugli). A great deal of the delta was marshy and uninhabitable in the early period of Bengal history. The above four tribes, Puṇḍra, Vaṇga, Rāḍha and Suhma, were the important ones, who gave their names to the various tracts they inhabited. But there were other tribes as well, some of which, like the Kaivarttas or Kēvaṭṭas (Kēṓṭs), were spread all over the country, while others, like the Caṇḍālas (Cā̃rāls), the Ḍōmbas, (Ḍōms), the Haḍḍikas (Hāṛīs), the ancestors of the Bāgŭdīs (=« * Vyāghra-dvīpikas » ?), the Vāthurīs (Bā[h]urīs), the Cuhāḍas, were more or less confined to parts of the country. Under the influence of the Upper Gangetic (Brahmanic) idea of caste, many of the non-Aryan tribes have become occupation castes in an Aryanised society, their position in the present-day Hindu society being determined by the nature of their occupation as a community. The tribes of Aṇga (East Bihar)

and Magadha were perhaps allied, and so were the Ōḍras and the Kaliṇgas of Orissa. There seems to have been an unbroken connection between Bihar, West Bengal, Kaliṇga and the Andhra country, racially and linguistically. (Cf. F. E. Pargiter in the JASB., 1897, i, pp. 85 ff.). The Kōl tribes (Santals etc.), now found in West Bengal are recent arrivals from the plateau of Chota Nagpur ; but before the advent of the Santals, there were earlier Kōl tribes *e.g.*, the Bhūmijes,—ancestors of some of the humbler sections of the West Bengal people—who, with their Dravidian neighbours, have become completely Hinduised. The Maler of the Rāj-mahāl Hills, the Oraons of Chota Nagpur, and the Kandhs of Orissa are some of the ruder Dravidian speakers who still preserve their language in their hill and jungle fastnesses. The Suhmas of South-west Bengal had their capital city in Tāmralipti, or Dāmalipta, as it is called in the 'Daśa-kumāra-carita' (8th century A.C.) : this is a Sanskritised form of some name like « * Dāmalitta, Dāmilitta », and here we probably have a connection with the word « Dāmiḷa » (=Tamil), as Mahāmahôpâdhyāya Hara-Prasād Śāstrī has suggested. (« *Dāmilitta » for a « * Dāmiḷ-viṭṭu »? *home of the Dāmiḷa people*). The modern name of this town is তমলুক, তমোলুক « Tâm(o)luk্ » : the affix suggests, according to Dr. L. D. Barnett, a connection with Kannaḍa « okkal » *house, home* (cf. the name « Utkala » for Orissa, probably also of Dravidian origin : Kannaḍa « ŏkkala » =*householder, farmer* ; the Ōḍra people= « ŏ̤ḍa » *delving labourer*, in Dravidian ; see F. Kittel's 'Kannaḍa Dictionary,' Bangalore, 1894, under « ŏḍḍa 1 » and « ōḍra »). The Mahābhārata legend of the five princes Aṇga, Vaṇga, Kaliṇga, Puṇḍra and Suhma being brothers, who were sons of the Rishi Dīrghatamās begotten on the wife of King Bali, is probably based on traditions of ethnic kinship among the tribes of which the five princes were the eponymous ancestors. (Cf. F. E. Pargiter, JASB., cited above). These early tribes of Bengal, Dravidian speakers mainly, were well-organised, and they seem to have possessed a culture of their own. The early history of Burma and Siam tells us that at a time when the Tibeto-Chinese tribes (Burmese, and Tai) had not yet arrived on the scene, and these countries were inhabited

only by Mōn-Khmēr peoples, Dravidians from Bengal and Kaliŋga were emigrating into these lands, and becoming the ruling race there. Later, when these non-Aryans from India assimilated Brahmanic culture, their princes claimed connection with the ancient royal houses of Aryan Upper India (a thing which was repeated in the case of the new Rajpūt clans at a later period), and introduced among the Mōns and the Khmērs in times *post* Christ the Sanskrit language as well as traditions connected with Hastināpura and Ayōdhyā which yet live.

44. The Tibeto-Chinese tribes came into the field later. In Indo-China, two of their powerful tribes, the Mran-mā (= Brammā, Byammā or Burmese, Indianised into 'Brahma'), and the Tai (better known by the name given to them by their Burmese kinsmen, *viz.*, Rham or Šan [Shan], Siem or Siamese, Indianised to 'Śyāma'), conquered respectively the Mōns and the Khmērs, the conflict beginning sometime in the middle of the 1st millennium A.C. and continuing down to the 18th and 19th centuries. (Cf. R. C. Temple, 'Outlines of Indo-Chinese History,' IAnt., 1916, pp. 37 ff.) The Boḍo section of the Tibeto-Burman branch of the Tibeto-Chinese people (Boḍo, Mēc, Kōc, Kacārī, Rābhā, Garo, Tipura) came to Assam and East Bengal, and were spread all over East and North Bengal. The time of the Tibeto-Burman incursion and settlement in Assam and East Bengal is not known, but it could not have been long before the beginning of the Christian era, at the earliest. Hiuen Thsang's remarks about the people of Assam in the 7th century A.C. (§ 47) are to be noted in this connection. In pre-Moslem Bengal, in the 10th century, the Kambōjas (= *Kamōca, Kaw̃ōca, Kõcɕ), one section of the Boḍos, for a time, usurped the throne of Bengal, at least in the northern part of the country (R. D. Banerji, 'The Pālas of Bengal,' Memoirs of the ASB., V, 3, pp. 68-69; Ramā-Prasād Chanda, 'Gauḍa-rāja-mālā,' Rajshahi, 1319 San, p. 37); and during the Moslem times, the Kōces, under their Hinduised Kings, had a powerful state in North Bengal and West Assam which continued till the middle of the 17th century (E. A. Gait, 'History of Assam,' Calcutta, 1916, Chap. IV; the Assamese verse chronicle 'Darang-rāj-baṅsāwalī,' ed. by Hēm-Chandra Goswāmī, Calcutta, 1917, Introduction). Aryanisation of

the Boḍos and of the Kōl and Dravidian peoples, and probably also of Mōn-Khmēr tribes allied to the Khasis, in North Bengal, Assam and East Bengal must have begun immediately after Central and North Bengal became Aryanised : and the kingdoms of Prāgjyōtiṣa and Kāmarūpa, claiming a fabulous antiquity, were established. Assam possessed a Hindu king in the 7th century, according to the testimony of Hiuen Thsang and of contemporary epigraphical documents. From its geographical position, Assam was practically an extension of North Bengal, so far as its speech and early history were concerned. The Aryanisation of the Tibeto-Burmans in North Bengal and in Assam is still progressing ; and a strong Boḍo influence has been seen by one scholar at least in the growth of Bengali (J. D. Anderson postulated Boḍo influence on Bengali syntax and accentuation : JRAS., 1911, pp. 524 ff., 1913, pp. 133 ff. ; and ' People of India,' Cambridge, 1913, p. 54). But it seems it is to Dravidian stress and Dravidian idiom rather than to the Tibeto-Burman Boḍo, that we are to look for the source of influence in the above points.

45. The people of Bengal, in the middle of the 1st millennium B.C., do not seem to have been Aryan speakers, but they possessed great skill in some arts and crafts which was recognised in Aryanised, imperial Magadha. Kauṭilya's ' Artha-śāstra ' (end of 4th century B.C. in its original form) praises the silk and other stuffs made in Puṇḍra, Suvarṇakuḍya and Vaṇga (II, 11) : the second tract has been identified with Karṇa-suvarṇa in Murshidabad District. The original author of the oldest Indian treatise on elephant-training and the diseases of elephants, the ' Hastyāyurvēda ' ascribed to Pāla-kāpya, a work compiled during the Sūtra period (600-200 B.C.), is described as a man from ' where the Lauhitya (Brahmaputra) flows towards the sea,' *i.e.*, from East Bengal near the mouths of the Ganges and the Brahmaputra (H. P. Śāstrī, ' Presidential Address to the 8th Bengali Literary Conference,' VSPdP., 1321, No. 4). It does not seem likely that Bengal (even North and West Bengal), was brought in line with the Aryan states of India before the Maurya period, by being conquered by Magadha. The Pāli Jātaka and Tri-piṭaka literature which gives a faithful account of Aryandom in

India in the centuries immediately before the Maurya period, mentions 16 great nations, among which Puṇḍra, Vaṇga, Rāḍha or Suhma have no place. Jain tradition as preserved in the 'Āyāraṇga Sutta' (1, 8, 4: p. 84, 'Gaina Sûtras,' trans. by H. Jacobi, SBE. [the work dating from the 3rd century B.C., at least in a more ancient original which is lost, but referring to the 6th century B.C. : cf. *op. cit.*, pp. xl-xliii]) describes Lāḷha and Subbha (=Rāḷha, Suhma) as countries inhabited by a wild and churlish people. In fact, the tradition, that the Rāḷha people of West Bengal were wild and barbarous, is present down to Middle Bengali times: *e.g.*, Mukunda-rāma writes (c. 1580) in his 'Caṇḍī-kāvya,' (Vaṇgavāsī edition):

p. 70—ব্যাধ গো-হিংসক রাঢ়।

« byādhâ gō-hiṁsâkâ rāṛâ (=rāḍha) »

A hunter, a cow-killer, a Rāḍha.

p. 73—অতি নীচকুলে জন্ম জাতিতে চোয়াড়।

কেহ না পরশ করে লোকে বলে রাঢ়॥

« âti nīcâ-kulē jânmâ, jāti-tē cōāṛâ ;

kēhâ nā pârâśâ kârē, lōkē bâlē rāṛâ ».

« *Birth in a very low caste ; by caste, a Cō(h)āḍ* (or *Cuhāḍ* : any connection with the Cuhaḍās or sweepers of Northern India and the Panjab?) ; *no one touches* (*me*), *people call* (*me*) *a Rāḍha.*

The attitude of the Brahman law-makers towards Bengal in early times (p. 63) may be recalled.

Pāṇini just mentions Gauḍa (VI, 2, 100): this Gauḍa seems to be in Bengal. Later Buddhist tradition as in the 'Divyâvadāna' mentions Puṇḍra-vardhana as being under Aśōka (see above, § 41), and Tāmralipta, the capital of Suhma, was also under Aśōka (V. A. Smith, 'Early History of India,[3]' Oxford, 1914, p. 162). The inference which can be drawn is as follows. Bengal was not within the Aryan pale in the 6th century B.C. In the 4th century B.C., Bengal was joined to Magadha, at least by commercial ties. A large number of pre-Maurya and Mauryan coins

(purāṇas), of the same kind as those found in Magadha, have been discovered in South-west, West, and North Bengal (R. D. Banerji, 'Bāṇgālār Itihās,' Part I, pp. 31-32). Jainism, and perhaps also Buddhism and Brahmanism, were spreading among the people in North, Central, and West Bengal: Puṇḍra-vardhana was a Jain centre according to the 'Divyâvadāna,' in the time of Aśōka; and in the beginning of the 2nd century B.C., the King of Kaliṇga was a Jain; and he was also a patron of the Brāhmans (Hāthī-gumphā Inscription of Khāravēla). North and West Bengal, contiguous to Magadha and Kaliṇga, were under Aśōka in the 3rd century B.C. From that time, we might assume, there was the commencement of a vigorous movement towards Aryanisation in Bengal.[1] The Aryan speech was undoubtedly brought into Bengal, from Magadha and beyond, by

[1] The Ceylonese Pali chronicles 'Dīpa-vaṁsa' and 'Mahā-vaṁsa' narrate the story of Vijaya. Both these works mention 'Lāḷa,' or 'Laḷa-raṭṭha' as the home of Vijaya. This 'Lāḷa' is only a variant of 'Lāḍa,' and is the same tract known as 'Lāṭa' in Sanskrit, and 'Larikē' in Greek='* Lāḍikā,' which corresponds to the Gujarat coast country (Kathiawar), and probably also to South Sindh, which is still known as 'Lāṛ'='Lāḍa.' Some scholars prefer to see 'Rāḍha' or West Bengal in this 'Lāḷa,': if this identification were correct, it would establish the existence of an old tradition in favour of there having been a considerable Aryanisation of West Bengal in the 6th or 5th century B.C. But the only ground of connection with Bengal is the mention of Vaṅga in narrating the story of Vijaya in the Pali works: both agree in saying that the mother of Sīha-bāhu, Vijaya's father, was a princess from Vaṅga or East Bengal. The Dipa-vaṁsa, which is slightly older than the Mahā-vaṁsa (the latter dating from the end of the 5th century after Christ: cf. M. Winternitz, 'Geschichte der indischen Litteratur,' II, Leipzig, 1920, pp. 168, 170), gives a only bald version of the wild legend of the lion and the Vaṅga princess, and mentions Vaṅga only casually, and speaks of Sīha-pura, Vijaya's native city, and describes his sojourn at Suppāra and Bharu-kaccha during his voyage to Ceylon; the Mahā-vaṁsa gives an elaborate version of the legend, mentions not only Vaṅga but also Kaliṅga and Magadha (although once), and omits Bharu-kaccha. (H. Oldenberg, the Dīpavaṁsa, London, 1879; W. Geiger, English Translation of the Mahā-vaṁsa, London, 1912.) The bringing in of the names of Vaṅga and Magadha, especially of the latter, looks like interpolations; the contiguity of Lāḷa, the home of the first Aryan King of Ceylon, with Magadha, the Buddhist holy land, which would be emphasised by the frequent mention of Vaṅga as in the Mahā-vaṁsa version, was sure to please the Ceylon Buddhists of early times. Sīha-pura, from where Vijaya came, may be represented by the modern Sihōr (=Sīha-ura, Siṅha-pura) in Bhavnagar state, not far from the sea. Above all, the mention of Bharu-kaccha and

Magadhan and other officials and soldiers, Brahmans, Buddhist and Jain missionaries and priests, traders and artisans in large numbers, and adventurers in search of fortune, who made the land their home. The upper classes among the original people of the land, like the upper classes everywhere under similar circumstances, would be most susceptible to this cultural and linguistic influence coming in the wake of a political suzerainty. When the upper classes are captured in this way, the spread of a foreign culture and language among the masses is a question of time only. People of humbler ranks were continually coming into Bengal from Magadha, Kāśī and beyond, as they have always been doing uptil now, and by settling down in the country were re-inforcing the position of the Aryan speech. It is very likely that Prāgjyōtiṣa and Vaṇga, from their comparatively remote position, received Aryan speech later than West, North, and Central Bengal; and this early contrast between an advanced and Aryanised North and West Bengal, and a rather backward East Bengal, possibly

Suppāra is a strong evidence in favour of the west coast having been the home of the first Aryan settlers in Ceylon several centuries B.C. Hiuen Thsang narrates the lion legend at some length, and the story of the colonisation of Ceylon (S. Beal, 'Buddhist Records, etc.,' Vol. II, London, 1906, pp. 236 ff.), but he places the scene in Southern India. The people of the Western Indian Coast were adventurous sailors from very early times, even before the advent of the Aryans; and not to speak of their voyages to lands beyond the Arabian Sea, Java in the Eastern Ocean was first colonised from India by the Gujarat people in the 1st century A.C., according to Javanese tradition (see Rādhā-Kumud Mookerjee, 'A History of Indian Shipping, etc.,' London, 1912, pp. 150-151). The Sinhalese language, according to Geiger, is connected with Western Prakrits, Saurāṣṭrī and Mahārāṣṭrī, rather than with Māgadhī (cf. W Geiger, 'Litteratur und Sprache der Sinhalesen,' pp. 90, 91, 92; P. Arunachalam, 'Sketches of Ceylon History,' Colombo, 1906, pp. 9, 10; see also *infra*, Appendix B. § 81, 'Echo Words' in NIA and Dravidian). But there is no denying that in later, post-Aśōkan times, after Buddhism was taken to Ceylon from Magadha, the connection between Bengal and Ceylon grew very intimate—regular trade through the harbour of Tāmralipti being carried on between Magadha and Bengal and Ceylon—a connection which continued down to the middle of the 13th century at least (when the Sanskrit scholar Rāma-candra Kavi-bhāratī, a North Bengal Brahman, persecuted by his people on becoming a Buddhist, went to Ceylon: R. D. Banerji, 'Bāṅgālār Itihās,' II, Calcutta, San 1324 p 59), and traditions of which in the shape of stories of commercial voyages to Ceylon undertaken by Bengali merchants are present in Middle Bengali literature.

differing linguistically and racially (in having a prominent Tibeto-Burman element) from West Bengal, is at the root of the contemptuous use of the term বাঙাল « Bāṇgāl » for an inhabitant of East Bengal (= « Vaṇg-āla »), even at the present day when the name Vaṇga has been extended west to Puṇḍra and Rāḍha (jointly known as Gauḍa-dēśa). South Bengal (the lower reaches of the Ganges delta) does not seem to have been very much habitable below the 23rd degree of latitude, perhaps not much below the Tropic of Cancer, at the period we are speaking of (some four hundred years B.C.): it seems to have been a marshy and jungly tract, infested by tigers,[1] in which settlements were made from Puṇḍra, Rāḍha and Vaṇga later.

The Kaliṇga country which Aśōka conquered, far removed from centres of Aryan speech, has always remained Dravidian, and the Ōḍra people, the ancestors of the present-day Oṛiyā speakers, were not Aryanised even as late as the 7th century A.C., according to the testimony of Hiuen Thsang (see *infra*, § 47). But the early use of the Aryan language for administrative and cultural purposes in Dravidian Kaliṇga and Ōḍra can be inferred from Aśōka's and Khāravēla's inscriptions.

46. There is nothing known definitely about Bengal till the time of the Guptas in the 4th century A.C. Śaka kings of the family of Kaṇiṣka ruled over Northern India during part of the period between the fall of the Mauryas and the rise of the Guptas. Their power extended over Magadha (R. D. Banerji, 'Bāṇgālār Itihās,' I, pp. 36 ff.), but it is not known

[1] The delta of Bengal is known by the name of বাগড়ী 'Bāgṛī < Bāgaḍī.' The name সমতট 'Sama-taṭa' is sometimes used for the delta, but it is properly a name for East Bengal, Vaṅga, rather than for South Bengal (Rādhā-Gōvinda Basāk, 'Sama-taṭer Rāja-dhānī,' Sāhitya, Āśvina, San 1321). The word 'Bāgaḍī' has not been satisfactorily explained. It is sometimes derived from a Sanskrit 'Vaka-dvīpa,' which is phonologically inadmissible. There is a 'Bāgṛī' or 'Bāgaḍī' in Midnapur District, near Garbētā, but it is far away from the delta. In the Khalimpur grant of Dharma-pāla (c. 800 A.C.) we find the mention of a 'Vyāghra-taṭī' district, forming part of the Puṇḍra-vardhana province. This place has not been identified, but it may be in the delta. Can 'Vyāghra-taṭī' = *tiger-coast*, a fitting name for a delta district as the home of the Royal Bengal Tiger, be the source of 'Bāgaḍī' (through '*Vaggha-aḍī,' '*Bāghawaḍī,' '*Bāghaḍī,' with deaspiration of 'gh' in Middle Bengali) ?

whether Bengal formed a part of the Śaka empire. But there is evidence of the industrial and commercial activities of the people of Bengal during the Kuṣāṇa period, *e.g.*, from the contemporary Greek work the 'Periplus of the Erythræan Sea' (1st century A.C.: Section 63).

The oldest epigraphical record found in Bengal is a very short Sanskrit inscription, in Brāhmī characters of the 4th-5th cen. A.C., on Susunia Rock in Bankura District, which mentions a king Candra-varman, the son of Siddha-varman (? Siṁha-varman), ruler of Puṣkaraṇā, a devotee of 'the Lord of the discus' (cakra-svāmin = Viṣṇu) (Ep. Ind., XIII; H. Lüders, 'List of Brāhmī Inscriptions,' No. 961, Appendix to Vol. X of the Ep. Ind.) This Candra-varman has been regarded as identical with the king Candra mentioned in the Meherauli Iron Pillar Inscription, as well as with the king Candra-varman named in the Allahabad Pillar Inscription of Samudra-gupta; and it has been also suggested—and the suggestion has been accepted by some scholars—that the Candra-varman-Candra of these three inscriptions was a scion of the Varman dynasty of kings mentioned in some inscriptions from Mandasor in Gwalior State (the oldest of which is dated 404-405 A.C.), and that he was a ruler of Western Rajputana, the place Puṣkaraṇā in the Susunia inscription being identified with Pokharaṇ city in Western Jodhpur (H. P. Śāstrī in the IAnt., 1913, pp. 217-219; R. D. Banerji, 'Bāṇgālār Itihās,' I, pp. 39-41). The presence of the inscription of a king of Rajputana at Susunia in distant Bengal has been explained as a memento of the « digvijaya » undertaken by this king: the Meherauli Inscription which mentions the conquests of king Candra from Balkh to Bengal supplying the explanation. But this identification of Candra-varman of the Susunia Rock Inscription with a supposititious ruler of the Varman dynasty of Mandasor, not mentioned at all in the Mandasor records, fails to be convincing; and Candra-varman of Susunia can very well be a local ruler in West Bengal, distinct from the Candra of the Meherauli Inscription, and very likely he was the same Candra-Varman who is mentioned in the Allahabad Pillar Inscription (J. F. Fleet, 'Corpus Inscriptionum Indicarum,' III) as one of those chiefs of Āryāvartta who were 'forcibly rooted out' by

Samudra-gupta ; and 'Puskaraṇā' of which he was the king is in all likelihood a place in West Bengal. If this view is correct, then Candravarman would be the oldest ruler of Bengal of whom we have a contemporary record : and he belonged to the middle of the 4th century A. C., when Bengal was recognised as a part of Āryāvartta and could no longer be omitted from the tale of North Indian Hindu states. The poet Kālidāsa (end of the 4th century A.C.), in describing the conquests of Raghu in his 'Raghu-vaṅśa,' brings him to Bengal (Vaṇga and Suhma), and apparently is of the same mind. The Sanskrit drama 'Pratijñā-Yāugandharāyaṇa,' ascribed to 'Bhāsa,' which is probably not older than the 4th century A. C., suggests that the ruling families of Bengal were regarded as equals to those of Northern India for inter-marriage with the house of Mālava.[1] The Jaina Upâṇgas, again, redacted c. 454 A.C., but preserving earlier traditions, include Bengal (Tāmalitta and Vaṇga) among Aryan lands, as opposed to « Milikkha » (=Mlecchа or Barbarian) peoples like the Saka, Yavaṇa, Pārasa, Damila, Pulinda, Hūṇa, Rōmaga, Boṭṭhakāna and others (IAnt., 1891, pp. 374 ff. : I am indebted to my friend Prof. H. C. Raychaudhuri for drawing my attention to this). All this would presuppose a considerable Aryanisation of Bengal by 300 A.C.

With the establishment of the Gupta power in Bengal in the 4th century, Bengal became finally and completely linked to Northern or Aryan India. The Allahabad Pillar Inscription of Samudra-gupta states that the people of Sama-taṭa, Kāma-rūpa and Ḍavāka (=East Bengal ?) paid him tribute. The Guptas were zealous Brahmanists, and from their time began a large settlement of Brahmans from the Midland, to whom were made substantial grants of land to enable them to carry on their Sanskrit studies and their religious rites for the benefit of the colonists from Upper India. The great number of Old Bengal

[1] Act II of the drama : king Pradyōta of Ujjayinī says, discussing with his queen a suitable match for their daughter Vāsava-dattā : 'asmat-sambaddhō Māgadhaḥ Kāśī-rājō Vāṅgaḥ Sūrāṣṭraō Māithilaḥ Śūrasēnaḥ : ētē nānārthāir ībhayantē guṇāir mām : kas tē vâitēṣām pātratāṁ yāti rājā ?' *connected with us are the kings of Magadha, of Kāśī, of Vaṅga, of Surāṣṭra, of Mithilā and of Śūrasēna ; they attract me by their manifold qualities : which king among them is deemed a proper bridegroom by you ?*

inscriptions consist of deeds recorded on copper-plates of such grants of land to Brahmans. The Brahman 'coming out of the Midland'—« madhya-deśa-vinirgata »—as he is frequently described in these deeds, was a missionary of Hindu Aryan or North Indian culture, and it was a meritorious act with all classes of people, from the rulers downwards, to settle him in villages with grants of land. In this matter, in later times even the rulers professing the Buddhist faith followed suit. Scions of aristocratic families—« kula-putras »—from Ayōdhyā and elsewhere in Northern India bought lands in Bengal for the support of Brahmanical temples, and in other ways helped to establish Hinduism ; and these « kula-putras » probably gave or reinforced the aristocracy of medieval Bengal (cf. the Dāmōdar-pur copper-plates, No. 5, of 533-34 A.C. : Rādhā-Gōvinda Basāk, 'Epigraphia Indica,' XV, p. 115).

47. When Fa Hien came to Bengal, in the beginning of the 5th century, the country was apparently flourishing in (Aryan) learning and culture, at least in the West and the North : for the Chinese pilgrim found Tāmralipti a seat of learning, where he spent two years, copying MSS. and painting images (J. Legge, 'Record of the Buddhist Kingdoms, etc.,' Oxford, 1886, p. 100). Another Chinese traveller, Hiuen Thsang, visited Bengal during the 1st half of the 7th century. He has an occasional remark about the language of the tracts he passed through, and his statements are valuable and interesting. (S. Beal, 'Records of the Western World,' II, London, 1906, pp. 194 ff.) Crossing the Ganges from Aṇga and Kājaṇgala, he came to Puṇḍra-vardhana, or North Central Bengal, to the north of the Ganges, where he found that the country was thickly peopled, the men esteemed learning, and Mahā-yāna and Hīna-yāna Buddhism, Brahmanism and Jainism were all flourishing. From Puṇḍra-vardhana he went to Kāma-rūpa or Western Assam and East North Bengal. The people of Kāma-rūpa were simple and honest in manners, and were of small stature, with a 'dark yellow' complexion. About their language, Hiuen Thsang says that it differed 'a little' from that of 'Mid-India.' The people were also impetuous and wild, but their memories were retentive, and they were earnest in study. They were mostly

Brahmanistic, and the king of Kāma-rūpa, Bhāskara-varman, is said to have been a Brahman. Hiuen Thsang remarked that the tribes living in the frontiers of Kāma-rūpa were akin to the Man tribes of South-western China, a wild Tibeto-Chinese people. From Kāma-rūpa he came south to Sama-taṭa or East Bengal, bordering on the sea. The land was low and rich ; the habits of the people were agreeable ; they were hardy, small of stature, and of a black complexion ; and they were fond of learning, and exercised themselves diligently in the acquirement of it. As in Puṇḍra-vardhana, Brahmanism existed side by side with Jainism. From Sama-taṭa, he passed on to Karṇa-suvarṇa, identified with Kān-sōnā in Murshidabad District, in Central Bengal. The men there were hardy and brave, and quick and hasty in manners; they were both heretics and believers. Thence Hiuen Thsang went to Tāmralipti, the people of which place were honest and amiable of manners, loving learning exceedingly, and applying themselves to it with earnestness. They were both Brahmanists and Buddhists. This finishes his itinerary in Bengal. He then comes to Ōḍra, which corresponded to modern South-west Midnapur and North Orissa, to Kōṇgōda or Central Orissa, and to Kaliṇga or South Orissa and Ganjam. The people of all these tracts are expressly mentioned as speaking a language different in forms and sounds from that of 'Mid-India'; obviously they spoke Dravidian dialects, although c. 619 A.C. we have in Kōṇgōda a ruling house employing Sanskrit in inscriptions, like Khāravēla's house in the 2nd century B.C. using the North Indian Aryan speech (Rādhā-Gōvinda Basāk, 'Mādhava-varmmār Tāmra-śāsan,' Sāhitya, Phālguna, San 1319).

Thus from the evidence of Hiuen Thsang, it can be concluded that by 7th century A.C. the Aryan language had been generally adopted by the people all over Bengal, and it had penetrated as far east as Western Assam, but it had not spread among the masses even in Northern Orissa. But it is curious to find that, according to him, the language of the Kāma-rūpa people 'differed a little' from that of Mid-India. Hiuen Thsang is silent about the language of Puṇḍra-vardhana or Karṇa-suvarṇa : it can be presumed that the language of these tracts was identical with that of Magadha, which was the 'Midland,' or 'Central India,'

or ' Mid-India ' of the Chinese traveller. Now, one would expect one and identical language to have been current in North Central Bengal (Puṇḍra-vardhana) and North Bengal and West Assam (Kāma-rūpa) in the 7th century, since these tracts, and other parts of Bengal, had almost the same speech, at least in morphology, in the 15th and 16th centuries, as can be seen from the extant remains in Bengali and Assamese. Perhaps this ' differing a little ' of the Kāma-rūpa speech from the speech of ' Mid-India ' (and presumably also from those of Puṇḍra-vardhana and other places in Bengal) refers to those modifications of Aryan sounds, which now characterise Assamese as well as North and East Bengali dialects, *e.g.*, « ts, s, dz, z » for « c, ch, j, jh », « r » (rather then « ṛ ») for « -ḍ- », and « h » for « ś<ś ṣ s ». The presence of a large Tibeto-Burman element in the population of Assam and East and North Bengal may have something to do with this (cf. the Tibetan and Burmese pronunciation of IA. « c, ch, j [jh] » as « ts, ts-h, dz » and « ts [s], s-h, z », and Burmese pronunciation of « s » as a spirant « th » [θ]) ; and these phonetic modifications very likely were first brought about in the Māgadhī Prakrit or Apabhraṅśa dialect current in Kāma-rūpa, with its predominantly Tibeto-Burman population, as noticed by the observant Hiuen Thsang ; and from Kāma-rūpa the « ts, dz », « r » and « h » pronunciations might have spread into the contiguous tracts of Bengal,—where, however, they do not seem to have become regularly established in the way they have done in Assamese.

48. Aryanisation of Bengal, inaugurated probably in the 4th century B.C. under the Mauryas, and vigorously carried on under the Guptas, seems thus to have been completed by the 7th century A.C. By this time the Gupta power waned in Northern India. In the early part of the 7th century, a chief named Śaśâṅka Narêndra-gupta, believed to be a scion of the house of the imperial Guptas, tried to create a strong and independent kingdom in Magadha and Bengal, but he failed, and Harṣa-vardhana of Thānēsar made himself master of all Northern India. During the first decades of the 7th century, Bengal seems to have been conquered by Bhāskara-varman of Kāma-rūpa, Harṣa's contemporary. After the death of Harṣa there was period of confusion and internecine warfare, accompanied by

attacks by kings from other parts of India, and Magadha and Bengal suffered from anarchy (R. D. Bānerji, 'Bāṇgālār Itihās,' I, Chapter VI). But now Bengal, well-known by the joint-name of Gauḍa-Vaṇga, figured largely in North Indian politics. The Prakrit poem 'Gaüḍa-vaha' of Vākpati-rāja describes the victorious campaign of Yaśōdharma-dēva of Kanauj into Magadha, Gauḍa and Vaṇga 'by the side of the sea,' in the early decades of the 8th century. Barring the short period of Harṣa's rule, for about a century and a half (600-740 A. C.) there was no stable government in Bengal. Petty chiefs warred against each other, and there seems to have been general misrule and anarchy. Out of this chaos, the people of Bengal at last elected a strong man to be king over them—Gōpāla, the son of Vapyaṭa (« mātsya-nyāyam apōhitum prakṛtibhir lakṣmyāḥ karaṇ grāhitaḥ » *in order to do away with 'the way of the fishes,' or anarchy, he was made by the subjects to receive the hand of Fortune*—as the Khalimpur grant of Dharma-pāla puts it); and with him (c. 740 A.C.) began a line of kings—the Pāla dynasty—which ruled Bengal for over 350 years, and which witnessed the highest political and intellectual achievements of the people of Bengal before the coming of the Turks in 1200.

The tribes of Bengal were already welded into an Aryan-speaking nation, and its distinct character was in its formative period. This new people took to learning with great zeal. Monasteries and colleges in Magadha and Bengal become famous as seats of Buddhistic learning, and an extensive Buddhistic religious and philosophical literature was produced. Indian culture was transmitted to Tibet and to Burma (among the Mōns and the Burmese) by Bengal scholars. In Sanskrit scholarship, Bengal already made its mark, and before the beginning of the 8th century when Bhāmaha and Daṇḍin the famous writers on Sanskrit poetics flourished, the « Gāuḍīya-rīti » or Bengal style of composition obtained an honoured place in Sanskrit rhetoric (M. Winternitz, 'Gesch. der ind. Litt.,' III, Leipzig, 1922, p. 14 : Sushīl-Kumār Dē, 'History of Sanskrit Poetics,' I, Calcutta, 1923, pp. 49, 66, 67, 70). There grew up flourishing seats of Brahmanical learning, like Siddhala and Bhūri-śrēṣṭha in West Bengal. Composition in the vernacular of the land as well as in the

literary Apabhraṅśa of the West started during Pāla times, the teachers and preachers of the Sahajiyā Buddhist cult and the newly-risen Śivaite sect of the Yōgīs or Nāthas, and probably also the Vaiṣṇavas, taking the lead in this matter. (Cf. H. P. Śāstrī, 'Literary History of the Pāla Period,' JBORS., V, ii, 1919). A new movement in sculpture arose in the 9th century in Varêndra (*i.e.*, Puṇḍra or North Central Bengal), according to the evidence of the Tibetan writer Tārānātha, who mentions two eminent artists Dhīman and Bitpalo (Tārānātha, 'Geschichte des Buddhismus,' by Anton Schiefner, Petrograd, 1869, pp. 279-280) : and this school gained distinction as the Gauḍa-Magadha style of Northern Indian sculpture.

When the Pāla power waned, c. 1100 A.C., and the dynasty of the Sēnas, originally feudatory chiefs in West Bengal, ousted the Pālas from Bengal and forced them to be confined to Bihar for the next century, the people of Bengal had probably already formed their separate individuality, with the dialects they spoke developing a common character in contra-distinction to those of Mithilā, Magadha and Ōḍra. And Bengal, which so long formed more or less an appendage of Magadha, seems to have distinctly broken away from the latter about 1100, with the elevation of the Sēnas. This break grew wider with the destruction of national life and the accumulated culture of ages in Magadha by the Turks in the course of their conquest, and by the subsequent affiliation of Magadha in matters social and cultural to Hindostan proper as one of its outlying provinces. Mithilā under her Hindu kings continued a self-contained, intellectual existence for some time, and she remained the teacher and inspirer of Bengal in higher Sanskritic learning, and to some extent in poetry, for over two centuries after the Moslem conquest.

By the middle of the 10th century, to which period the earliest extant specimens of Bengali can be referred, the Bengali language may be said to have become distinctive, as the expression of the life and religious aspirations of the people of Bengal, with the nucleus of a literature uniting the various dialectal areas. A new speech entered into being, to give expression, later in its life, to some of the highest flights of the human spirit in the regions of poetic imagination and perception.

49. The Indo-Aryan speech thus took over a thousand years to be transformed into Bengali, after it came to Bengal during the first MIA. period (roughly, 400 B.C.—900 A.C.). The story of the development of IA. during these long centuries cannot be taken up here; the broad lines of it have been indicated in § 20. Linguistic studies of the Aśōka and other inscriptions, grammars and philological works on Pali, the Prakrits and the Apabhraṅśas, and above all, the texts themselves, enable us to form some idea of MIA. The materials for the study of MIA. in Eastern India are the following (but it must be noted that MIA. documents relating to dialects current in other tracts are equally important, for their parallel forms, for their throwing valuable light on the development of MIA. as a whole, for their often preserving an eastern form, and for their influence on the dialects of the East):

(1) Stray words and forms in the language of the Vedas, the Brāhmaṇas, and in early classical Sanskrit, which, from their phonetic aspect, can be regarded as eastern: *e.g.*, « vikaṭa =vikṛta », « daṇḍa =*dandra », « ślīla =śrīra », « śithila » *loose* (for *śiṭhila=2nd MIA. śiḍhila=*śṛthira), « √gil=gir » *swallow*, « kṣulla » *small* (for *kṣudla = kṣudra). (Cf. § 36.)

(2) The oldest inscriptions in the East: Aśōkan, and other Brāhmī (*e.g.*, the Sohgaura plaquette inscription, the Piprahwa vase inscription, the Śutanukā inscription).

(3) Ardha-māgadhī forms in Pali (cf. § 39).

(4) Old Ardha-māgadhī and Old Māgadhī specimens in the Buddhist drama fragments of the 1st century A.C. (edited by Lüders: §§ 39, 40).

(5) Passages in Māgadhī Prakrit, in Śakārī, Cāṇḍālī and other dialects based apparently on Māgadhī, in Sanskrit dramas. Especially important in this connection are the 'Mṛcchakaṭika' and the 'Śakuntalā.' Jaina Ardha-māgadhī.

(6) The Prakrit grammarians, beginning with Vararuci (5th century) down to Mārkaṇḍēya (17th century), where they describe the eastern dialect (Māgadhī speech).

In the development of NIA. from OIA., the phonetic changes brought about in the transitional period between early MIA. and second MIA.,

and the gradual decay of inflections throughout all the MIA. stages, have served to make NIA. almost entirely change its character, and to begin afresh, as it were. As it will be seen under *Morphology*, very few OIA. inflections have survived in NIA. But it is the loss of the intervocal stops, and the weakening of the aspirated stops to « h » in MIA., which have transformed the Aryan language in India. A lax pronunciation of the unvoiced « -k- -c- -ṭ- -t- -p- » turns them easily into the voiced « -g- -j- -ḍ- -d- -b- », when they are preceded and followed by vowels, which are voiced sounds. Further laxity prevents complete closure of the mouth-passage, and the voiced stops become open consonants, spirants or continuants, namely, « g̣, y (fricative, = [ʒ]), some kind of fricative cerebral l̤ or [ɻ][1], ð, ƀ » respectively : and these open consonants often lose their audible friction, so that the consonant is reduced to zero. The voicing of the tenues is found sporadically as early as the 3rd century B.C. in Aśōka's eastern inscriptions : *e.g.*, « ava- » for « apa- » at Sahasram ; « ajala » at Dhauli, corresponding to « acala » at Jaugada ; « lōga » for « lōka » at Jaugada ; « libi = lipi » at Delhi-Topra ; « Aṁtiyōga » for « Antiyōka » = Greek « Antiokhos », at Kalsi. (Also cf. « rathidara = rathitara », Brāhmī inscription from Kangra Valley, 3rd century B.C. ? see J. Ph. Vogel, Ep. Ind., VII, pp. 116 ff.)

In the transitional period of MIA., 200 B.C.—200 A.C., we see that these voicings are on the increase in the inscriptions ; and cases of elision also appear, growing more numerous as we advance to the second MIA. stage : *e.g.*, « Anādhapēḍikō = Anātha-piṇḍika », « Maghādēviya = Makhādēva- », « avayēsi < avāðēsi < avādēsi = avādayat » (Bharhut, 2nd century B.C.) ; « padhamē = prathamē », « cavutha < *caðuttha < caturtha », « radha = ratha », « vitadha = vitatha », « Bharadha < *Bhāratha = Bhārata », « ñāvaka

[1] The intervocal cerebrals in MIA. did not become fricative, but were changed either to ' l̤ ' or to the so-called cerebral ' ṛ ' : the latter is not a continuant, but a ' flap ' sound. The very character of the cerebrals, which needed the tongue-tip to be rolled back and struck against the roof of the mouth for their proper pronunciation, ensured the momentary closure, even when the other consonant sounds became open. See later, under *Phonology*, where the phonetic history of IA. is discussed.

=jñāpaka » (Khāravēla Inscription, 2nd century B.C.) ; « chatrava=kṣatrapa », « atēurēṇa=antēpura- », « thuva=stūpa », « niyadido=niryātita », « Nākaraasa=Nāgarakasya » (a hybrid form, with Dardic or Northwest Indian « -k- » for « -g- »), « ayariya=ācārya », « vēya-udinō=vēgôdīrṇa », « viyaa=vijaya » (Mathura Lion Capital Inscription, early 1st century A.C.); « apratiṭhavita=apratiṣṭhāpita » (Taxila Plate, of the same date as the preceding). Similar forms, with voiced stops for unvoiced ones, and « y » possibly for an open spirant pronunciation, are found in the Nasik and Karle Cave Inscriptions of the 2nd century A.C. Of the literary Prakrits (as in the older Sanskrit dramas), which were based on the spoken MIA. vernaculars of the 1st—5th centuries A.C., we find that the voicing of the tenues, and their retention side by side with the original voiced ones, to be quite the rule in Māgadhī and Śaurasēnī (only « -k-> -g- » is generally elided, but « -t->-d- » never); but in the dialect named Mahārāṣṭrī, they are in all cases elided. Modern IA. languages derived from Māgadhī and Śaurasēnī, *e.g.*, Bengali and Hindī, show that those original single stops of OIA., which were preserved as voiced stops in the literary Prakrits, were subsequently dropped as well : *e.g.*, OIA. « śatam » > Māg. « śadē, śadaṁ », Śaur. « sadaṁ » : cf. Bengali শ' « śå » from « śaa, śaẘa », Hindī « sau, sai » from « sa(ẘ/ẏ)a » ; OIA. « pāda »> Māg., Śaur., « pāda » : cf. Bengali পা « pā », Hindī « pāẘ » ; OIA. « calati »> Mag. « ẏcaladi », Śaur. « caladi » : cf. Bengali চলে « cålē, Hindī « călē calai <« calaï ». This stage of Māgadhī and Śaurasēnī, in which all the intervocal stops were elided, has not been indicated in the oldest grammar of Prakrit that we have, that of Vararuci, who says that « -t-, -th- » become « -d-, -dh- » in Śaurasēnī ; and Māgadhī follows Śaurasēnī in this respect ; and later Sanskrit writers, who turned Sanskrit words into Prakrit, followed Vararuci and the usage of Śūdraka, Kālidāsa and the rest. But in Śaurasēnī Apabhraṁśa, we have the genuine state of things in the spoken language indicated by plenty of forms without the intervocal consonants. For a final or intervocal stop to be elided, it must be either laxly or lazily pronounced, leading to absence of contact, as described above ; or 'throttled' into an unexploded stop, as it has

happened to the final stops in many speeches ; or changed into a glottal stop, [ʾ], as in dialectal English, *e.g.*, London cockney [wo:ʔə, baʔə, pʰɑiʔə, məiʔɬ] for *water, butter, paper, Michael* = standard Southern English [wɔ:tə, bʌtə, pʰeɪpə, maikl̩]. The process, namely, stops > voiced stops, lazily uttered > open stops, or voiced fricatives with very little friction > complete elision, or zero,—seems to have taken place in Northern India. The « ya-śruti » of Jaina Ardha-māgadhī, which may be represented « -ẏ- », probably represents an intermediate stage between fricative pronunciation and complete elision, when the suggestion of a spirant would just be heard. This, as S. Lévi has noted (JA., 1912, ii. pp. 511-512), is found in the word « avayēsi » = « avādēsi, avādayat » in the Bharhut inscriptions, 2nd century B.C. Later MIA. inscriptions of the transitional stage show it ; and probably the Jain traditional spelling of Ardha-māgadhī with the « ẏa-śruti » is a systematisation in writing of what was no doubt heard in actual speech some time or other in the history of the dialect. Now, it seems that the occurrence of « -g- -d- -b-, -gh- -dh- -bh- » (as well as « -j- -jh- ») intervocally in Māgadhī and Śaurasēnī in the second MIA. period, as illustrated by Vararuci and by the early dramas, could only have been as fricatives : witness also the existence of « -p- » as « -v- », in spelling, of bilabial fricative « -ƀ- » (*i.e.*, [ʋ], in the IPA. script). Similar indication of fricative or open consonant sounds by letters which originally were always pronounced as stops is quite common in many languages, old and new : *e.g.*, in Gothic, in Old Irish, in Modern Greek, in Spanish. (See under *Phonology*, Sound-System of Second MIA.) Occasional hesitancy in spelling, between retaining a voiced stop and dropping it, which is noticed in contemporary documents of the transitional period and in Prakrit texts (*e.g.*, the name « Mōa = Mōga » respectively in the coin of that Indo-Parthian king and in an inscription of his time) also supports the assumption of the presence of a spirant pronunciation. The aspirates « kh gh, th dh, ph bh » similarly became « ɣh, ð̄h, ƀh », and finally « -h- ». In Mahārāṣṭrī, however, the stops were already dropped at a time when they were yet preserved as open consonants in Māgadhī and Saurasēnī and in the dialects of the North-west, and possibly as strong

fricatives indicated by the « ẏa-śruti » in Ardha-māgadhī. It is not certain by which process this was brought about in the Southern dialect, but the presence of « -ẏ- » forms in the Nasik Cave Inscriptions (cf. R. G. Bhāṇḍārkar, 'Wilson Philological Lectures,' 1914, pp. 88, 302), which belong to the present day Marāṭhī linguistic area, probably indicates the change here also was gradual, as in Northern India, only it was accomplished earlier. This peculiarity of pronunciation as soon as it was attained was probably noted in Northern India which still adhered to intervocal sounds.[1] The predominance of vowels in Mahārāṣṭrī, as the result of the dropping of consonants, made it more melodious, and this, coupled with the prestige of a rich literature of lyrics and little couplets which was growing up in it from the beginning of the Christian era, was probably responsible for its being accepted as *the* Prakrit dialect for songs and poetical stanzas by Sanskrit and Prakrit dramatists and poets everywhere. Like Braj-bhākhā in Northern India from the 15th century downwards, Mahārāṣṭrī became the recognised dialect for lyrics in the second MIA. period. (See p. 61.)

50. The Prakrits of the transitional and second MIA. periods came to have some literature in them, through the endeavours of the Buddhists (the Prakrit speech of Gandhāra or the North-west, *e.g.*, the 'Dharmapada' discovered by Dutreuil de Rhins in Central Asia, and first published by E. Senart in the JA., 1897, and edited by Bēni-Mādhab Baṛuā and Śailēndra-Nāth Mitra, Calcutta University, 1921), of the Jains (the Ardha-māgadhī dialect, now apparently re-edited from 'Old Ardha-māgadhī'—cf. p. 58—with influence from Śaurasēnī and other

[1] In the 'Mṛcchakaṭika' drama, probably 4th century A.C. (cf. M. Winternitz, 'Indische Litteratur,' III, p. 203), a character says : 'vaaṁ dakkhiṇattā avvatta-bhāsiṇō' *we Southerners speak indistinctly* (Act VI). This is perhaps a comment on the early elision of the stops in the South, which would be contrasted with the comparatively distinct—'vyakta'—albeit fricative, articulation of the North. The speaker, Caṇḍanaka, speaks familiarly of the ruses of the Karṇāṭa people in starting a quarrel : he is apparently a man from the Mahārāṣṭra country, bordering on Karṇāṭa ; and his dialect is not pure Śaurasēnī,—it is described as Āvantī, spoken in Ujjayinī—something intermediate between Śaurasēnī and Mahārāṣṭrī. Cf. Pischel, 'Gram. der Prakrit Sprachen,' § 26.

dialects), and of the Sanskrit dramatists, and vernacular poets in general (the Śaurasēnī and Māgadhī dialects, the Mahārāṣṭrī dialect). Grammars of some of these were written in the second MIA. period: and these dialects soon became stereotyped as literary languages, and did not keep pace with the spoken dialects, both in the scholarly Sanskrit dramas and in the Prakrit compositions in which they figured. The spoken dialects developed and changed; and during the period between the second MIA. dialects as in the dramas and the modern languages, these arrived at a stage (§ 20, p. 19) which has been called 'Apabhraṅśa,' following Hēma-candra, who definitely describes by that name a typical late MIA. speech which is younger than the Prakrits of the dramas, but older than the modern vernaculars. Thus the 'Śaurasēnī Prakrit' of the second MIA. stage, which was used in the Sanskrit drama, and was actually based on the spoken language, say of the 3rd, 4th and 5th centuries, continued to be written in the 6th, 7th, 8th and 9th centuries, and later; and being then confined to high literature only, and to a great extent removed from the actual, living Śaurasēnī of the later period, it became a matter of the scholar's and the grammarian's interest, to be written according to the grammars based on earlier specimens and modified by later views, opinions, theories, and, very rarely, by actual (later) contemporary linguistic conditions. While this was going on, the current late Śaurasēnī came to be used in literature by the masses; and then *it* grew to have a position of its own, as a younger Śaurasēnī Prakrit; it developed into a 'Śaurasēnī Apabhraṅśa,' in which gradually a literature was created. What happened to Śaurasēnī undoubtedly happened to the other Prakrits; only the literary counterparts of the 'Apabhraṅśa' forms of these latter—Mahārāṣṭrī, Māgadhī, Ardha-māgadhī, and the North-western Prakrit—are now wanting: either because the literatures in these have entirely perished; or because such literatures did not exist, at least on a large scale, which is equally likely—Śaurasēnī Apabhraṅśa alone having taken up the whole field for literary purposes.

51. When did MIA. have its new 'Apabhraṅśa' characteristics fully developed? Vararuci does not speak of any speech named Apabhraṅśa

in his grammar: apparently it was not known to him. H. Jacobi gives evidence from literature and epigraphy, from Bhāmaha and Daṇḍin, and from the inscription of king Dhara-sēna of Valabhī, that some form of speech called Apabhraṅśa was used for literary purposes as early as the 6th century A.C. (' Bhavisatta-kaha,' Munich, 1918, pp. 54*—55*). Jacobi also notes certain Apabhraṅśa traits in a Prakrit work, ' Paüma-cariya,' dating, according to him, from the 2nd-3rd century A.C. at the earliest (*op. cit.*, pp. 59* ff.). Jacobi thinks that the spoken dialects, partially at least, developed the Apabhraṅśa traits by that period. But contemporary epigraphical documents, which certainly are more faithful than post-11th century MSS., do not at all justify us in assuming the Apabhraṅśa stage so early. In the Dutreuil de Rhins fragments of the Prakrit ' Dharma-pada,' which belongs to the latter half of the 3rd century (see § 50), we come across the nominal « -u » affix for « -ō », no doubt; this weakening is one of the characteristics of Apabhraṅśa; but « -ō » forms are equally common, and « -u », « -ō » both might be irregular graphic devices for one sound, namely, a very close « ō », in this dialect. The ' Mṛcchakaṭika ' has Prakritic portions, which resemble Apabhraṅśa in some points: cf. Act II, the dialogue between the gambling-house keeper and the gambler, whose dialect has been called ' Ḍhakkī ' (see Pischel, ' Gram. der Prakrit Sprachen,' § 25); this ' Ḍhakkī ' is really ' Ṭakkī,' based on a North Panjab, at any rate a North-western, dialect, and it has nothing to do with Ḍhakkā = Ḍhākā or Dacca in East Bengal (see Grierson, JRAS., 1913, pp. 875 ff.). These ' Ṭakkī ' portions do not represent the true Apabhraṅśa; here it seems we have a dialect of the North-west, like the Dutreuil de Rhins fragments which tended to change final « -ō » to « -u » as early as the 3rd-4th centuries A.C. The stanzas uttered by the king when he lost his reason in the 4th Act of the ' Vikramôrvaśī ' of Kālidāsa seem to be Apabhraṅśa in form and metre; this would bring Apabhraṅśa to the 4th century A.C. But the genuineness of these stanzas has been doubted by some scholars (Jacobi, *op. cit.*, p. 58*). Moreover, here the characteristic Apabhraṅśa phonetic change—intervocalic « -m- » > « -w̃- »—is absent, and the Apabhraṅśa pleonastic affixes like « -illa, -alla » and « -ḍa » are not found. The affix

« -ḍa », of which the Sanskrit (OIA.) counterpart is « -ṭa », is very sparingly used in OIA., and is equally rare in first and and second MIA. (See under *Morphology* : ' Formative Affixes.') Personal and other names with « -ṭa » become plentiful in Sanskrit literature and inscriptions from the 7th century A.C. onwards, like « Kāiyaṭa, Vapyaṭa, Tātaṭa, Śubhaṭa, Dēvaṭa, Bhōgaṭa, Jayaṭa, Uvaṭa, Mammaṭa, Rudraṭa, Vakhaṭa ». Such names are unknown in the earlier periods, and they are Sanskritisations of names in « -ḍa » which were becoming common in the spoken languages. It would seem that the germs of the Apabhraṅśa stage were present as early as the 5th century, and « -ō » became « -u » first in the North-west and West —among the Gandhāras, the Ṭakkas, and other North Panjab peoples, and among the Ābhīras and other tribes who were spread over Sindh, Rajputana and also the West Midland. The language of these latter was first distinctly called Apabhraṅśa (cf. Jacobi, ' Bhavisatta-kaha,' pp. 67* ff.), as a group of dialects which had deviated from standard Śaurasēnī and other speeches in certain respects, probably as early as the 5th century A.C.

The term ' Apabhraṅśa ' originally had no special significance, and merely meant *speech fallen off* (*from the norm*), *vulgar speech*. The learned man's contempt for popular speech is manifest in the use of the terms « apaśabda, apabhraṅśa, apa + √bhāṣ » by Patañjali (cf. Jacobi, *op. cit.*, p. 81*). No one would suggest that the word Apabhraṅśa as used by Patañjali meant anything but *dialectal*, *ungrammatical* or *vulgar speech*, or that it can mean anything like the tertiary development of MIA. In Bengal, the Paṇḍits used to describe the Sanskritised literary Bengali as সাধুভাষা « sādhu-bhāṣā », and the actual, living Bengali as অপভাষা « apa-bhāṣā » or ইতর-ভাষা « itarā-bhāṣā » (cf. H. P. Śāstrī, VSPdP., San 1321, p. 285). One can very well understand that after the MIA. forms (Pali and Śaurasēnī and other Prakrits) were established, deviations in the vulgar speech, especially of some of the less cultured peoples of North-western and Western India, would be described as ' Apabhraṅśa ' forms ; and when these new traits (*e.g.*, « -ō > -u ») became established in the speech of all classes in Western and Northern India, and certain other new characteristics, not noticed before in the 5th or 6th

century, were developed and established, the term 'Apabhraṅśa,' or 'Apabhraṣṭa' would come to be restricted for this new phase of the speech, to distinguish it from the well-attested 'Prākṛta' of the earlier epoch. The Apabhraṅśas, as popular dialects, came to be employed by the masses for their songs and couplets; and, with a popular literature, they came later to obtain recognition from scholars as well. Hēma-candra, evidently following earlier and generally accepted nomenclature, called this late form of MIA. as used in literature an 'Apabhraṅśa.' The necessity for exact definitions in modern scholarship has gradually established, in Indo-Aryan Linguistics, the use of the term Apabhraṅśa to indicate the *stage* between the Prakrits of the dramas (second MIA.) and the modern vernaculars: a stage, as one can postulate from what has been said above, which was well established by 600 A.C. (For Apabhraṅśa, see R. G. Bhāṇḍārkar, *op. cit.*, pp. 109-118; R. Pischel, 'Materialen zur Kenntnis des Apabhraṁśa,' Abh. der kön. Gesellsch. der Wiss. zu Göttingen, 1902; H. Jacobi, 'Bhavisatta-kaha,' Ueber den Apabhraṅśa, pp. 53* ff., and Sanatkumāra-caritam,' Munich, 1921, pp. xix-xxx; P. D. Guṇē, 'Saṁyama-mañjarī,' Annals of the Bhāṇḍārkar Inst., Poona, 1920; Grierson, 'The Apabhraṅśa Stabakas of Rāma-śarman Tarka-vāgīśa,' IAnt., Jan., 1922, Jan. 1923.)

The IA. dialects spoken in Gujarat, Rajputana and the Midland alone are fortunate in possessing specimens of the Apabhraṅśa stage. A kind of Midland or Śaurasēnī Apabhraṅśa was a sort of literary speech for Northern India in the closing centuries of the 1st millennium A.C., and some centuries later. The power and prestige of the Rājpūt courts, which had their centres in the Midland and the Ganges Valley, was responsible for it. The Jains of Gujarat cultivated it a great deal; and often it became a mixed dialect. Nāgara Apabhraṅśa, also cultivated by the Jains, is probably based on the late MIA. source-dialects of Rājasthānī-Gujarātī, strongly tinged with Śaurasēnī. We are also told about Vrācaḍa (=Sindh), Kēkaya (=West Panjab) and other forms of Apabhraṅśa. Doubtless, there were similar Apabhraṅśas derived from Mahārāṣṭrī, Ardha-māgadhī, and Māgadhī; but we have no specimens in these. (Cf. Grierson, 'The Apabhraṅśa Stabakas of Rāma-śarman Tarka-vāgīśa,' referred to

above.) In the East, the local *patois* does not seem to have been cultivated after the days of Aśōka: in any case, Māgadhī never seems to have been. It was a despised dialect—the speech of the lowest classes in the drama. Śaurasēnī was established for literary purposes in the Ardha-māgadhī and Māgadhī areas. Possibly Śaurasēnī was the polite language of the day when people employed a vernacular; and in the Apabhraṅśa period, eastern poets employed the Śaurasēnī Apabhraṅśa, to the exclusion of their local *patois*. This tradition, that of writing in a western, Śaurasēnī, literary speech, was continued in the East down to middle and late NIA. times, even after the eastern languages had come to their own. The writers of oldest poems in Bengali (10th-13th centuries) also composed in this Śaurasēnī Apabhraṅśa; Vidyāpati, the Maithil poet of c. 1400, wrote in his native Maithilī as well as in 'Avahaṭṭha,' or 'Apabhraṣṭa,' which is only a late form of Śaurasēnī Apabhraṅśa. (See § 61.) So far as the eastern languages are concerned, we have to come at one bound from the specimens in second MIA. (pre-6th century) to the specimens in the crystallised modern speeches (10th-13th centuries for Bengali, early 14th century for Maithilī, and later for the other languages).

52. The modern representatives of Māgadhī Apabhraṅśa are Bengali, Assamese, Oṛiyā, Magahī, Maithilī and Bhōjpuriyā. In the middle of the 7th century, as the testimony of Hiuen Thsang would seem to suggest, there was one language spoken in Bihar, Bengal and Western Assam: only in Assam there was a deviation, probably in phonetics only. Bengali and Assamese are practically one language, when a comparison is instituted among the Magadhan speeches; and Oṛiyā is most closely related to Bengali-Assamese. There are some points of agreement between Maithilī and Bengali-Assamese-Oṛiyā. The 'Prakrit' and Apabhraṅśa dialects brought to Bengal and Assam (and Orissa) may have largely belonged to Aṅga and Mithilā, the tracts contiguous to Bengal. But Maithilī and Magahī, in having a complicated verb-system, with its infixed pronouns and its honorific forms (cf. Grierson, 'Seven Grammars of the Dialects and Sub-dialects of the Bihárí Language,' Calcutta, 1883-87; LSI., V, Part II), stand apart from other Magadhan. This verb-system of Maithilī

and Magahī seems to be a rather late development, originating or asserting itself long after the differentiation of the Māgadhī speeches. Early Maithilī, as in the 'Varṇa-ratnâkara' and in Vidyāpati, shows a simpler conjugation, which might have become archaic, and thus was restricted only to the language of literature, in the 14th century; but it certainly indicates that the intricacies of later Maithilī were absent in Old Maithilī. The same may be said of Magahī, although here we do not have early documents. Bhōjpuriyā somewhat stands apart from its sister-speeches, having come under the influence of its western neighbour Awadhī (Ardha-magadhī) from very early times. Magadhan speeches can very well be classified into the following 3 groups:

1. Eastern Magadhan: Bengali, Assamese, Oṛiyā.
2. Central Magadhan: Maithilī, Magahī.
3. Western Magadhan: Bhōjpuriyā, with Nāgpuriyā or Sadānī.

Grierson calls 2 and 3 'Bihārī,' regarding them as variations of one type. But the sharp distinction between Bhōjpuriyā and Maithilī-Magahī in their conjugation would justify their relegation to two separate groups, at least for the modern stage.

The more important points of agreement among the Magadhan languages can be summarised as follows:

(i) Common to all Magadhan:

Phonetic: Tendency to turn the original «ă» sound ('samvṛta' ă= [ʌ]) of OIA. and MIA. into an «å» [ɔ]; original «ś ṣ s» > «ś» [ʃ], (but in Central and Western Magadhan, Upper Indian influence has helped this sound, after the development of these languages, to change to a dental sibilant, while in the extreme east, in Assamese, it has become a guttural spirant, [x]); epenthesis of «i» developed in all Magadhan, except probably in standard Bhōjpuriyā. *Morphological*: an instrumental in «-ẽ, -ẽ, -ē, -ĕ»; «-kăra» as a genitive affix; original genitive> oblique plural in «-n(i)»; locative in «-ē»; (see below under *Morphology*; 'Case Inflections'); «-l-» for the past base, «-b-» for the future base and also for a verbal noun; remnants of an «-h-» future derived from the synthetic «-sy-» future of OIA. (*e.g.*, Bhōjpuriyā 3 pers. sing. «dēkhī

< *dēkhihi », Bengali 2 pers. precative future দেখো = দেখিও = দেখিঅ = দেখিহ « dēkhō < dēkhiō < dēkhiâ < dēkhihâ »). Roots « hō, ah, rah », and possibly also « ach », for the substantive verb (« ach » not found in present-day Bhōjpuriyā and Magahī). *Syntactical* : active construction in the past tense of the transitive verb, and affixation of personal inflections to the past base (*e.g.*, base « dēkh-il-, dēkh-al- » : dialectal and standard Bengali দেখিলি, দেখিলাহোঁ > দেখিলুঁ, দেখিলাম « dēkh-il-i, dēkh-il-ā-hõ > dēkh-il-ũ, dēkh-il-ām, », Assamese « dēkh-il-õ », Oṛiyā « dēkh-il-i, dēkh-il-ũ », Magahī dekh-ɲl-ī, dekh-ɲl-ũ », Maithilī « dekh-ɲl-ī, dekh-ɲl-a-hũ », Bhōjpuriya « dekh-ɲl-ī, dekh-ɲl-õ ») came to be developed independently in each. The differentiation between transitive and intransitive verbs, 3 person only (*e.g.*, standard colloquial Bengali দেখ্‌লে « dēkh-l-ē » *he saw*, but চ'ল্‌ল « cōl-l-ō » *he went*, Assamese « dekh-il-ē » but « tsâl-il-ɲ », Maithilī « dekh-ɲl-ak », but « cal-al-ɲ », Bhōjpuriyā « dēkh-ɲl-ē, dēkh-ɲl-as », never « dēkh-al-ɲ », but « cal-al-ɲ »), can be called a common Magadhan trait, having its germs in the Māgadhī Apabhraṅśa. There was a general tendency to give up the distinction between the nominative and oblique forms of the noun, which is now absent in the modern Magadhan speeches.

(ii) Characteristics of Eastern Magadhan :

Full « å » [ɔ] pronunciation of the short « ă » is the only one that obtains. The palatal nature of the Māgadhī sibilant is most faithfully retained. Epenthesis of « i, u » fully established. « kṣ » (in *tat-sama* words) pronounced as « (-k)khy- ». Genitive in « -rɲ », from « -kēra, -kara » ; disuse or restricted use of the genitive in « -ka », except in Oṛiyā. Past and future bases in « -il-, -ib- », instead of « -al-, -ab- », which characterise other Magadhan; a passive participle in « -ā »—*e.g.* « dēkhā » *seen* ; confusion between roots « ah » and « hō » (*e.g.*, Old Hindī « (a)haï » and « hōwaï » both meaning *is*, but derived from different roots ; so Magahī « hal » and « bhēl, hōl » *was* ; in Bengali, Assamese, and Oṛiyā, old forms like হয় < হই « haï » and হোএ < হোই « hōi » have merged together. See below, under *Morphology* : 'Defective Verbs').

Nominative in « -ē », locative in « -t(ē) », and absence of number in verb, are common to Bengali and Assamese ; formal differentiation between

the past of the transitive verb and the past of the intransitive verb in the 3rd person only (*e.g.*, সে দিলে « sē di-l-ē » *he gave*, but সে গেল « sē gē-l-å » *he went*), is found in West and North Bengali and in Assamese; « ś > h, c ch j jh > ts s dz z », found in dialectal (East) Bengali and Assamese.

Non-initial stress, giving rise to forms like « găcha, răjā » *tree, king* (cf. Bengali গাছ, রাজা « gāchȧ, rājā »), and absence of « ō, ū, u » pronoun for the remote demonstrative, are common to Assamese and Oṛiyā.

Special plural forms: রা « -rā » দিগ « -digå », গুলা « -gulā » etc. in Bengali; « -bilāk, -bōr, -hāt » in Assamese; « -ē, -mānē » in Oṛiyā. The ablative in « -u » and the conjuntive indeclinable in « -iṇå » are peculiar to Oṛiyā only.

(iii) Characteristics of Central Magadhan:

Short « ă » approaches the [ɔ] pronunciation of Eastern Magadhan, rather than the [ʌ] of Northern India. Special verbal forms, with affixed and infixed pronouns: elaborate system of honorific and other verb forms with reference to the object (*e.g.*, Maithilī forms—« dekh-ȧl-ak, dekh-al-ȧk-ai, dekh-ȧl-a-nhi, dekh-al-ȧk-ai-nhi, dekh-ȧl-athi, dekh-al-ȧthī-nhi, dekh-al-ȧth-ū-nhi » *he saw* or *they saw*); present participle in « -at » used for the future, in the 3rd person only (*e.g.*, Maithilī and Magahī « dēkh-at, dēkh-ȧt-ai » *he* or *they will see*); « -th- » affix distinguishing verb plural, now singular honorific as well (*e.g.*, Maithilī and Magahī « dēkhai » *he sees*: original plural « dēkhathi » *they see*, now both honorific plural and singular).

The honorific pronoun of the second person, « ahā̃ », is peculiar to Maithilī; the substantive roots « (a)ch, thik » characterise Maithilī, and are not found in Magahī; and the root « ah, ha », beside « hō », common in Magahī, is not characteristic of Maithilī. A group like « ă + single consonant + ĭ, ŭ » results in « å (*i.e.*, long å = [ɔ:]) + consonant » in Maithilī.

(iv) Characteristics of West Magadhan:

« ă » is pronounced as in Northern India, = [ʌ]. There is a developed long « å » sound, [ɔ:]. Use of an affix « -as » for verb 3 pers. singular, through influence of Awadhī (*e.g.*, « dēkhē, dēkh-as » *he sees*, « dēkhȧlē,

dēkhaḷ-as » *he saw*, « dēkhat, dēkhaṭē, dēkhit, dēkhaṭ-as » *he used to see*) ; a present indicative and future with the particle « la » (« dēkhå-lõ » *I shall see*, « dekhå-, dēkhē-lā » *he will see*) ; synthetic future in « -h- », for the 3rd person only, retained ; root « vṛt » for the substantive verb occurs as « bāṭ, bāṛ, bā » ; (root « ach » *be*, now absent in Bhōjpuriyā, seems to have existed in Old Bhōjpuriyā) ; use of the particle « khē » in connection with the verb (« nahī khē bā, nahī khē, naïkhē » *is not, does not exist* « hōkhē » *is*).

(v) Common to East Magadhan and Central Magadhan :

Nominative in « -ē » ; use of the affix « -ka- » in connection with the verb 3rd person (*e.g.* Bengali দেখিলেক « dēkh-il-ē-kaḷ », Early Oṛiyā « dēkh-il-ā-kå », Maithilī-Magahī « dekh-ḷ-a-k » *he saw*) ; tendency to change intervocal « -b- » in some forms to « -m- » (*e.g.*, Assamese « dim », dialectal Bengali দিমু « dimu » < « dibõ » *I shall give*, Oṛiyā « dēkhimi », beside « dēkhibi » *I shall see*, Magahī « lēmā < lēbā » *you will take*) ; the roots « āch (=ach, ch) » and « tha (thik, thak, thāk) » for the substantive verb ; and the post-positional ' article ' « -ṭā, -ṭī ».

« -rā » plurals, from the genitive, of personal pronouns (cf. Maithilī « hamaṛā-sabh », Magahī « hamaraḷ-nī » = Bengali আমরা সব, সভ « āmaṛā-sab(h)ḷ » *we* : later this was extended to the noun in Bengali) ; genitive in « -kēra » (= Bengali এর « -ērḷ ») : common to Bengali and Central Magadhan.

Pronominal adjectives in « -h- », *e.g.* « *jaïhaṇa, kaïhaṇa » etc., = Maithilī « jēhan, kēhan », Bengali যেন কেন [ʤeno, kɛno] from earlier যেহেন, কেহেন, যেহু, কেহু « jēh(ē)nå, kēh(ē)nå », Assamese যেনে কেনে « zēnē, kēnē » : common to Bengali-Assamese and Maithilī.

(vi) Common to East Magadhan and West Magadhan :

Root « vṛt » as a substantive root (= Bhōjpuriya « bāṭ, bāṛ, bā », Oṛiyā « åṭ », Bengali বট « båṭ »).

Number in the finite verb-forms, all persons, retained in Bhōjpuriyā and Oṛiyā, but distinction of number lost to other Magadhan.

The use of a particle (or post-position) « la » in connection with the verb also found in Middle Bengali (?) (see *Morphology* : ' The Verb—Pleonastic Affixes ').

(vii) Common to Central Magadhan and West Magadhan :

Weakening of long vowels when words are extended or compounded, through reasons of stress (a characteristic found in Eastern and Western Hindī as well: *e.g.*, « pānī » *water*, but « păniā » *water*, « păni-hār » *water-carrier*). Dental pronunciation of the old Māgadhī palatal sibilant, although written श (ś) in the Kaithī alphabet in which these dialects are generally written; « r » for Māgadhī « l » (*e.g.*, « har, phar, rāur = hala, phala, lāŭla = rāja-kula [= *honoured sir*] »)—a well-marked tendency perhaps at one time the rule in Central and Western Māgadhan; 3, and sometimes 4 forms for the same noun, with preference for the « awā » and « auwā » forms (*e.g.*, « ghur ghōr, ghōrā, ghŏrawā, ghŏrauwā » *horse*, respectively 'weak,' 'strong or ordinary,' 'long' and 'redundant' forms); an oblique form in « -ē » for nouns often retained; genitive of nouns in « kā, -kā », of pronouns in « -kar, -kārā »; dative in « -sē », locative in « -mẽ »; « -al-, -ab- » and not « -il-, -ib- »; a verbal noun in « -al- ».

53. If we compare Maithilī of the 14th century, which forms the oldest extant specimens in it (see § 56), with 14th century Bengali as in the 'Srī-Kṛṣṇa-Kīrttana,' and with the Oṛiyā of the Puri inscriptions (15th century), we find that these languages are already widely different, and have almost arrived at the stage where they are now. Maithilī, Bengali and Oṛiyā are by 1300 A.C. fully developed languages, each with its own characteristics, and not mere dialects of a common Māgadhī. In its phonetics and its forms, Oṛiyā is the most conservative of Māgadhan languages, and Bengali is the most advanced, or farthest removed. The difference between Maithilī-Magahī and Bengali-Oṛiyā is manifold, so much so that these groups must have parted company, each taking up its own line several centuries at least before 1300 A.C. When precisely this split of Māgadhī Apabhraṁśa into a Western, a Central, and an Eastern group had become accomplished, it cannot be determined. When Hiuen Thsang came to Eastern India (1st half of the 7th century), it seems there was not much difference between Magadhan as spoken in its own home (South Bihar) and in Bengal; it was just spreading from South-west Bengal into what is now Orissa, and it had already penetrated from

North-eastern Bengal into Assam, where it probably underwent some easily noticed phonetic modifications. The Apabhraṅśa stage was one in which IA. was shedding off most of its old affixes, when the old inflectional system was being whittled down out of existence. New affixes and post-positions were coming into prominence in the declension of the noun, and the temporal and finite use of the participles was established for the verb. A few of these were already to be found in Māgadhī Apabhraṅśa of the 7th century, the common source of all modern Magadhan languages (see § 22). But as the modern Magadhan languages show, each local form of late Māgadhī Apabhraṅśa, in the Bhōjpuriyā tract, in Mithilā, in Magadha, in Bengal, in Orissa, solved more or less independently its own needs, in the 8th-11th centuries A.C. This period was one in which the language was in a formative, 'fluid' state in all Aryan India; this was roughly a period for 'Proto-Bengali,' 'Proto-Maithilī,' 'Proto-Oṛiyā,' etc., when the specifically Bengali, Maithilī and Oṛiyā characteristics were in all probability manifesting themselves, but were not as yet fully established; when the dialects still looked back to the past, to second MIA.; and the NIA. characteristics (*e.g.*, loss of one consonant in double consonant groups with compensatory lengthening of preceding vowel) were but in the process of formation. Thus, Oṛiyā-Bengali-Assamese normalised the affix « -kara > -ara, -aṛa » for the genitive; Bengali also showed a predilection for « -kēra > -ēṛa »; the old plural inflection was lost, and in this matter Bengali hesitated for a long time, until, in addition to a number of Sanskrit nouns of multitude, it took up the « -ara » of the genitive, strengthened with « -ā » affix into « -ṛā », and also the words গুলা « -gulā » < Sanskrit « kula- » and দিগ « -digå » < Sanskrit « ādi-ka » in the Middle Bengali period; whereas Assamese differentiated itself in that period by building up the affixes « -bōr, -bilāk, -hāt »; Oṛiyā, on the other hand, probably as early as in the Proto-Oṛiyā stage, adopted the Māgadhī Apabhraṅśa word « māṇaẅå » = Sanskrit « mānava » *man* as a plural sign, in addition to employing an oblique plural form in « -ē ». The differences in affixation, such as are noticeable in the plural form in Bengali, Assamese and Oṛiyā, cannot have been inheritances in these speeches from their common

source-dialect. Early Maithilī of the 14th century, as in the 'Varṇa-ratnâkara,' shows a plural nominative in « -āha, -aha », and a plural oblique in « -nhi », which are inherited forms from Apabhraṅśa Māgadhī, traces of which are found in all forms of Modern Magadhan. The Modern Magadhan genitive affixes « -rɸ, -karɸ, -kara, -karā < -kara-, -ērɸ, -kērɸ, kērā < -kēra-, -kɸ, -kā, -kē < -kaa », the nominative, instrumental, accusative and locative « -ɛ̃, -õ, -ē, -ĕ », are inflections derived from the common mother. The passive construction for the past of the transitive verb was inherited by all Magadhan speeches, as can be seen from traces in the oldest specimens of these; but this method was given up independently in each.

Taking into consideration the differences and agreements among the various forms of Modern Magadhan, the assumption of a split of late Māgadhī Apabhraṅśa into the three groups enumerated above can be justified. Eastern Māgadhī further split up into (a) Bengali-Assamese and (b) Oṛiyā groups, the link between the two being the South-western dialect of Bengali as current in Midnapur (LSI., V, Part I, pp. 105-119). When this differentiation between Assamese-Bengali and Oṛiyā took place it is not easy to determine, in the absence of documents. The language of the 'Caryā-padas' (see §§ 60-63) is Old Bengali, modified to some extent by a Western Apabhraṅśa: Bengali with its characteristics was already established in the 11th century. Differentiation from Oṛiyā might have been in progress at that time: for there are certain indications that in the Old Bengali period (10th-11th-12th centuries) there was a shifting of stress in West Bengali, which served to give Modern Standard Bengali its definite character, and distinguished it from its neighbour Oṛiyā and the rest (see later, under *Phonology of the Native Element*, Vowels and Stress System). The Bengali group of dialects early came to be united by a common literary language based on West Bengali, which became fully established by the 15th century, and exerted an influence on all the other dialects. The common dialect current in North Bengal and Assam continued as one speech, as a member of the Bengali-Assamese group of dialects. In the 15th century it split up into two sections,

Assamese and North Bengali, when Assamese started on a literary career and an independent existence of its own by not acknowledging the domination of literary Bengali, already established in East Bengal as well.

54. The oldest specimens in the various Magadhan languages may now be discussed.

West Magadhan, *viz.*, Bhōjpuriyā, is the language of a splendid martial race: it is also the speech of the tract which has the city of Benares for its chief centre. But Bhōjpuriyā does not seem to have been much cultivated; at any rate, it was neglected by the scholars. The Bhōjpuriyā territory has always been under the influence of the West, and Western forms of speech, like Braj-bhākā, and Awadhī, and literary Hindōstānī (Hindī and Urdū) in later times, have been cultivated by poets and others who spoke Bhōjpuriyā at home. Barring the composition of a number of ballads and songs, which are as beautiful specimens of folk literature as any, and which still have a vigorous existence in the countryside, there has been no conscious literary effort in Bhōjpuriyā. The oldest specimens in this speech that we possess are probably a few poems written by the great religious reformer and mystic teacher of Northern India, Kabīr (15th century). Kabīr was an inhabitant of the Bhōjpuriya tract, but following the practice of the Hindostan poets of the times, he generally used Braj-bhākhā, and occasionally Awadhī. His Braj-bhākhā at times betrays an eastern (Bhōjpuriyā) form here and there: and when he employs his own Bhōjpuriyā dialect, Braj-bhākhā and other western forms frequently show themselves. As specimens of Kabīr's Bhōjpuriyā poems, the following may be mentioned (from Kshiti-mōhan Sēn's Selections, in Bengali characters and with Bengali translation, 4 Parts, Śānti-nikētan, Bolpur, San 1317 ff.):

Part I, pp. 20-21:

.....« kanawā phaṛāya jōgī jaṭawā baṛhaulai :
dāṛhī baṛhāya jōgī hōi gailai bakarā.....
kahahī Kabīra, 'sunō bhāī sādhō,
Jama-darajawā bāndhala jaibē pakarā.' »

Splitting (his) ears, the Yōgī has grown matted locks :
Growing a beard the Yōgī has become a goat.....
Saith Kabīr : 'Hear, brother devotee,
At the gate of Yama you will be bound and seized.'

Part III, pp. 86-87 :

..... « bābā-g̃hara rahaulaũ, babūī kahaulaũ,
saĩyã̃-ghara, catura sayāna
cētaba gharawā āpana rē ».....
In my father's house I was retained, and was called a darling ;
My Husband's home—wise and grown-up,
I shall know that home to be mine, O.

Part III, p. 98 :

« kā lai jaibau, pītama ghara aibau ?
gã̃wa-kē lōga jaba pūchana lagihaĩ,
taba hama kā rē bataibaũ ? ».....
With what will he depart (when) my Love will come to (my) house ?
When the people of the village will begin to question, what indeed then shall I say ?

Part IV, pp. 70-71 :

« sūtala rahalũ maĩ nīda bhari hō, piyā dihalaĩ jagāya ;
carana-kaw̃ala kē añjana hō nainā lēlũ lagāya ».....
I remained sleeping in deep slumber, ah me ! My Love he made (me) awake ;
The collyrium (of the dust) from his lotus like feet I put in (my) eyes.

55. Magahī has been one of the least fortunate among IA. speeches. The land of Magadha was one of the most prosperous parts of India in pre-Christian times, and its people, probably together with their brethren from other eastern (Prācya) tracts like Benares (Kāśī), formed the most powerful nation in India during the time of the Mauryas. But with the fall of the Mauryas, the importance of Magadha waned. In the 4th century A.C., according to the testimony of Fa Hien, the Chinese pilgrim, there was a decay in Southern Bihar,—the country had become jungly, and was sparsely peopled : and the reason of this decay is not known. But

Magadha, as the holy land of the Buddhists and the Jains, and later, with its newly established place of pilgrimage at Gayā, of Hindus as well, always had some importance. The establishment of the Buddhist colleges or universities of Nālanda during the time of the Guptas, and of Vikrama-śilā, made Magadha once more famous throughout the Buddhist world in Asia as a centre of culture. During the time of the Pālas, who were professed Buddhists, Magadha seems to have flourished exceedingly. But the conquest of Bihar by the Turks in the last decade of the 12th century was fraught with disastrous results for the intellectual life and culture of the province. The story of the sack of Bihar, as preserved by Minhāj-i-Sirāj in the Ṭabaqāt-i-Nāṣirī, is typical of what had happened all over Magadha. Catastrophes like these extinguished learning in the land. The learned men were slain, or else they fled to Nepal with such manuscripts as they could take with them : in this way many precious MS. treasures from Bihar dating from pre-Moslem times could be preserved in the monasteries of Nepal. In Magadha, all indigenous literary culture was at an end. Magadha has been aptly described as the cock-pit of Eastern India, and it was the scene of constant fights during the Turkī, Paṭhān and Moghal periods. The desolation of the country favoured the incoming from the South of the Musaharās and other non-Aryan (Kōl) tribes, who were partially Aryanised, and took up the Aryan speech from the original Magadha people. All sense of connection with the past was lost, all knowledge of the glories of pre-Moslem Magadha. The only important places were the small town of Gayā, where a few Brahmans might have kept up a little study of Sanskrit, and the city of Patna, which was dominated by the Indian Mohammedan culture from the West. The contrast with Mithilā across the river was very great. There was no cultivation of the language of the country. The masses were rude, and to a great extent, in the lower classes, recruited from aborigines. The new upper classes were Brahmans and Kṣatriyas as well as Kāyasths, mostly from the West : the original Brahmans, the ' Bābhans,' took to agriculture and became degraded. The aristocratic communities spoke or affected Hindī (Braj-bhākhā, and Awadhī) as well as Urdū. The local dialect was never

seriously employed in literature, so that Magahī, the NIA. speech of South Bihar, has had to lead the existence of a humble *patois* from the very beginning of its life. But the masses, as in other parts of India, sought to express themselves in this *patois* of their daily life, and as a consequence in Magahī we have a small literature of ballads and folk-songs, some of which have been collected in the end of the 19th century by scholars like Grierson. The educated classes in Magadha at the present day do not feel any interest in their mother-tongue, High Hindī and Urdū taking up all their attention. It is said, however, that a little other literature in the shape of a verse adaptation of the Rāmâyaṇa, and one or two similar works, exists among the masses. All this *corpus* of composition in Magahī does not go back to any early period.

56. Maithilī has been more fortunate. For a long time after the conquest of Magadha and Bengal, Mithilā retained her independence, at least internally, and the first flood of Turkī invasion did not pass over her, wrecking the ancient intellectual life. Even after the conquest by the Moslems and virtual suppression of the native kings (c. 1500, cf. R. D. Banerji, 'Bāṇgālār Itihās,' II, p. 205), there was nothing like the sweeping destruction of temples and the slaughter of scholars which accompanied the Turkī conquest in the 12th and 13th centuries. The Maithilī Brahmans were renowned for their Sanskrit learning, and right down to the 16th century, Mithilā used to be the resort of students from Bengal and other parts of Eastern India (R. D. Banerji, *op. cit.*, pp. 130 ff.). The Brahmans of Mithilā did not despise their mother-tongue, and we have an unbroken literary record in Maithilī from the beginning of the 14th century, probably even earlier, down to the present day.[1]

The earliest Maithilī work which we have is the 'Varṇa-ratnâkara' of Jyōtirīśvara Ṭhākura, who wrote it during the 1st quarter of the 14th

[1] Maithilī as language of public life and literature has been largely suppressed by High Hindī and Urdū during the latter part of the last century. The University of Calcutta has within the last five years taken up seriously the study of Maithilī, and has received strong support from many scholars and noblemen in Mithilā; and it looks as if there will take place a revival of this descendant of the old Māgadhī speech of Eastern India.

century. This work is a sort of lexicon of Maithilī and Sanskrit words in the frame-work of several descriptions (*e.g.*, the description of a king's court enumerating all the functionaries and officials who would be found there). It is preserved in a unique MS.[1] dating from the beginning of the 16th century, now in the library of the Asiatic Society of Bengal. (R. D. Banerji, 'Bāṇgālār Itihās,' II, p. 133; Manōmōhan Chakravartī, in the JASB., 1915, Nov. and Dec., p. 414; Hara-Prasād Śāstrī, 'Bauddha Gān O Dōhā,' VSPd., Introduction, p. 35.)

Vidyāpati Ṭhākura (end of 14th—beginning of 15th century) is the greatest writer of Maithilī. Vidyāpati's songs on the love of Rādhā and Kṛṣṇa (edited by Nagēndra Nāth Gupta, VSPd., San 1316) are among the fairest flowers in Indian lyric poetry. These exerted a tremendous influence on the Vaiṣṇava lyric of Bengal. They spread into Bengal, and were admired and imitated by Bengali poets from the 16th century downwards, and the attempts of the people of Bengal to preserve the Maithilī language, without studying it properly, led to the development of a curious poetic jargon, a mixed Maithilī and Bengali with a few Western Hindī forms, which was widely used in Bengal in composing poems on Rādhā and Kṛṣṇa. This mixed dialect came to be called ব্রজবুলী « Brâjâ-bulī » or *speech of Vraja*, from the fact that the poems composed in it described Kṛṣṇa's early life and his love with Rādhā which had for its scene the Vraja district, round about Brindāvan, near Mathurā. This « Braja-buli » is of course entirely different from the Western Hindī dialect, called 'Braj-bhākhā,' which is current round about Mathurā (§ 13). The literature in this artificial Braja-bulī dialect is one of the most beautiful expressions of the poetic spirit of the Bengali people, deservedly popular poets like Gōvinda-dāsa and Jñāna-dāsa, among a host of others only less famous, having composed exquisite lyrics in it. Braja-bulī as a poetic dialect is occasionally taken up by the present-day Bengali poets as well, and even Rabīndra-nāth Tagore has emulated the

[1] An edition of the text has been prepared, to be printed by the University of Calcutta (August 1923).

poetic predecessors in his own language by writing a whole series of poems, the 'Bhānu-siṅha Ṭhākurēr Padâvalī,' in Braja-bulī. Braja-bulī poetry is a standing example of the extent to which an entirely artificial dialect can be utilised by a whole people for poetic exercise ; and its position in Bengal can be compared with that of Śaurasēnī Apabhraṅśa and Avahaṭṭha outside the Midland in the late MIA. and early NIA. periods.

In addition to poems in his own vernacular Maithilī, Vidyāpati has left compositions in a Western Apabhraṅśa speech, a dialect archaic in spirit for his age, which he calls 'Avahaṭṭha.' (See p. 91.) There are some short poems, and two long works, the 'Kīrtti-latā'[1] and the 'Kīrtti-patākā,' connected with the achievements of Kīrtti-siṅha, one of his royal patrons at the beginning of the 15th century.

The oldest specimens of Maithilī, as in the 'Varṇa-ratnâkara' and the poems of Vidyāpati, present a language which is extremely archaic and simple when compared with the Maithilī of the present day : especially noticeable is the simplicity of the verb-system, with its freedom from the ramifications of pronominal infixes and affixes. This is a sufficient indication of the fact that the elaborate conjugational devices of Maithilī (and Magahī) are late : since, some traces of these would have been found in these remains if they were in common use in the 14th century. Could these pronominal modifications of the verb have begun in Magadha, with a fresh, peaceful influx of Kōl people from the South, manifesting themselves first in the Magahī speech and in Maithilī as spoken to the south of the Ganges, namely, in the 'Chikā-chikī' dialect, and then spread into Maithilī as spoken to the north of the Ganges ?

It may be mentioned that prior to 1200 A. C., we have a few place-names in inscriptions referring to Magadha and Mithilā, but they are not important enough, either numerically or in their forms, as documents of the language in those tracts in the late MIA. period.

[1] This Avahaṭṭha work, under the editorship of Mahāmahôpādhyāya Hara-Prasād Śāstri is now (August 1923) in the press in Calcutta.

57. Oṛiyā is very closely related to Bengali. West Bengali and Oṛiyā seem to have developed from one from of Māgadhī Apabhraṅśa, as current in South-west Bengal in the 7th-8th centuries. This speech was differentiated among the Ōḍra or Uḍra people[1] who lived on the borderland between Suhma (South-west Bengal) and Kaliṅga. Hiuen Thsang described the Ōḍras as a barbarous people, whose words and language differed from 'Central' India; but they loved learning, and applied themselves to it without intermission, and they were mostly Buddhists. With regard to the people of Kōṅgōda, corresponding to Puri district of the present day, Hiuen Thsang makes a more definite statement, that although the Northern Indian alphabet was current among them, their language and mode of pronunciation were quite different (S. Beal's Translation of H. T., London, 1906, II, pp. 204-206). In the early part of the 7th century, we have thus the testimony of the Chinese traveller that the sea-board country where Oṛiyā is now spoken was non-Aryan in speech. Yet we have epigraphical evidence to show that Brahmans were settled in non-Aryan Kōṅgōda with grants of land precisely when Hiuen Thsang noticed the general linguistic condition of the country (Rādhā-Gōvinda Basāk, 'Mādhava-varmār Tāmra-śāsan,' Sāhitya for Phālguna, 1319). What would seem to have been the case is that the Ōḍra people were receiving Aryan speech from the neighbouring Suhma and Rāḍha, in the 7th century and before, as well as during the subsequent period, and they rapidly became

[1] Oḍra is the Sanskritised form of the word Oḍḍa, the name of a Dravidian people. Kittel's opinion about the meaning and affinities of the word is given at p. 68. For a different derivation, from a Dravidian root meaning *to run away*, see B. C. Mazumdar, Introduction to Vol. I of 'Typical Selections from Oriya Literature.' 'Oḍḍīyaa' (=Skt. 'Āuḍrīyaka') > 'Oṛiyā'; 'Oḍra-viṣaya,' or 'Āuḍri-viṣaya' = 'Oḍḍi-viśaa, Oḍiviśaa' > 'Oṛiśā,' the modern Oṛiyā name for their country; whence Bengali উড়িষ্যা 'Uṛiṣyā,' the Oṛiyā pronunciation of 'ś' as something like 'sy,' together with a vague sense of this word being connected with the word 'viṣaya' with a cerebral 'ṣ' being responsible for the Bengali spelling ষ্যা '-ṣyā.' The form 'Oḍiviśa' is preserved in Tārānātha (16th cen.) and other Tibetan writers. The name 'Utkala' seems to be from a Dravidian word meaning *householder, farmer* (see *supra*, p. 68; also B. C. Mazumdar, *op. cit.*).

Aryanised. West Bengal was the centre from which Aryanism spread into Orissa and into Chota Nagpur, as far as Sambalpur side, where it joined forces with Aryan influences from the Midland and Kōsala. (Cf. B. C. Mazumdar, 'Sonpur,' pp. 30-31, 115-116: the influence of Bengali Kāyasthas in Orissa of the 10th-11th centuries, as can be seen from epigraphical evidence, is noticed by Mazumdar; also cf. Introduction to Vol. I of 'Typical Selections from Oriya Literature' by B. C. Mazumdar, Calcutta University, 1921). The Māgadhī Apabhraṅśa of West Bengal was differentiated in Orissa, where it was transplanted, by that speech changing more in its original seat in Bengal than among the Ōḍras and the Utkalas, among whom it acquired a most conservative spirit. The Old Bengali specimens of the 10th-13th centuries, as preserved in the 'Caryās,' already shows a stage in some respects in advance of that which is represented by Middle Oṛiyā of a later period. Kṛṣṇa Paṇḍita, 'author of the 'Prākṛta-candrikā' (12th century), mentions 'Uḍra' as one of the 27 Apabhraṅśas: this is perhaps the earliest reference to Oṛiyā as a distinct Prakritic speech (Manōmōhan Chakravartī, 'The Language and Literature of Orissa,' JASB., 1897, i, p. 319). The spread of Oṛiyā was at the expense of Dravidian and Kōl, as in Bengal; and a civilised Dravidian speech, Telugu, seems to have receded before Oṛiyā.

The earliest specimens of Oṛiyā, in connected expressions, hitherto discovered, occur in two copper-plate grants of king Nṛsiṅha-dēva IV, dated c. 1395 A. C. (edited by Manōmōhan Chakravartī, JASB., 1895, i, pp. 136 ff.). In these we find a respectable number of Oṛiyā words which show that the Oṛiyā language is already formed. Some of these words are very valuable for phonological study: for example, the word « ciāri », occurring twice, for the modern « cāri » *four*; the « -i- » after the « c- » is found in Marāṭhī, « * ciāri > cyār > cār », pronounced as a palatal affricate, [t͡ʃ] or [c͡ʃ], and not as a dental affricate [t͡s], which would be the regular pronunciation of a « c » before « a, ā » in Marāṭhī; and this « i » is a puzzle. (J. Bloch, 'Langue Marathe,' § 216; « cyāri = ciāri » is found in Old Hindī, and in Old Gujarātī also. See later, *Morphology*, under 'Numerals'). Before that date, we can mention a

few place-names in earlier inscriptions (*e.g.*, the copper-plate grant of Nṛsiṅha-dēva II, 1296 A. C., edited and published in the JASB., 1896, i, pp. 254-256 ; the grants of the Trikaliṅga Gupta and the Bhañja kings of South Kōsala or Sambalpur, for which see B. C. Mazumdar, 'Sonpur,' pp. 33 ff. ; the grant of Mādhava-varmā of Kōṇgōda, 7th century, referred to above).

But the most considerable and most noteworthy specimens, apart from the literary records, which in the works of Jagannātha-dāsa and others go back to the 15th century, are in a series of inscriptions, some 12 in number, all in Oṛiyā, in the temples of Puri and Bhuvaneshwar, dating from 1436 to 1542 (published by Manōmōhan Chakravartī, JASB., i, 1893). Along with these is to be reckoned a grant inscribed on a copper axe-head, with a short Oṛiyā inscription, dating from the time of Puruṣôttama-dēva (1466-1496) (E. A. Gait, JBORS., 1918, Part IV). These inscriptions prove that Oriya was to all intents and purposes the same language in the first half of the 15th century that it is now.

The spelling of some of the words in these inscriptions is worthy of attention, and it throws a great deal of light upon the stress system of the language, and also on one or two points connected with the pronunciation. Epenthesis of « -y- » after a consonant was quite a regular thing ; « jñ » in *tat-sama* words was pronounced « gỹ » as now ; « ṛ » was pronounced as « ru » ; and syllables contiguous to a strongly stressed one were dropped : *e.g.*, राइजे = « rājyē » (inscription of 1466) ; आइगां = « āgỹā, ājñā » (1450) ; also आइगां (1470) ; बाहिज = « bājhya, vāhya « (1459) ; and forms like गजपि, पुरुषोत्म, योगिन्र (1466), गुवारे=गुबारे (« ṛ » pronounced as « ru ») (1459), वृ(=भु)षोत्तम (1470), पृथा=प्रुथा, पुरुषा, पुर्षा, प्रमेश्वर (1470), नर्क (1542), show that the stress was ante-penultimate, and that a preceding or following weak vowel was dropped : *e.g.*, « gājápati, puruṣôttamā, jōgíbarā, gurúbārē, puruṣôttāmā, púruṇā, paramēśwārā, náraká ». The early Oṛiyā of these inscriptions is a living speech. Oṛiyā as in literature is more Sanskrit-ridden than Bengali, and the language there is never so interesting as in these not very long specimens in the inscriptions : except that a few archaic or obsolete forms are preserved in the former (*e.g.*, the

conjunctive in « - iṇâ »), and that in quantity it is quite a respectable body of national literature in the language.

58. The agreement between Assamese and Bengali is so close that the dialects of Bengali and Assamese may be described as belonging to the same group. Dialects are independent of literary speech: as such, East Bengali dialects, North Bengali dialects (with which Assamese is to be associated) and West Bengali dialects are not only independent of one another, but also they are not, as it is popularly believed in Bengal, derived from literary Bengali, the « sādhu-bhāṣā » , which is a composite speech on an early West Bengali basis. (See §§ 68, 70, 71, 72.) Assamese dissociated itself from the other Bengali dialects when the speakers of these acknowledged the supremacy of a literary Bengali, and thus accepted the bonds of linguistic union. Assamese continued to be the language of an independent community ; and, under the peculiar circumstances under which it was placed, as it progressed deeper and deeper into the Brahmaputra valley among the Boḍo and other Tibeto-Burman, and Shan peoples, it developed some peculiarities of its own. The earliest Assamese remains date from the middle of the 15th century ; and at that time the language is practically identical with contemporary literary Bengali as employed in North and East Bengal, with the distinctive Assamese characteristics rare and not at all prominent. Yet Assamese traits are occasionally noticeable: *e.g.*, the confusion between dentals and cerebrals, the use of ৱ « -w- », the absence ৃ « -ṛ- », the absence of the « -i » affix for the verb 1st person present, etc. But on the whole, Early Assamese, and even Modern Assamese, are not much removed from the Common Bengali type. The Bengali dialects of the extreme east and south-east (Sylhet, Chittagong) are certainly more removed from Standard Bengali than is Assamese. The earliest poets in Assamese are Mādhava Kandalī, Śaṇkara-dēva (? 1449-1569), Mādhava-dēva and Rāma-Sarasvatī (Ananta Kandalī). Some Assamese writers would assign a Middle Assamese work called ' Dīpikā-chanda ' to the 11th, 9th or even to the 6th century, but the work is palpably post-15th century in its language (Dēvêndra Nāth Bēz-bâruā, 'Asamiyā Bhāṣā Āru Sāhityar Burañjī,' Jorhat, Śaka 1833, p. 71 ;

Padma-nābha Śarmā, in the VSPdP., 1319, No. 1, pp. 45-58). The oldest linguistic remains of Assamese are some names in inscriptions; but in pre-Moslem times, Assamese and Bengali were certainly one language; and a study of these names can be better made in connection with old Bengal place names (*Appendix C*).

59. The oldest specimens of Bengali, prior to 1300 A. C., are the following.

(1) A number of place-names in inscriptions and in old books, beginning from the first half of the 5th century A. C. As has been said before, these names have been Sanskritised a great deal, but some of the *tadbhava* and *dēśī* words can be distinguished. In the 'Rāma-carita' of Sandhyākara-nandī, 11th century, similar names have been found (cf. R. D. Banerji, 'The Pālas of Bengal,' pp. 87-90), and one or two in other works, but their value is not so great as in the epigraphical records.

(2) A glossary of over 300 words, scattered in a Sanskrit commentary on the 'Amara-kōṣa,' by a Bengali Paṇḍit, Vandya-ghāṭīya Sarvânanda, written about 1159 A.C. This work, bearing the name 'Ṭīkā-sarvasva' was noticed in the catalogues of Sanskirt MSS. by Aufrecht and Burnell (cf. Ep. Ind., VI, p. 203). The work was lost to Bengal, but was preserved in Malabar, and it has been recently edited from Malabar MSS. by T. Gaṇapati Śāstrī in the 'Trivandrum Sanskrit Series.' The vernacular words preserved in it belong to the Old Bengali period, and they embody valuable material for the study of Bengali phonology. A great many of these words have become obsolete now, and quite a number of them present a slightly Sanskritised appearance, which was due to the scholastic tendencies from which Paṇḍits have never been free. A few of these words have been found in pre-Moslem (Old Bengali) and early Bengali literature described below. [The VSPdP. for San 1326, No. 2, has two papers, in one of which these words have been discussed (by Rāi Bahādur Yōgēsh Chandra Vidyā-nidhi, 'Sāṛē Sāt Śata Vatsar Pūrvēr Bāṇgālā Śabda'), and in the other they have been arranged alphabetically for the benefit of students (by Basanta-Rañjan Rāy, 'Dvādaś Śatakēr Bāṇgālā Śabda')].

The above lists of names and words are but meagre materials to reconstruct the history of a language. Sentences and connected phrases of the language in its oldest period, just after it had evolved from the Apabhraṅśa stage, would be invaluable. Fortunately, we have been possessed of such specimens of Old Bengali, after it had manifested most of its peculiar characteristics, and before it could crystallise into the Middle Bengali of the established type. These specimens allow us to have a glimpse of the language in its formative period.

60. (3) These specimens consist of some 47 [1] songs, called 'Caryā-padas,' or 'Caryās,' composed by teachers, «siddhās», of the Sahajiyā sect, which was an off-shoot of the Tāntrika or late Mahāyāna Buddhism. This sect seems to have been connected with the Śaiva sect of the Yōgīs (Nātha-panthīs), in their doctrines, in the possession of some common traditions, and apparently of some common teachers as well, like Matsyêndra-nātha, Gōrakṣa-nātha and Jālandhari-pāda. (The doctrines of the Sahajiyās, as set forth in the 'Caryās,' can be compared with those of the Yōgīs as in the 'Gōrakh-bōdh,' a 14th century work in Hindī: cf. L. P. Tessitori, 'Kānphaṭā Jōgīs,' in Hasting's Cyclopaedia of Religion and Ethics; Grierson, 'Gōrakh-nāth,' in the same work.)

These songs are preserved in a MS., which, according to Mahāmahôpādhyāya Hara-Prasad Śāstrī, who discovered it in Nepal and edited it under the auspices of the VSPd. of Calcutta, belongs to the beginning of the 12th century, but Rākhāl-Dās Banerji expresses a doubt as to its being earlier than the end of the 14th century (in his article on the date of the MS. of the 'Srī-Kṛṣṇa-Kīrttana,' one of the introductory essays in the edition of that work, for which see below). H. P. Śāstrī published this MS. along with 3 others in one volume, to which he gave the title 'Hājār Bacharēr Purāṇa Bāṇgālā Bhāṣāy Bauddha Gān Ō Dōhā' *Buddhist Songs and Couplets in the Bengali Language a Thousand Years Old.*

[1] There were 50 songs in the MS., and these are numbered. Five leaves in the MS. are wanting. Through this reason, we have only a portion of Carjā 23, and Caryās 24, 25 and 48 are missing entirely, leaving the actual number at 47.

Of the four MSS., printed in this book, the first one alone, the 'Caryā-carya-viniścaya,' containing the songs mentioned above, have a supreme importance in studying the origins of Bengali.

The second and third, called respectively the 'Dōhā-kōṣa' of Saraha, and the 'Dōhā-kōṣa' of Kānha, are in an Apabhraṅśa dialect, in which the distinctive Bengali traits such as are found in the Caryās are absent, but their language has an important bearing on the development of NIA. The subject matter of the poems and and couplets in these two 'Dōhā-kōṣas' is the same as that of the Caryās.

The last MS. printed in Paṇḍit Śāstrī's volume, the 'Ḍākârṇava,' presents a third variety of Prakritic speech. This work is a Buddhist Tantra, named in full 'Dākârṇava Mahāyōginī-Tantra-rājya,' and it is in a number of chapters (paṭalas); the MS. gives the text only in a mutilated form. The text consists of Sanskrit *ślokas* interspersed with portions in the Prakritic speech. There is no Sanskrit « chāyā », or commentary, and the interpretation of the work is rendered extremely difficult. The Prakritic portions appear to be in *sūtra* form as well as in verse. These are at times intelligible; and a word or two here and there (*e.g.*, the root « acch », the form « kē », interrogative pronoun, rather than « kō ») indicate eastern influence. The MS. is palpably late: the text also appears to be corrupt: we have even post-Middle Bengali forms like « tumi ». The ignorance of the Nēwārī copyist, who had a little Sanskrit and less of Apabhraṅśa, is responsible for making the language the enigma that it is in the MS. In any case, being at its basis a Western Apabhraṅśa, as even a cursory glance at the language will show, the connection of the speech of the 'Ḍākârṇava' with Bengali is but remote; and although the restoration and explanation of the passages in it is sure to be of some value in the history of late MIA., the consideration of the problem may be laid aside for the present as having no immediate bearing on the origins of Bengali.

In the MS. of the 'Caryā-carya-viniścaya,' we have the poem in the Prakritic speech given first, and then a Sanskrit commentary on the poem. The commentary occasionally gives short quotations from similar Prakritic

literature—Old Bengali and Western Apabhraṅśa, an interesting example being two short couplets in Old Bengali attributed to Mīna-nātha (in comm. to Caryā 21). In the second MS., the Prakritic lines of Saraha, or Sarōja-vajra, are not always given by themselves, but are quoted *in extenso* in the Sanskrit commentary by Advaya-vajra: the author of the commentary has the text before him in another MS., from which he is content to introduce tags or full verses in his work. Kānha or Kṛṣṇâcārya's Dōhā-kōsa, the third MS. in Śāstrī's book, gives first the Apabhraṅśa couplets and then the Sanskrit commentary to it.

The subject matter is highly mystic, especially in the 'Caryās,' centering round the esoteric doctrines and the Yōga and erotistic practices of the Sahajiyās; and the commentary, being itself in a highly technical jargon, does not make the text any the clearer, notwithstanding the fact that it quotes extensively from a large analogous literature. The poems in the 'Dōhā-kōṣa' of Saraha are not so mystic, but they are abstruse enough: and the same may be said of the second 'Dōhā-kōṣa,' of Kānha.

Two different dialects are found in these three works. The dialect of the 'Caryās' alone is Old Bengali, as its peculiar Bengali forms show (*e.g.*, the genitive in এর, অর « -ēra, ara », dative in রে « -rē », locative in ত « -ta »; post-positional words like মাঝ « mājha », অন্তর « antara », সাঙ্গ « sāṇga »; past and future bases in ইল, ইব « -il- , -ib- » and not « -al- , -ab- » of Bihārī; present participle in অন্ত « -anta »; conjunctive indeclinable in ইআ « -iā », conjunctive conditional in ইলে « -ilē »; passive in « ইঅ -ia- », which is preserved as a relic in Middle Bengali; substantive roots আছ « āch » and থাক « thāk «, not « thik » of Maithilī or « thā » of Oṛiyā; and a number of Bengali idioms). The two 'Dōhā-kōṣas' present the same dialect, which is a kind of Western (Śaurasēnī) Apabhraṅśa, as its « -u » nominatives, its « -aha » genitives, its « -ijja- » passives, and its general agreement in forms with the literary Western Apabhraṅśa amply indicate. There was a considerable amount of Eastern Buddhist (Sahajiyā) literature, of the type found in the 'Dōhā-kōṣas,' in the Western Apabhraṅśa. C. Bendall has published some fragments of such Apabhraṅśa strophes (in the

'Subhāṣita-saṃgraha,' Le Muséon, new series, Vols. IV, V, Brussels, 1905). In the monasteries of Nepal, some of these Sahajiyā Apabhraṅśa songs and strophes are even now preserved and sung (H. P. Śāstrī, VSPdP., 1329 San, No. 1, pp. 44 ff.). And a great many, along with poems and other compositions in Old Bengali, seem to have been rendered into Tibetan and included in the 'Bstan-lIgyur' (Tan-jur), the Indian originals being lost (cf. Cordier's Catalogue, mentioned in footnote at p. 119).

61. As has been said before, as a literary language this Western Apabhraṅśa was current in Eastern India. During the 9th-12th centuries, through the prestige of North Indian Rājpūt princely houses, in whose courts dialects akin to this late form of Śaurasēnī were spoken, and whose bards cultivated it, the Western or Śaurasenī Apabhraṅśa became current all over Aryan India, from Gujarat and Western Panjab to Bengal; probably as a *lingua franca*, and certainly as a polite language, as a bardic speech which alone was regarded as suitable for poetry of all sorts. Professional bards, 'bhāṭs,' in other parts of India had to learn this dialect, as well as Sanskrit and the Prakrits, and compose in it. In the first centuries after the development of NIA., this Śaurasēnī Apabhraṅśa continued to be used, but it yielded more and more to the local dialects in the various parts of India, and ultimately, by the middle of the 15th century, it was no longer, or very sparingly, used, other vernaculars like Maithilī, Awadhī, and Rājasthānī having asserted themselves; and in its own home, the Midland, it gradually approximated itself to Braj-bhākhā, which was in a way its direct representative. The Old Hindī of the 'Prithīrāja-Rāsau' is very strongly influenced by Apabhraṅśa forms, is almost overwhelmed by them—the genuine NIA. character of the work showing itself nevertheless. A younger form of this Śaurasēnī Apabhraṅśa, intermediate in forms and in general spirit to the genuine Apabhraṅśa of times before 1000 A.C. and to the Braj-bhākhā of the Middle Hindī period, say, of the 15th century, is sometimes known as 'Avahaṭṭha.' The 'Prākṛta-Paiṃgala' (see § 64) embodies an anthology of verses in this Avahaṭṭha speech. In Rajputana, Avahaṭṭha was also known as 'Piṃgala,' and local bards continued to compose in 'Piṃgala,' as an archaic literary

language, almost as much as they composed in 'Ḍiṇgala' or local Rājasthanī dialects. The prestige and influence of Śaurasēnī Apabhraṅśa was no less strong in Bengal than in Bihar, Panjab and Rajputana. During the formative period of Bengali (? 700—900 A. C.) and the Old Bengali period (950—1200 A. C.), a great deal of the early Buddhist (Sahajiyā) literature was composed in it. Being a dialect that was not the mother-tongue of those who composed in it, local eastern (Bengali) idioms and words have crept into it: *e.g.*, « kaḍhiu rāva » *raised a shout*, in the 'Dōhā-kōṣa' of Saraha (p. 91 in Śāstrī's book): cf. Bengali রা কাড়া « rā kāṛā »; « bhiḍi » *tightly, fast* (ibid., p. 90): cf. Middle Bengali ভিড়ি « bhiṛi »; use of roots « acch » and « thakk » (pp. 104, 105): Bengali আছ, থাক « āch, thāk »; « jabbē, tabbē » *when, then* (p. 107): Bengali যবে, তবে « jābē, tābē »; « cha(ḍ)aï » *leaves* (p. 112): cf. Bengali ছাড়ে « chāṛē », but Hindōstānī « chōṛē »; « tāhara » *his* (p. 115): Bengali তাহার « tāhāra » ; « bujjhiaü » *understood* (p. 129): cf. Bengali বুঝ « bujh »; etc.

The practice of employing this western literary speech in the eastern tracts continued in Mithilā at least as late as the time of Vidyāpati. Vidyāpati's compositions in Avahaṭṭha have been mentioned before (see p. 104); and in his Avahaṭṭha, naturally there is a considerable mingling with contemporary early Braj-bhākhā forms, as well as Maithilī forms; and frequently the influence of Maithilī phonology and orthography is noticeable, and, at times, the influence also of the classical Prakrit as used in the Sanskrit drama. Here, with Vidyāpati, the Avahaṭṭha dialect it is more or less restricted to court poetry of a formal, panegyrical character. In Bengal, Western (Śaurasēni) Apabhraṅśa and its younger form Avahaṭṭha ceased to be employed as soon as Bengali came to its own. But the practice of using the language of Upper India on formal occasions at least seems to have lingered on as a tradition in the courts of Bengal princes, along with the courtly etiquette and ceremonial which was Rājpūt or Northern Indian; and it was revived in post-Moghal times, with the influx of Rājpūt and other officials from Northern India. In Bhārata-candra's 'Annadā-maṇgala' (middle of the 18th century), we have some Hindī verses in which a Bengal prince,

the ruler of Burdwan, and his 'bhāṭ' or court bard and emissary talk with one another. The use of Western Hindī, or Braj-bhākhā, by the Bengali poet is an echo of this revived tradition ; which thus goes back to the days when Western Apabhraṅśa was cultivated by Bengal poets.

62. The language of the Caryās is the genuine vernacular of Bengal at its basis. It belongs to the Early or Old NIA. stage. The declension is still more like MIA. rather than NIA., although the NIA. system of post-positions has come in. The past base, when the verb is transitive, is still an adjective qualifying the object, as it is still the rule in Western Hindī. But the influence of the Śaurasēnī Apabhraṅśa was very great on it : and occasionally of Sanskrit and the literary Prakrits of the second MIA. period. There is the old passive in « -ia- », which is lost to New Bengali, but which lingers in isolated instances in Middle Bengali. (See under *Morphology* : The Verb: Passive Voice.) The affix « -illa > -ila » has not as yet become universal for the past base, « -ia » forms, without the strengthening « -l- » affix, being retained in a few instances (see below, under *Morphology*: Conjugation, Past Base). The text at times gives a form in « -ia », but from the commentary and from the rime it can be seen that the original word was in « -ila »: *e.g.*, Caryā 31, « chāḍia » in text = « chāḍila » in commentary; 35, « laïā » in text, to be read as « laïlā », to rime with « kaēlā » ; so 50, « phuliā » is for « phulilā », to rime with « tāēlā » = « bhāïlā? nēlā? ». Still, forms like « bujhia, bharia » were used side by side with « bujhila, milila » etc. The past (*i.e.*, past participle) in « -iu, -u », as in « kiu, biāpiu, gaü, ahāriu, bikasaü, thākiu, bāhiu » etc., which, however are not many, are borrowed from Śaurasēnī Apabhraṅśa. So also the pronominal forms like « jō, sō, kō, jasu, tasu », = Old Bengali « jē, kē, jā(ha), tā(ha) », also found in the Caryās ; these, again, are not very common ; and also the pronominal adverbs « jima, tima », and the pronominal adjectives « jaïsana, taïsana, jaïsō » (Old Bengali forms would be « *jēmanta, tēmanta ; jaïhaṇa, taïhaṇa »). Echoes of the older literary Prakrits of the West are not absent (*e.g.*, the « -ō » affix ; stray forms like instrumental feminine in « -ia : samāhia =

samādhyā »; retention of double consonants in a few cases; and an occasional phrase like « kim pi = kim api »). It seems that in these Caryās we have the first attempts at literary employment of the Bengali speech. And being but first attempts, the speech is not sure of its own forms, and leans on its stronger, better established (in a literary sense) sisters and aunts. The literary languages and models which the poets of the Caryās, Lui and Kānha, Bhusuku and Cāṭila, Saraha and Kukkurī, and the rest, had before them, were Sanskrit, the various literary Prakrits (of the Second MIA. stage), and Western or Śaurasēnī Apabhraṅśa, and the rich and ever growing literatures in them. Of these, the Śaurasēnī Apabhraṅśa was in spirit and form nearest the vernaculars, presenting with them almost a similar stage of development. Śaurasēnī Apabhraṅśa, again, was the most cultivated literary language based on a slightly archaic form of a contemporary vernacular: and its influence was paramount from Gujarat to Bengal. Naturally, it may be expected that there would be a great influence exerted by it on the Old Bengali of the period: especially when the latter was practising its first steps, so to say, in the hands of men fully familiar with the former. Hence it is not strange to find a number of Śaurasēnī Apabhraṅśa forms in this offspring of Māgadhī Apabhraṅśa. The manuscript in which the Caryās are preserved was written in Nepal, in a land where the scribes were perhaps more familiar with the standard Śaurasēnī Apabhraṅśa than with Bengali: at any rate, the readings of the poems as in the MS. sufficiently show that the scribe was not familiar with their dialect: and through this reason, the suppression of dialectal Bengali forms by others from the Western speech, at least in a few cases, is very likely; nay, it is proved by the correct reading often being given in the commentary, as in the case of the word « chāḍila » quoted above. Śaurasēnī had already exerted a profound influence on its neighbour and erstwhile rival, Ardha-māgadhī, so much so that the Śaurasēnī Apabhraṅśa affix « -u » for the noun had become established in the Eastern Hindī dialects (Awadhī etc.), the native Ardha-māgadhī « -e > -i » affix being entirely given up. The « -u » affix also invaded the Māgadhī area, but not to the same extent.

The MS. of the 'Caryācarya-viniścaya' was written in Nepal, where Maithilī was current and was cultivated in the drama; and in South-eastern Nepal, the Morang country, Maithilī was spoken. Hence, through contamination, it is not strange to find in the Caryā MS. two Maithilī forms, « bhaṇathi » and « bōlathi » (=Old and Early Middle Bengali « bhaṇanti, bōlanti ») and one or two cases of use of « -a- » instead of « -i- » as the link vowel in the « -b- » forms of the verb.

The language of the Caryās seems to be based on a West Bengal dialect. Some of its forms belong rather to West Bengal than to East Bengal: *e.g.*, the use of the « -k- » affix for the dative, rather than « -r- », the latter occurring in two instances only; the employ of the post-position « sāṇga » and « sama », rather than « sātha » which would be preferred in East Bengali. There are two remarks on the people of East Bengal which do not show any admiration for them; this is a thing which is noticeable in the 12th century West Bengal scholar Sarvânanda (§ 59), who, in his commentary on the 'Amara-kōṣa,' speaks of the « Vaṇgala-vaccāra » *the vulgar Bengal people* who were fond of dried fish, meaning, no doubt, the semi-Aryanised masses in East Bengal. (See pp. 73, 74.)

The metres of the Caryā poems are *mātrā-vṛtta*, being mostly 'Pādākulaka,' or 'Caupāī,' which originated in the late MIA. period. A specifically Bengali or East Magadhan metre like the 'Payār' of 14 syllables is not found. Perhaps the 'Payār' was not yet developed. It seems that the 'Payār' is a later transformation of the 'Pādākulaka' or 'Caupāī' (see under *Phonology of the Native Element*, Stress System). Or it may be that the 'Payār' had already shaped itself in folk-poetry, but the poets of the Caryās, with their acquaintance with the common MIA. and Early NIA. metres, ignored it in their compositions.

There cannot be any serious objection (which could be supported by a detailed study of the grammar of the language, as well as by taking into consideration the development of Modern Bengali) which can be urged against the Caryās as presenting the oldest connected specimens of a characterised Bengali speech that we have been enabled to possess. The language is

not 'Prakrit' or 'Apabhraṅśa,' as it has been urged by some, since it shows simplification of the MIA. double consonants (« dhāma < dhăṁma= dharma, jāma < jăṁma =janma, tānti=tãⁿti <tănti=tantrī, bāṭa < *vaṭṭa=vartma, āïla < *āyĭlla=āyāta-ila-ka, hāḍa- < hăḍḍa, sēji=śējī < *śĕjjiă=śayyikā » etc.), and has developed some genuine Bengali morphological forms. It is not 'Māgadhī,' *i.e.*, Magahī, because no specifically Magahī characteristic is traceable, and the verb system is as yet primitive. And it is not an artificial jargon made up of shreds of different dialects, because, barring those few Western Apabhraṅśa forms, discussed above, there is nothing in its grammar which cannot be explained with reference to the development of Middle and Modern Bengali.[1]

We have in these Caryās some of the oldest documents in any NIA. language, documents of prime importance for NIA. philology, which can be placed side by side with the Śaurasēnī Apabhraṅśa fragments, in Hēma-candra, in the 'Kumāra-pāla-pratibōdha,' and in other works; with the Avahaṭṭha fragments in the 'Prākṛta-Paiṅgala'; with the oldest Marāṭhī fragments as in the epigraphical remains and in the 'Jñānêśvarī'; with the 'Pṛithīrāja-Rāsau' in its primitive form; with the Old Western Rājasthānī remains, which are later in date; and also with the artificial Buddhist and Jain literature in Western Apabhraṅśa—like the 'Dōhā-kōṣas' and the 'Subhāṣita-taṇgraha,' and the 'Bhavisatta-kaha,' the 'Nēmināha-caria,' the 'Saṁyama-mañjarī,' and other works.

63. What is the date of the Caryās? Judging from the language, one would be inclined to place them at least 150 years before the 'Śrī-Kṛṣṇa-Kīrttana,' which belongs to the last quarter of the 14th century,

[1] The importance of the Caryā-padas has not been sufficiently appreciated in Bengal, and only about half a dozen papers or notes on them have been published so far by Bengali scholars. They only valuable article is by Maulavī Muhammad Shahīdullāh, now of the department of Sanskritic studies in the University of Dacca; his paper (in the VSPdP., 1327, pp. 145-152) offers very satisfactory readings of some obscure passages, and on the whole is extremely helpful and suggestive. Prof. H. Jacobi cursorily refers to the language of the Caryās as being 'Alt-Bengalisch' (in the Introduction to the 'Sanatkumāra-carita,' pp. xxvii-xxviii, Munich, 1921).

and which is our oldest Middle Bengali text : roughly, before 1200 A. C. The authors who composed these poems are Lui-pā or Lūyī-pāda (2 poems), Kukkurī (2 poems), Birūwā or Virūpa (1 poem), Gu(ṇ)ḍarī (1), Cāṭila (1), Bhusuku (8), Kānha or Kṛṣṇa-pāda (12), Kāmalī or Kambalâmbara (1), Ḍombī (1), Śānti (2), Mahittā or Mahīdhara (1), Bājila or Vīṇā-pāda (1), Saraha or Sarōja-vajra (4), Śavara (2), Āja or Ārya-dēva (1), Ḍheṇḍhaṇa (1), Dārika (1), Bhādē or Bhādra-pāda (1), Tāṷlaka (1), Kaṇkaṇa (1), Jaya-nandī (1) and Guñjarī (1) : 22 names in all. They are among the 84 Siddhas, or great miracle-working saints and teachers who are worshipped by the Mahāyāna Buddhists in Tibet and in Nepal, and about whom there are current a number of legends in Nepal, in Tibet and also in India. Their compositions have always been held in honour by the Northern Buddhists : these are even now sung by the Buddhists in Nepal (H. P. Śāstrī, VSPdP., 1329), and they were rendered into Tibetan and are included in the 'Bstan-Hgyur' (Tan-jur).[1]

The date of one of these Siddha composers of the poems, Lui or Lūyī-pāda, seems to be certain : he was an elder contemporary of Dīpaṇkara Śrījñāna, or Atiśa, and they prepared a Buddhist Tāntrika

[1] In the 'Tân-jur,' Cho XLVIII, there are translations of a mass of short poems (a reference to which I obtained from Dr. F. W. Thomas of the India Office Library) in the Prakritic dialects—Old Bengali, perhaps, and Western Apabhraṁśa, attributed to our poets of the Caryās and to other Siddhas who are not represented in the 'Caryācarya-viniścaya.' With the help of Cordier's Catalogue of the 'Tan-jur' ('Catalogue du Fonds tibétain de la Bibliothèque Nationale,' par P. Cordier, Deuxième Partie : Index du Bstan Hgyur, Tibétain 108-179, Paris, 1909), and through the courtesy of M. Jean Przyluski (of the E'cole des Langues Orientales Vivantes of Paris) I had copied out some 40 likely versions of these Indian songs from the volume concerned (Tibétain 157) in the Bibliothèque Nationale. M. Przyluski read these for me, and we compared them with the Caryās, and so far only one Caryā poem agreed with a text from the 'Tan-jur' (Section 2, in Cho XLVIII, Tibétain 157, p. 26 : the lines beginning 'dños po yaṅ ni ma yin z'in, dños med la ni ma skyes pa'i,' agreeing with Caryā 29 in Śāstrī's book, p. 45). This sufficiently demonstrates that the vernacular and Apabhraṁśa literature of the period 800-1200 A.C., or later, was to a large extent translated into Tibetan ; a comparison of the text and the Tibetan translation, wherever this will be possible, is sure to help in the restoration of the former, which is generally in a very mutilated form).

work named 'Abhiṣamaya-vibhaṇga.' Atiśa went to Tibet in 1038 A. C., when he was 58. The literary life of Lui, when he composed these songs, can very well be placed in the second half of the 10th century. (H. P. Śāstrī, English Preface to the 'Bauddha Gān Ō Dōhā,' p. 2.) This period provisionally may be regarded as the upper limit for the Caryās: Lui seems to have been the most venerated in the group—there is a respectful reference to him in the poem by Dārika (No. 34), and in a poem by Kānha (No. 36), and he is worshipped even now in Bengal (cf. Śāstrī's Preface): possibly he was the oldest. As many as 12 poems are by Kāṇha. It is quite possible that there were more Kānhas than one; the 12 poems, in most cases signed 'Kāṇha, Kānhu,' are introduced as being 'Kāṇhu-pādānām, Kṛṣṇâcārya-pādānām, Kṛṣṇa-pādānām, Kṛṣṇā(cārya?)-pādānām, Kṛṣṇa-vajra-pādānām.' In the Tibetan 'Tan-jur,' there are apparently quite a number of Kṛṣṇas who figure as authors of Tāntrika works. The Cambridge University Library has a MS. of a work called 'Hēvajra-pañjikā Yōga-ratna-mālā,' by 'Paṇḍitâcārya Śrī-Kahṇa-(=Kānha)-pāda.' It was written in Magadha during the 39th year of Gōvinda-pāla, the last king of Magadha (=c. 1199 A. C.), and was taken to Nepal, whence it was brought to Cambridge by D. Wright. (R. D. Banerji, 'The Pālas of Bengal,' p. 111.) This 'Kahṇa' must be one of the Kānhas, if there were several. That would place some of the poems in the second half of the 12th century, as the MS. can well be contemporaneous with the author.

The Sahajiyā sect of Bengal had unquestionably some connection with the Śivaitē Nātha or Yōgī sect, which originated in Northern India as an expression of a revived Hinduism, during the beginning of the second millennium A. C. The history of the origin of this sect is shrouded in mystery, and a great deal of the religious, social and literary life of Northern India will have light thrown on it when we come to know the story of the origin of the Nātha-panth, and about the personality of Gōrakṣa-nātha. Gōrakṣa-nātha, or Gōrakh-nāth, was the greatest teacher of this sect, and he seems to have been a man from Northern India (Panjab). There are legends current all over Aryan India about Gōrakh-nāth, and his *guru* Mīna-nātha or Matysêndra-nātha

(Machindar-nāth)—how the latter obtained secret knowledge from Śiva in the form of a fish, how he forgot his wisdom and was ensnared in the love of life and of women, and how his pupil Gōrakh-nāth came to him and brought him back to his life as a Yōgī. Contemporary with Gōrakh-nāth was Jālandhari-pāda, known also as Hāṛī-pā, according to the unanimous agreement of traditions still current among the masses in Northern India and in medieval vernacular literature, from Chittagong and Assam to Mahārāṣṭra, Gujarat and the Panjab. Gōrakh-nāth was the *guru* of a queen Mayanā-vatī of Bengal; and Mayanā-vatī's son was the famous Rājā Gōpī-canda, who, while quite a young man, gave up his kingdom and his wives, and became a Yōgī, and followed Jālandhari-pāda, as his *guru*. Gōpī-canda's renunciation is the theme of a large mass of folk poetry, songs, ballads and romances, in Bengali, Oṛiyā, Bhōjpuriyā, Hindī, Panjābī, Marāṭhī, Gujarātī and other languages, and is the subject even now sung by itinerant Yōgī beggars in Hindustan and in the Deccan. According to some versions, including Tibetan ones, Jālandhari-pāda in common with Mayanā-vatī, was a disciple of Gōrakṣa-nātha. And according to the unanimous agreement of the legends, Jālandhari had a devoted disciple in Kānu-pā or Kāṇha-pāda. Now, one of the Caryās, No. 36, attributed to Kṛṣṇâcārya-pāda, and signed 'Kāṇhilā lāṇgā' *i.e.*, 'Naked Kānhilā= Kānha' (line 4), expressly mentions Jālandhari-pāda in the last verse:

« śākhi kariba Jālandhari-pāē :
pākhi (pāśi) na cāhaï [mōri] paṇḍiācāyē. »[1]
I shall make Jālandhari-pāda (my) witness:
a great scholar (Paṇḍitâcārya) does not look to my side.

The Kṛṣṇa of Caryā 36 is therefore Kāṇha-pāda the disciple of the Nātha Yōgī Jālandhari of the legend. This Kānha is described as 'Kṛṣṇâcārya' in the Caryā commentary. The author of the 'Hēvajra-pañjikā Yōga-ratna-mālā' (the MS. of which dates from 1199 A.C., see p. 120)

[1] The text as printed by H. P. Śāstrī runs thus: শাখি করিব জালন্ধরি পাত্র / পাখি ণ রাহঅ মোরি পাণ্ডিআ চাদে ॥ 'śāthi kariba Jālandhari pātra / pākhi ṇa rāhaa mōri pāṇḍiā cādē.' It has been emended in my quotation, following the reading and interpretation of the commentary.

is described as '*Paṇḍitâcārya* Śrī-Kahṇa-pāda.' The word 'paṇḍiācāyē,' in Caryā 36, as I read it, following the Sanskrit equivalent 'paṇḍitâcārya' given in the commentary, can very well be a reference by Kānha to himself, the last verse usually giving the name or title of the poet : *I shall call to witness my Guru Jālandhari-pāda ; my Paṇḍitâcārya* (*i.e., myself who am a great scholar*) *does not look at me* (*i.e.*, my knowledge I owe to the grace of my *guru*, and not to my studies and my being a Paṇḍitâcārya). If the author of Caryā 36 were also the author of the Tantra work mentioned, as it can be reasonably supposed, then we would get c. 1200 A.C. as the lower limit for one Kānha at least; and consequently for Jālandhari and for Gōrakṣa-nātha, and for the main personages who figure in the Gōpī-canda story, if that story has any basis in fact ; and there is nothing to show that it does not have. This Kānha must have been the Siddha Kānha mentioned in the Tibetan and Indian lists of 84 Siddhas : and all the poems in the Caryās, as well as the Dōhā-kōṣa, may very well be by one and the same individual.

From Marāṭhī sources, we have some indication as to the date of Gōrakṣa-nātha (and consequently of Kānha). Jñāna-dēva in the 'Jñānêśvarī' (c. 1290 A. C.) says that he received initiation from his elder brother Nivṛtti-nātha, who was born 1273 A. C.; and Nivṛtti-nātha's *guru* was Gainī-nātha, or Gōyaṇī-nātha, whose *guru* was Gōrakṣa-nātha, the disciple of Matsyêndra-nātha. (V. L. Bhāvē, 'Mahārāṣṭra-sāraswat,' pp. 39, 40, 42.) It may be that the tradition presented by the 'Jñānêśvarī' is faulty, and as it often happens, omits some intervening names in the 'guru-paramparā' (succession of masters). Assuming that Gainī-nātha was an old, old man when he initiated Nivṛtti-nātha, we can make an adjustment of the chronology from the Marāṭhī source with the dates suggested for Gōrakṣa-nātha and Kānha in the previous paragraph, namely, the end of the 12th century.

The Tibetan legends about the 84 Siddhas, including the poets of the Caryās, profess to give details about the life and history of them, but they are hardly reliable. (These have been translated into German, by A. Grünwedel in the 'Baessler Archiv,' Berlin, Vol. V.) Tārā-nātha,

in his 'History of Buddhism in India,' in Tibetan (German translation by A. Schiefner, Petrograd, 1869) also gives legends about them, but in the matter of chronology, the Tibetan authority is hopelessly confusing. He, however, makes this interesting statement that at the time when the Tājiks and the Turks were ravaging Eastern India, *i.e.*, at the end of the 12th century, the Yōgīs who followed Gōrakṣa-nātha became devotees of Śiva (p. 255, Schiefner). Can this suggest a date for Gōrakṣa-nātha? Tārā-nātha, however, gives elsewhere (p. 174, Schiefner) a date several centuries earlier for Gōrakṣa. Among other interesting things, Tārā-nātha quotes a Bengali word (« Ajischa » in Schiefner, p. 205 = *আয়িশ « *āẏiśa(a) » in Old Bengali, written আইস « āïsâ » *come!* in ordinary Bengali), as being uttered by Virūpa, who is one of the poets of the Caryās.

The other poets, from the style of their composition, from language, and from general spirit, belong to the same age. The period 950-1200 A. C. would thus seem to be a reasonable date to give to these poems; and they are preserved in a post-14th century MS. These poems must have been very popular in Bengal: and we have echoes of lines from them in Middle Bengali literature, beginning from Caṇḍī-dāsa in the 'Śrī-Kṛṣṇa-Kīrttana.' [1]

64. Other remains of Proto- or Old Bengali are possibly in a few poems and couplets in the 'Prākṛta-Paiṅgala.' This work is a treatise on Apabhraṁśa and Early NIA. versification. Various metres are described, and examples are quoted. These examples are from the floating mass of popular poetry and song current among the poets and the people of Northern India during the period 900-1400 A. D. The book in its present form dates from the latter half of the 14th century.

[1] *E.g.*, Cāryā 6, অপণা মাংসেঁ হরিণা বৈরী 'apaṇā māṁsēṁ hariṇā bairī' *the deer is a foe (to all) because of its own flesh*; cf. 'Śrī-Kṛṣṇa-Kīrttana,' p. 78, যেন বনের হরিণী ল নিজ মাঁসে জগতের বৈরী: 'jēna banēra hariṇī la nija māṁsē jagatēra bairī'; p. 88, আপণার মাঁসে হরিণী জগতের বৈরী 'āpaṇāra māṁsē hariṇī jagatēra bairī'; also ŚKK., pp. 358-359: the lines on Sahajiyā Yōga practice are echoes of similar passages in the Caryās; and the same may be said of lines from Middle Bengali works like the 'Gōrakṣa-vijaya.'

Most of the poems are in the artificial, literary Western Apabhraṁśa, or in Western Avahaṭṭha, based on earlier literary Śaurasēnī: two verses are even in regular literary Prakrit of the 2nd MIA. stage, being taken from the Prakrit drama 'Karpūra-mañjarī' of Rāja-śēkhara (c. 900 A. C.). But there are some which belong to a stage which might be called Old Western Hindī: *e.g.*, the poems at pp. 249, 375, 412, 435, 463, 470, 516, 541, among others, in the *Bib. Ind.* edition. B. C. Mazumdar first suggested that a few of the poems in the 'Prākṛta-Paiṅgala' are in Old Bengali; *e.g.*, those at pp. 12, 227, 334, 403, 465, from their general style, their vocabulary in some cases, and specially from their verse cadence (cf. 'History of the Bengali Language,' Calcutta University, 1920, pp. 226 ff.). It is very likely that in their original form these poems were in Old Bengali, or rather, in Proto-Bengali, with MIA. characteristics still present. But as they stand in the 'Prākṛta-Paiṅgala,' there is nothing in their forms to mark them out specially as Bengali: rather, some grammatical forms, like « jāta » *is going* in « cañcala jobbana jāta », and » chaïla », in the poem at p. 227 (cf. Western Hindī « jātu, jāta, jātā », and « chaila »); « natthi » in the poem at p. 465 (cf. Gujarātī « nathī » *is not*); « lijjia », passive participle in « -ijj- » in the same poem; « dijjaï » in the poem at p. 403; « jimi » in the poem at p. 334 (cf. Hindī « jīma, jīwà, jyõ ») ; «jiṇi » for « yēna » in the same poem (the Modern Bengali যিনি « jini » *who*, honorific, did not originate till later, in the late Middle Bengali period, from যেহঁ « jēhã » or যিহঁ « jihã »),—are not Bengali or Old Bengali at all. Then, many of the forms are MIA., without the simplification of double consonants which characterises NIA. in the Midland and in Eastern India. But it is quite possible that these poems were originally Bengali, especially from their verse cadence; and through their passage from Bengal to Western India, their grammar and language has been to a great extent westernised. In their present from, they are at the best useful for comparison with Old Bengali: but, as they stand, they do not have any bearing on the development of Bengali.

Two poems ascribed to Jaya-dēva, the great Bengal poet of the 12th century, may be mentioned here. They are preserved in the Sikh 'Ādi

Granth,'[1] which is a collection, made in the 16th century, of devotional hymns composed by the Sikh *Gurus* and by saints of Northern India. The earliest of these hymns go back to the 12th century, and they embrace works of poets who lived in Aryan India from Bengal to the Panjab and right down to the Marāṭhā country,—poems by Northern India saints like Rāmânanda, and Kabīr, as well as by the Marāṭhī poets like Trilōcana and Nāma-dēva being found in it. Jaya-dēva had become well-known in Northern India as a Vaiṣṇava saint and poet by the 16th century, and the two poems in the 'Granth' ascribed to him may really have been composed by him; but in their present form, they are sadly altered, and no one can recognise Bengali of any period in them. It seems very likely they were originally in the Western Apabhraṅśa as written in Bengal. Western characteristics are noticeable in them: *e.g.*, the «-u» affix for the nominative. There is strong influence of Sanskrit as well. They were later altered and mutilated to their present shape.

65. The 'Gīta-gōvinda' of Jaya-dēva may be noticed in this connection. Jaya-dēva of Kēndu-bilva in Rāḍha (=Kōdūlī in Birbhum District), in the latter part of the 12th century, just before the conquest of West Bengal by the Turks, composed a number of songs (padas) describing the love of Rādhā and Kṛṣṇa. These songs, in the form in which we have them, possess an exquisite verbal melody and a most cloying sensuous charm. Their language is professedly Sanskrit, but in their style and execution, and in their rimed *mātrā-vṛtta* metre, they are more like vernacular than anything else. Scholars suspect (Pischel, 'Grammatik der Prakrit Sprachen,' § 32; B. C. Mazumdar, Introduction to the Bengali Translation of the 'Gīta-gōvinda,' Calcutta) that these songs were originally composed in some Prakritic speech, which in this case would be either Western Apabhraṅśa as written in the East, or Old Bengali, both the alternatives being equally likely; and from their music

[1] One of these occurs under Rāg Gūjarī, as the last poem: this one has been given in the original by Trumpp, in his Translation of the 'Granth'; the other under Rāg Mārū. (I am indebted to my colleague in the University, Mr. Indu-Bhūshaṇ Banerji, for these references.)

and their poetic charm they had an enormous popularity. Avahaṭṭha poems similar in form and spirit to some hymns by Jaya-dēva are found in the 'Prākṛta-Paiṅgala,' *e.g.*, the poems at pp. 334, 570, 576, 581, 586. Jaya-dēva, who was a Vaiṣṇava of the Sahajiyā type, as later legends would seem to testify, might very well have written in the vernacular of the country. However, it seems that even the learned Paṇḍits, who would scorn anything composed in a vulgar tongue, were charmed with these *padas* of Jaya-dēva; and quite early in their history, some worthy scholar, or a group of scholars, it may be contemporaneously with the poet himself, rather than lower themselves by reading or chanting poetry in the vernacular, touched these poems up a bit, and garbed them in the dignity of Sanskrit, of a sort, just as it would not be very difficult to restore into Latin a line of Old Italian. After that some laborious verses in Sanskrit, in the most approved classical style, were composed, and these verses told the story of the love which is the theme of the songs; and thus they were formed into a sort of framework for the songs, the whole being arranged in a connected poem of 12 cantos. This made-up work is one of the most popular books in Sanskrit literature, and, under the name of 'Gīta-gōvinda,' is well-known wherever Sanskrit is studied. Later on, when there was a Vaiṣṇava revival in the 16th century in Bengal and Orissa, it was venerated as a religious work,—it was enjoined to be sung before the image of Jagannātha in the temple at Puri, as we know from an inscription of 1499 A. C. in the temple. The style of the songs had an enormous influence on the Bengali lyric. Jaya-dēva, together with the poets of the Caryās, stands at the head of Vaiṣṇava and other lyric poetry in Bengal: and it would have been a great thing if we had his songs in the language in which he possibly wrote them. But undoubtedly they have been so carefully preserved because they happened to be rendered into Sanskrit: like other popular things in vernacular literature, *e.g.*, the songs of Caṇḍī-dāsa, with the passing of centuries they would have been altered beyond recognition to medieval or present-day Bengali. The languages of the Caryās and of the 'Śrī-Kṛṣṇa-Kīrttana' have been preserved only because they were

fortunately locked up in old MSS., which were not replaced by later copies in which the language would certainly have been altered.

66. The next great landmark in the study of Bengalī, after the Caryās, is the 'Śrī-Kṛṣṇa-Kīrttana' of Caṇḍī-dāsa. This work, from point of view of language, is of unique character in Middle Bengali literature. There is a fairly copious Middle Bengali literature, of which the most important, and by far the earliest extant works are the 'Padas' of Caṇḍī-dāsa, the 'Rāmâyaṇa' of Kṛtti-vāsa, the 'Padmā-purāṇa' of Vijaya-gupta, the 'Śrī-Kṛṣṇa-vijaya' of Mālādhara Vasu, the 'Mahā-bhāratas' of Sañjaya, Kavīndra Paramêśvara, and Śrīkaraṇa Nandī, the 'Dharma-maṇgala' of Māṇika Gāṇgulī, the 'Caṇḍī-kāvya' of Mukunda-rāma Cakravartī, the 'Padmā-purāṇa' of Vaṅśī-dāsa, the 'Manasār Bhāsān' of Kētakā-dāsa Kṣēmânānda; besides, the poems about Gōpī-canda, and other pre-Moslem romance; and Buddhistic treatises on religious ceremonial and ritual, like the 'Śūnya-purāṇa' of Rāmāi Paṇḍita; in addition to numerous fragments from diverse poets. The Middle Bengali period in literature is continued down to 1800, and a mass of songs, proverbs and popular poetry, which have been collected in recent times, also properly belongs to the Middle Bengali period. The help afforded by Middle Bengali literature, which covers a period from the 14th to the 18th century, is not as great as it might be expected, in tracing the history of Bengali. Early works as a rule have not been preserved in their original shapes, almost always in language and frequently in subject matter. The oldest MSS., mainly on paper, and also frequently on palm-leaf, seldom go beyond the middle of the 16th century, and commonly these are of the 17th and 18th centuries; and these give but late recensions of earlier works, in which it is useless to expect anything like a faithful representation of the author's language. By the beginning of the 15th century (but the tendency or movement had started considerably earlier) a standard literary Bengali grew up and rapidly came to be used all over Bengal. This was the more or less conventional language of verse: of prose literature there was little or nothing before 1800; and it is prose which properly represents, under ordinary circumstances, the normal habits of a

language. MSS. do frequently show local forms : but in an ordinary Middle Bengali MS., no matter where it was written, we always find standard literary forms which are even now unknown to the spoken language of the place, side by side with the genuine dialectal ones. The Bengali literary language is a 'high' dialect, which has utilised forms from the various spoken dialects, and these latter are from the beginning independent of literary Bengali. If we could find a MS., say, of Kṛtti-vāsa (15th century), which preserves the language of the poet intact, its importance would be inestimable. But there is no Middle Bengali work dating from before 1500 which is preserved in a contemporary MS. ; except one, and that is the 'Śrī-Kṛṣṇa-Kīrttana.'

The MS., from the style of script it employs, according to expert opinion, belongs to the latter half of the 14th century. It gives us the genuine West Bengali as used in literary composition in the middle of that century. The genuineness of the work is borne out by the remarkably archaic character of the forms, which agree with such widely distant dialects as North Bengali and Assamese ; and some of its expressions are found in Early Oṛiyā. The resemblances with Early Assamese have been put forward as an argument, among others, for the spuriousness of the work,—and even in favour of its having passed through North Bengal, to be edited to its present shape.[1]

The MS. of the 'Śrī-Kṛṣṇa-Kīrttana' has been almost miraculously preserved, to be discovered by Basanta-Rañjan Rāy and edited by him in a style rarely attained in the edition of an old text in India (VSPd., San 1323). The work seems to have been lost sight of from the 17th century, and it is in this way that the language could not be altered, from the original form in which it was composed, to late Middle Bengali, or even

[1] Rai Bahadur Yōgēsh Chandra Vidyānidhi called into question the genuineness of the 'Śrī-Kṛṣṇa-Kīrttana' in a paper to the VSPdP. for San 1326. A study of the language with reference to the development of Bengali will show that this great and versatile scholar of Bengal is off the track here. Satīsh Chandra Rāy and Basanta Kumār Chatterji in the VSPdP. for the same year have contested the issues raised by Y. C. Vidyānidhi in favour of the genuineness of the work

Modern Bengali, in the hands of subsequent copyists. The grammar of the speech of the 'Śrī-Kṛṣṇa-Kīrttana' gives a clue to many of the forms of New Bengali. The speech here is not what may be called Old Bengali, taking *Old, Middle* and *New* in the sense in which they are used with regard to the Germanic and Romanic languages. The Caryās are in Old Bengali, and are comparable to Old English (Anglo-Saxon) remains in the study of English: *Old* in the sense that the speech belongs partly to an ancient stage rapidly passing away. The 'Śrī-Kṛṣṇa-Kīrttana' belongs to what may be called the *Early Middle Bengali* stage: and its importance in the study of Bengali, in the absence of other genuine texts, is as great as that of the works of Layamon, Orm and Chaucer in English.

67. The Bengali language in its history may be conveniently divided into *three* periods.

[1] The Formative or Old Bengali Period: 10th-13th centuries (c. 950-1200 A. C.). This period *may*, in the Proto-Bengali stage, have gone beyond 900 A. C.: in any case, it may be said to have overlapped the late MIA. (Apabhraṁśa) stage. It may be compared to the 'Old' period of the modern Romance and Teutonic languages; only necessarily for the Indian language, as being the last stage of an already decayed order (and herein the Romance speeches can be compared), the inflections in it are few, as compared with the later language with its new post-positional affixes and other devices.

The sound system is practically the same as that of late MIA., only there has been a simplification of double consonants and transformation of a nasal preceding a stop to a mere nasalisation (often expressed in writing by leaving the nasal letter untouched), with compensatory lengthening of the preceding vowel; « ă » probably had not been drawn up to its present open « ŏ » [ɔ] value; final vowels were retained, except where there was simplification of groups like « -iă > -ī »; and there is no indication of « i » or « u » epenthesis. Elision of intervocal labials and gutturals seems to have been in force, as in second MIA; and the occurrence of euphonic « ẏ, ẇ » between vowels. The genitive affix was « ā, āha < -asya », « -ēra, -ara, -ka < kēra, kara, kaa », and, in the plural,

« -ṇa »; instrumental, « ẽ »; dative based on genitive; locative in « -i, -ahĩ, -ahi »; some post-positions; use of the plural forms of the 1st and 2nd personal pronouns for the singular, « amhe, tumhe » for « maĩ, taĩ », is established; and the old « ahakam > hãũ (haũ) » *I* is still present. In the verb, the past base ordinarily has « -ila », but sometimes the « -l- » does not figure; and the construction is passive for the transitive verb, adjectival for the intransitive,—the system of pronominal affixation, rendering the construction active, is as yet unknown. There are traces of the « -h- < -sy- » future; and the « -ia- » passive is a living form, but the analytic « √jā » passive is also used.

The vocabulary is mainly *tadbhava*, but *tatsama* words also figure slightly. Literature is just at its beginning, and in addition to the Caryās which we now possess, it possibly consisted of similar songs on Rādhā and Kṛṣṇa, and of some hymns and ballads, the last being the sources of the later Gōpī-canda, Dharma-maṇgala (Lāu Sēna), Lakhindar and Behulā, Śrīmanta, and Kāla-kētu tales,—but of these no trace belonging to this age remains.

68. [2] Middle Bengali Period: 1200-1800. This is better subdivided into 3 stages:

(a) Transitional Middle Bengali, 1200-1300 A. C.

The language had all its Bengali characteristics fully established during this period, so that from the speech of the Caryās it was transformed into that of the 'Śrī-Kṛṣṇa-Kīrttana.' The post-positions in the declension were fully established; the conjugation became active in the past and future forms of the transitive verb, and the system of pronominal affixation to the past and future bases came in, though it was not fully established till the 15th century and later. The old *mātrā-vṛtta* metre, of 16 or 15 *morœ*, found in the Caryās, became, by an arrangement of *akṣaras*, a syllabic metre of 8+6=14 *akṣaras* or syllables during this period: tendencies towards the development of this special metre of Bengali, the 'Payār' metre, found also in Assamese and Oṛiyā, are noticeable in the Old Bengali period and were possibly present in Common Eastern Magadhan (Apabhraṁśa Māgadhī of the East).

We have no genuine specimens of Bengali which can be relegated to this period. But the national legends of Bengal, the stories of Gōpī-canda, of Behulā and Lakhindar, of Khullanā and Dhana-pati, of Phullarā and Kāla-kētu, and of Lāu-sēna which were treated in great poems in the following centuries, were probably taking shape during this century. But nothing can be asserted about the language and literature of this period, although a little can legitimately be guessed. Politically, it was an age of chaos and destruction, being the first century of the Turkī conquest. But there was some literary activity, and Kāṇā Hari-datta, Mayūra Bhaṭṭa and Māṇika Datta, who are mentioned by later poets as being the first to take up respectively the Behulā legend, the Lāu-sēna romance and the Caṇḍī legends and treat them in long narrative poems to be chanted before a gathering of people at a number of sittings, seem to have flourished before 1300. The fragments that we have from these poets are in ordinary late Middle Bengali MSS.

Rāi Sāhib Dīnesh Chandra Sen (*e.g.*, in the 'Vaṇga Sāhitya Paricaya,' Calcutta University, 1914) refers to the 11th-12th centuries the poems of 'Māṇik-candra Rājār Gān' and 'Mayanāmatīr Gān,' narrating the Gōpī-canda legend (cf. p. 121), which were taken down from the recitation of North Bengal villagers and edited respectively by Grierson in 1878 and by Bishweshwar Bhaṭṭāchārya in 1908; to the 10th-11th centuries he refers the 'Śūnya-puṛāṇa,' the MS. of which, according to its editor, Nagēndra-nāth Vasu, is only 300 years old, and which, as Y. C. Vidyānidhi has shown (VSPdP., 1316, No. 4), must belong to a period subsequent to the 13th century. Certain distichs embodying the proverbial wisdom of the land,—agricultural maxims, and comments on life and on things, which are attributed to 'Ḍāka' and 'Khanā,' two personages (the second a woman) about whom there are numerous legends current in Assam and Bengal and who are connected with Varāha-mihira of Ujjayinī, the famous astronomer of the 5th-6th centuries A. C., Dīnesh C. Sen refers to the 8th-12th centuries: but all these proverbial distichs attributed to Ḍāk and Khanā were collected within recent years. All these above-mentioned works, and some others too, occasionally do represent

archaic or pseudo-archaic forms, it is true: the 'Śūnya-purāṇa' and similar Buddhistic works show a surprisingly large number of old forms for MSS. only 300 years old. But in their grammar, there is nothing archaic, generally: they are good Middle Bengali, although some of the poems, with their loose metre, their antiquated spelling, and their occasional old forms, do present an archaic look at times: but it is impossible, on both philological and literary grounds, to relegate them to any period before 1400: although their lost prototypes, models, or originals might quite reasonably be regarded as having belonged to the 14th, or even the 13th century.

(b) Early Middle Bengali Period: 1300-1500 A.C.

Bengali literature becomes fully established, by the end of tho 15th century, with a number of considerable works, which have become the classics of the language. We see the working of the influence of classical Sanskrit on Bengali from this period: the 'Rāmâyaṇa,' the 'Bhāgavata Purāṇa,' and the 'Mahābhārata' are adapted into the language: the language changes its spirit under the umbrage of Sanskrit: there is a great access of *tatsamas*, making many old *tadbhavas* obsolete or restricted in use. The literary language, based on West Bengali, is perfected, and is employed in all parts of Bengal, slightly modified by local dialects, no doubt. The 'Śrī-Kṛṣṇa-Kīrttana' is the most important work, philologically (before 1400); Caṇḍī-dāsa composed his songs; Kṛtti-vāsa rendered the 'Rāmâyaṇa' into Bengali in the middle of the 15th century; and Vijaya Gupta and Mālādhara Vasu flourished, as well as Śrīkaraṇa Nandī.

In phonetics, the most noticeable thing, found in the ŚKK., is the weakening of independent « i (u) » after « å, ā », resulting in new diphthongs « åi, āi, åu, āu », which were regarded as one *akṣara* in which the second element was pronounced very short, and the first element tended to be modified; this was followed by epenthesis of « -i, -u »; « -enta < -anta » of the present participle is found as « -itå », the change of « -ent- > -ēt- > -īt- > -it- » having been carried out during the preceding period. The aspiration of the nasal in the groups ঋ=ম্হ « -mh- », হ্ন=ন্হ « -nh- » is lost by the middle of the 15th century. Final « -å » seems

to have become quiescent, « -অ », by the middle of the 15th century. The conjugation of the verb is purely active in the past tense. There are still a few traces of the old inflected passive. Compound tenses come into being. The use of a strong form of the genitive, « -rā », for the plural, noticed in its incipient stage in the ŚKK. (where it is found with the personal pronouns only) becomes established by 1500. The plural affix for the verb, « -anti », is found as « -anta, -enta » in the 15th century, and finally, by the 17th, it yields to the form « -enঅ », which is influenced by the old plural affix for the noun oblique (see under *Morphology*: Declension).

(c) Late Middle Bengali: 1500-1800.

The earlier part of this period, during the 16th century, witnessed the development of Vaiṣṇava literature through the influence of Caitanya (1485-1533) and his disciples. Biography as a *genre* was added to Bengali literature. There was a very great influence of Sanskrit, and of Maithilī, and a restricted one of Western Hindī (Braj-bhākhā) on both language and literature. The artificial literary dialect 'Braja-bulī' grows up (see p. 103).

Epenthetic « u » became « i » during the earlier part of this period, and came to modify the preceding and following « å » and « ā » sounds, and ultimately were dropped entirely in West Bengali dialects by the close of the 18th century. Affixes like ইয়া « -iā », verbal or nominal, were contracted, and were gradually turned to the monophthong [ɛ, e], written -য়্যা, -এ, in many dialects: রাখিয়া, রাইখ্যা, রাখ্যা, রেখ্যা, রেখ্যে, রেখে *having kept* [iɑ>ĭa>ea>ɛa>ɛ>e: rakhiɑ > raikhĭa > raĭkhea > rɛĭkhɛa > rɛ(ĭ)khɛ > rekhe]. In West Central Bengal, along the Hugli River, the habit of vowel-mutation and general contraction of syllables begins, and this invades the other dialects as well. The aspiration of ঢ় « -ṛh- » is continued till the beginning of the 17th century and then is gradually lost, Middle Bengali words like পঢ়ে « paṛhē < paṭhati » *reads* and পড়ে « paṛe < patati » *falls* becoming identical (পড়ে) in Modern Bengali.

There is a great influence of Persian on the vocabulary, especially in the 18th century; and to a slight extent, of Portuguese. The loss of the final « -a » gives an impetus to a system of metre based on stress,—

tendencies towards which are not absent in the 14th century; but the syllabic metre is perfected and holds the field in all formal poetry, the stressed metre being confined to popular poetry, songs, lullabys, charms, etc., and its presence and importance are recognised by learned people only by the end of the 19th century.

All these ushered in, by the end of the 18th century, the Modern stage of the language; and the medieval spirit in Bengali literature was entirely done away with by the middle of the next century.

69. [3] Modern or New Bengali: from 1800.

Prose is written for the first time seriously, but for fifty years the literary language is under the tyranny of Sanskrit. Out of the large number of forms, dialectal, and archaic, which prevailed in Middle Bengali, specially in the verb, documentary and epistolary Bengali of the three centuries 1500-1800 was evolving a standard language for prose, in which only a few recognised forms were used; and this documentary and epistolary Bengali, based as it was on the speech of the 15th century, or it may be, of the 14th, was adopted as the language of ordinary prose composition, when the advent of Western learning brought in a sudden demand for a prose style. Literary Bengali of prose, during the greater part of the 19th century, was thus a doubly artificial language; and, with its forms belonging to Middle Bengali, and its vocabulary highly Sanskritised, it could only be compared to a 'Modern English' with a Chaucerian grammar and a super-Johnsonian vocabulary, if such a thing could be conceived. This literary form for prose became the standard, and growth of the printing press established the grammar and the orthography: the latter, the work of Sanskritists ignorant of the history and phonetic tendencies of the language, threw overboard the meagre traditions of spelling for the *tadbhava* words that obtained in Middle Bengali. Good, simple prose which had a relation to everyday life was occasionally written, but the forms of the verb remained archaic. The colloquial, occasionally attempted to be represented in a work like Carey's 'Dialogues' (1816), went along its own line, and the stilted Sanskritic 'sādhu-bhāṣā'

carefully avoided its contamination. In the meanwhile, Calcutta became the intellectual centre of the Bengali people, and through literature and actual contact in life, the Calcutta form of Bengali spread and infected the dialects. The colloquial of Calcutta made its first éclatant advent in the 'Hutōm Pẽcār Naksā' (1862) *Sketches of the Hooting Owl* of Kālī-Prasanna Siṅha, which is one of the raciest books in Bengali, a work which is full of life, being sketches of social life in Calcutta in the middle of the 19th century, written in the choicest colloquial spiced with slang terms and unconventional expressions such as a man about the town would use. The actual spoken language gradually came to its own in a mass of unconventional literature, and in ephemeral poetry: and it attained to dignity in the early writings of Rabīndra-nāth Tagore. It now reigns supreme in the drama (in the fifties and sixties of the last century, and later, characters in a play speak the 'sādhu-bhāṣā' which no Bengali would dream of using in actual life), and to a great extent in the conversational passages in novels. In poetry, the colloquial shares honours with the literary, both forms being used in the same poem, nay, in the same line, side by side; it has become a serious rival of the 'high' language of prose as well; and, observing the fact that the colloquial of Calcutta has become the speech of educated classes everywhere in Bengal, it may be predicted that in about another half a century the disuse to the largest scale imaginable, if not the entire suppression, of the literary language will be in the course of things.

The phonetic changes, ushering in the Calcutta colloquial as the most advanced or progressive Bengali dialect (the other dialects remaining true to the Middle Bengali), were mostly evident by the second half of the 18th century: only, the close « e », as derived from an earlier « ā » through the influence of « i », seems to have been more open in the 18th century than in the early 19th. There has been some influence of the literary speech in modifying the normal growth of the dialects, including even that of Calcutta. ফ ভ « ph, bh » developed their spirant values [ɸ, f; ʋ, v] in the standard colloquial during the beginning of the 19th century.

The enormous and evergrowing influence of English on Bengali, in vocabulary, and in some cases in idiom and in expressions, is the most noteworthy thing in New Bengali: and the influence of Sanskrit has been placed on a different footing, at least in the best writers, restricting it to borrowing of words pertaining to higher culture only, and often to coining of new words with the help of Sanskrit vocables, to meet the necessity of having synonyms for terms of Western life, institutions and science.

70. A classification of the Bengali dialects is to be, in the first instance, from the stand-point of Modern Bengali. The composite nature of the literary speech does not make the early literature which is written in it very helpful in this matter. Special peculiarities are occasionally found: *e.g.*, East Bengal MSS. represent in many ways the pronunciation of the epenthetic «-i-», in spellings like লৈক্ষ সৈত্য তৈতিক্ষণ « laikkhyâ = lakṣa, sâityâ = satya, tâtâikkhyâṇa = tâtâ-kṣâṇa », or they show a 1st person future form in -ইবাম « -ibām » side by side with -ইবোঁ, ইমু « -ibõ, -imu » from other dialects. In reconstructing the history of the dialects, what help can be obtained from the forms in Middle Bengali literature is to be taken, but the basis of dialectal division must be the living dialects themselves. One work, however, although it is less than 200 years old, has an exceptional value in the study of dialectal Bengali, as well as of Bengali phonology: and its value is due primarily to the script in which it is written. This is the 'Crepar Xaxtrer Orth-bhed' (= কৃপার শাস্ত্রের অর্থভেদ 'Kṛpār Śāstrēr Artha-Bhēd' *An Explanation of the Scripture of Mercy*), a catechism of the Roman Catholic religion, written in 1734 in the dialect of Dacca by a Portuguese missionary, and printed, in the roman character according to the Portuguese system of orthography, at Lisbon in 1743. (S. K. Dē, 'Iurōpīya-likhita Prācīna-tama Mudrita Bāṇgālā Pustak,' and S. K. Chatterji, 'Kṛpār Śāstrēr Artha-bhēd Ō Bāṇgālā Uccāraṇa-tattva,' in the VSPdP., San 1323, No. 3.)

The dialects of Bengali have some important points of agreement with Maithilī, the most noteworthy being the presence of the root « ach » *to be*; the speech of Aṇga (Bhāgalpur District south of the

Ganges, and Santal Parganas—the 'Chikā-chikī' area of Maithilī) and of Mithilā, tracts adjoint to Bengal proper, forming probably the basis on which the dialects of Bengali grew up in Bengal. From Aŋga, the Aryan speech (Māgadhī, Prakrit and Apabhraṅśa) seems to have passed down to Rāḍha, and crossed over the Ganges to Puṇḍra-vardhana or Varêndra, where the Aryan language might also have come overland from Mithilā. Along the Ganges, it spread from Aŋga, Puṇḍra and Rāḍha to Vaŋga. A wave of emigration and cultural influence from Mithilā joined forces with Varêndra, and later, perhaps, from Vaŋga, and the Māgadhī Apabhraṅśa was carried to North Bengal and Kāma-rūpa, and thence further east into the Assam Valley. From Rāḍha, the language spread among the Ōḍra tribes of South-west Bengal, and from thence it was taken to what is now Orissa. From South-west Bengal, the Ōḍra from of Māgadhī advanced westwards, in to Jhāḍa-khaṇḍa (Chota Nagpur) and South Kōsala (East Central Provinces), where it came in touch with the speech of South Bihar (Magahī) and with West Magadhan (Bhōjpuriyā), as well as with the Chattis-garhī form of Eastern Hindī. With the last two, the Oṛiyā speech shows some points of agreement : *e.g.*, the retention of singular and plural distinction in the verb forms obtains in Chattis-garhī, Bhōjpuriyā and Oṛiyā, and the affix « -man » for the plural of nouns and pronouns of Chattis-garhī is also found in Oṛiyā, as « -mānå » . The Aryan speech seems to have been in two forms in Rāḍha, one of which used as a substantive auxiliary the root « thā » along with the root « ach » , and employed the word « māṇå-, mānå- < mānava » for indicating the plural of names of sentient beings, and also retained the affix « -n » < « -ānām » (the OIA. genitive plural affix) in the oblique plural (*e.g.*, « kåru-åchåï » *is doing*, but « kåru-thilā » *was doing*: cf. Bengali করিতেছিল « kåritē-chilå » ; « lōkå-mānē » *men*, « lōkåŋ-kå = lōkå-n-kå, lōkå-mānå-ŋ-kå » *of men*) ; and the other form of Rāḍha speech did not have these characteristics. From the former originated Oṛiyā, and the so-called Bengali dialect of South-west Midnapur. The other is the source of ordinary West Bengali, which, again, falls into two groups, one of the West, and the other of the East on the two sides of the Bhāgīrathī.

71. The dialects of Bengali fall into four main classes, agreeing with the four ancient divisions of the country: Rāḍha; Puṇḍra or Varêndra; Vaṇga; and Kāma-rūpa. Rāḍha and Varêndra, and to some extent Kāma-rūpa, have points of similarity which are absent in Vaṇga; and the extreme Eastern forms of the Vaṇga speech, in Sylhet, Kachar, Tippera, Noakhali and Chittagong, have developed some phonetic and morphological characteristics which are foreign to the other groups. A great deal of these have unquestionably an ethnic basis. The differences in pronunciation and stress, as well as in general enunciation and grammar, which are observable in the Bengali of a Manbhum peasant, and in that of one from Maimansing, are certainly connected with the fact that one is mainly Kōl (or mixed Kōl and Dravidian), and the other modified Boḍo (Tibeto-Burman), by origin.

An intermingling of dialects, in addition to the dominant influence of the literary language, has made the question complicated. There were also class dialects, spoken by members of the same class or caste scattered over a large area. Ever since the beginning of her history, Bengal has been receiving settlements of people from the West, from Bihar, from the Benares and Gorakhpur side, from Oudh, from the Panjab, from Gujarat, and from the South—from Orissa, and even from the Dravidian lands. Sometimes these peoples were numerous enough to form self-contained communities, which stereotyped themselves into castes, thanks to the exclusiveness of medieval Hindu society; and when they became Bengali speakers, their speeches often came to retain certain peculiarities, and merited the name of 'class dialects.' The speech of respectable Brahmans and others scattered all over the country would thus retain some class features, mainly in vocabulary and idiom, occasionally in phonetics and morphology, despite the approximation to local dialects. A respectable non-Brahman caste of West Bengal, for example, has some peculiarities of speech, one of which, the confusion between ড় «ṛ» and র «r», is noticed in and about Calcutta even now, although education is fast driving it out; and the Kaivarttas or Bāurīs, Bhūiñ-mālīs or Rājbaṅśīs, have their communal peculiarities in speech.

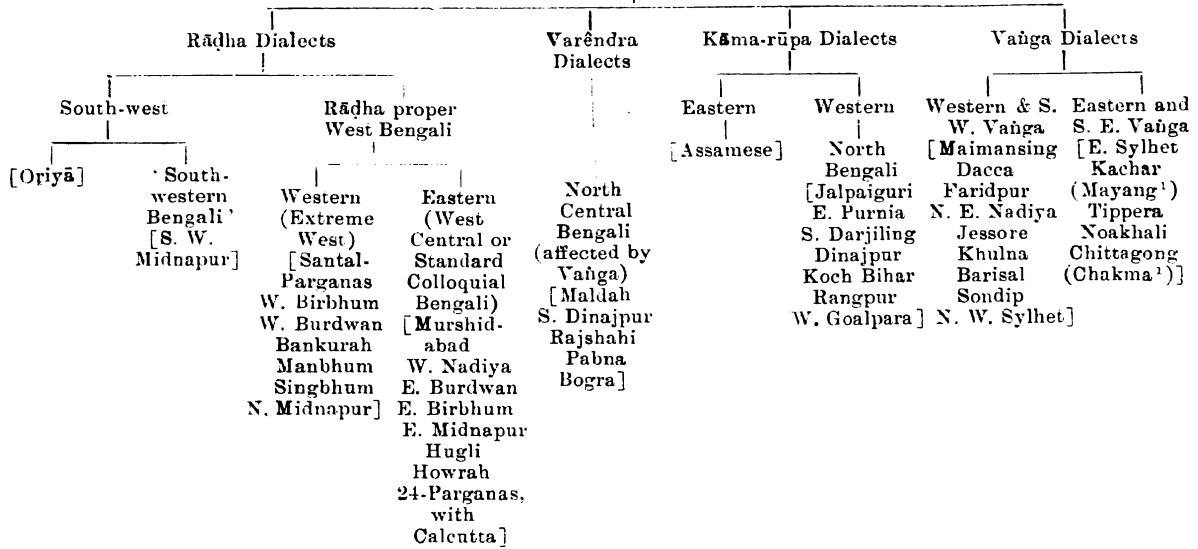
Communities which have exerted a dominant cultural influence, like the Brahmans, have imposed their stamp on the speech as a whole. But as this sort of communal inter-dialectal influencing has been going on for centuries, guided in some cases by notions and theories of grammar and good usage, nothing very much definite can be insisted upon it.

But there has been a certain amount of internal movement of population within the country, from West to East Bengal, and back again, from East Bengal to North Central Bengal, and from both these tracts to North Bengal. Brahmans have shared in this movement more than other communities, perhaps. There has been also mutual influence in the case of dialects which are contiguous. The delta tract cannot be said to have any special dialect of its own, unlike the other parts of Bengal. It is attached in the west to West Bengali (Rāḍha), and in the east to East Bengali (Vaṇga), with perhaps the influence of Varêndra in the north. In the border districts of the delta, namely, South Faridpur, East Nadiya, West Jessore, West Khulna, the Rāḍha and Vaṇga forms intermingle, where Rāḍha influences Vaṇga. The speech of the upper classes in the western part of the Delta and in Eastern Rāḍha gave the literary language to Bengal, and now the educated colloquial of this tract, especially of the cities of Nadiya and Calcutta, has become the standard one for Bengali, having come to the position which educated Southern English now occupies in Great Britain and Ireland.

72. The dialects can be tabulated as in the next page, with the Districts where they are spoken mentioned under them.

The Bengali dialects cannot be referred to a single Primitive Bengali Speech, but they are derived from various local forms of late Māgadhī Apabhraṅśa, which developed some common characteristics that may be called pan-Bengali: *e.g.*, « -ila, -iba » for the past and future base, rather than « -ala, -aba »: « -iā » rather than simple « -i » for the conjunctive; « -ēra <-kēra » besides « -ara<-kara » for the genitive; « -kē, -rē » for the dative, rather than « -ku » as in Oṛiyā: etc. These pan-Bengali features link the dialects together as members of a single group, and enabled them to be attached to a composite literary language as a matter of course. Taking

Forms of Māgadhī Prakrit and Apabhraṅśa as brought to Bengal, Assam and Orissa



The materials accumulated in the LSI., Vol. V, Part 1, and the monographs on Bengali dialects and dialectal vocabularies in the VSPdP. have been made the basis of the above tabulation.

[1] Chakma in the dialect of the hill people of Chittagong. Mayang or Bishnupuriyā is spoken by a few people in Manipur: it is much mixed up with Tibeto-Burman, and in the LSI., it is regarded as a dialect of Assamese, but its forms show unquestionably a greater affinity with Eastern Vaṅga.

this pan-Bengali basis, a Proto-Bengali or Old Bengali Stage can for practical purposes be postulated in the history of the dialects, or, in mass, in the history of the Bengali language. Dialectal peculiarities, as much as common characteristics, were developed independently in the various dialects, apart from those cases where mutual influence is plainly visible. Thus, East Bengali ইলাম « -ilām » (1st person past) and ইবাম « -ibām » (1st person future) are independent formations in the dialect of Vaṅga, just as West Bengali forms ইলুম, ইলুঁ, ইলোঁ « -ilum, -ilũ, -ilõ » and ইব, ইবো, ইবোঁ « -ibâ, -ibō, -ibõ » are derived from similar independent formations in the Rāḍha dialect ; and neither group can be referred to the other, or to a Common Old Bengali : although we have to speak of the source forms of all these —« -ilām, -ibām » and « -(i)lum, -(i)bō » , which are found in the Modern dialects, as equally Old Bengali or Early Bengali forms.

The literary language has all the pan-Bengali characteristics, but sometimes it leans to one dialect and sometimes to another, although its basis is 'Gauḍīya' or Typical West Central Bengali. It is eminently representative. In the study of Bengali *Phonology* and *Morphology* in the following pages, the forms of this full and rather archaic literary Bengali are considered, as well as those of the Standard Colloquial which is most intimately connected with it : and dialectal peculiarities, wherever they are important and interesting, have been noticed.

73. The more important points of divergence among the various dialect groups of Bengali are noted here.

Phonetic.

The vowel system, in general, is more conservative in Vaṅga and North Bengal than in Rāḍha and other parts : Middle Bengali conditions, with epenthetic « -i- », are better preserved in the former than in the rest. East Rāḍha, the Standard Colloquial, has advanced more than any other dialect in effecting a total change from the Common Bengali type by introducing largely the habits of mutation, vowel harmony etc. *e.g.* : East Rāḍha ক'রে, কোরে [kore], রেখে [rekhe], দিশি [diśi], বিলিতি [biliti] = Typical East Bengali [kòira, raikha, deśi, bilati], respectively *having done*

having kept, native, European. The open এ « è » figures as 'অ্যা' [æ] in Rāḍha, but in Varêndra, North Bengal and Vaṇga it is found as a slightly higher sound, [ɛ] ; and the close « ē » of West Bengali frequently becomes open [ɛ] in Vaṇga : *e.g.*, Bengali তেল *oil*, এক *one*, দেশ *country*, কেন *why* are found as [te:l, æ:k, de:ʃ, kæno] in West Bengali, but as [tɛ:l, ɛ:k, dɛ:ʃ, kɛ:n] in Typical East Bengali. [ɛ] is occasionally present in West Bengali as a final sound, but it is not a characteristic sound of the Standard Colloquial. The tendency in West Bengali is to turn the অ « å » [ɔ] sound, as in English *dot*, to a close ও « o » as much as possible : this tendency is invading other dialects, but it was foreign to these. « ō » and « ē », derived and original, are by for the most common vowel sounds of West Bengali ; and « u, i » are laxly pronounced in West Central Bengali, and tend to become « o, e » . Late Middle Bengali front [a] has merged into the central or back [ɑ] in the Calcutta colloquial. West Bengali « o », original or derived, often becomes « u » in Vaṇga: this trait is met with in the extreme West Bengali area too. West Bengali and North Central Bengali have kept intact the original nasalised vowels; these seem to have also been maintained in North Bengali, but in the Vaṇga dialects nasalisation is entirely dropped : only in certain Eastern Vaṇga dialects, *e.g.*, Chittagongese, nasalisation has recently developed from a Bengali intervocal « -m- » (*e.g.*, আমার « āmāṛ̊ » *my* > আঁর « ãr »). The West Rāḍha dialect in characterised by a fondness for nasalisation, especially in the verbal indeclinable in « iā » ; in literary Middle Bengali, this West Rāḍha feature is prominent in some authors : *e.g.*, রাখিয়া « rākhiyā » West Rāḍha রাখ্যাঁ রাখেঁ [rakhẽ], in Middle Bengali written রাখিঞা « rākhiñā » .

The stress system in West Central Bengali is predominantly initial, both in words and phrases. This results in the dropping of vowels in unstressed medial syllables, and thus in shortening of the forms of words (*e.g.*, West Bengali কষ্টী পাথর [koʃṭi pathor] *touch stone* = North and North Central Bengali কষটী [koʃ̣ṭi], from Old Bengali [koʃ̣o:ṭi] = MIA. « *kaśśa-vaṭṭia » = Skt. « karṣa-paṭṭikā »), and in polysynthetic expressions. (See later, under Stress System in *Morphology*.) The stress system in other dialects has not been properly studied ; the general tendency now seems

to be to bring it to the head of the word, but non-initial stress is still present in many forms of folk-Bengali.

As regards consonants, Vaṇga is easily distinguished by some special features, *e.g.*, the disaspiration of the medial aspirates in all cases: « gh, dh, bh » being pronounced in all cases as « g, d, b, », and « jh » as « z »; and « ḍh-, -ḍh- > -ṛh- » as « ḍ-, -r- ». In other dialects, it may be said that the old values are preserved *initially*: only « bh » tends become a bilabial or denti-labial spirant, [ʋ] or [v]: and *medially*, there is a tendency to lose aspiration of all sorts, of the tenues as well. The palatals « c ch, j jh ɟ » are pronounced as dental affricates « ts s, dz z » in Vaṇga and in North Bengal; in Rāḍha and Varêndra, the old values of palatal affricates, made with the front of the tongue flattened out and pressed on the supra-alveolar region, still obtain, but Varêndra has been much under the influence of Vaṇga in this respect, and the tongue-tip-alveolar affricates are also heard there. The latter sound occasionally is found in Rāḍha also. « -ḍ- -ḍh- > -ṛ-, -ṛh- » are pronounced as « r, rh » in Vaṇga and North Bengal; and although rarely in some of the Vaṇga tracts « ṛ » does occur, the absence of it can be said to characterise the eastern dialects. « n- » and « l- » are interchangeable in Rāḍha; and a North Bengali characteristic is the omission of initial « r- », or the intrusion of it in a word beginning with a vowel (*e.g.*, « rām » for « āmɬ » *mango*, and « ām » for « Rāmɬ »: like the Londoner's *h*-). Intervocal « -h- » is weak in all dialects, except in West Rāḍha, where « -h- » is often brought in to give force to a stressed, emphatic syllable. Initial « h- » is preserved in West Central and in North Central Bengali; but it is very weak in Vaṇga and in North Bengali. In Vaṇga it is generally dropped; and in many parts of Vaṇga, a glottal stop is substituted for it: *e.g.*, Standard Literary Bengali হইবে « hàibē » *will be* (3rd person)=West Rāḍha [ɦɔb'bɛk, ɦɔb'ɦɛk], West Central [ɦɔbe], Typical East Bengli [oibɔ, ʾoibɔ]. This dropping of « h » is another peculiarity of most of the Vaṇga dialects. The single « ś » of Common Bengali, derived from « ś, ṣ, s » of OIA., tends to become « h » in initial positions (and in rare cases medially) in Vaṇga, and in initial and other positions in North Bengali. It is a regular characteristic of Assamese, where

the sibilant became an « h » (*e.g.*, Assamese « mānuhʼ < mānuṣa, bāhi < bāśi » etc.) : in Assamese now it is the unvoiced guttural spirant [x] : but in Vaṇga this tendency was checked, and was not allowed to have full play, probably through resistance of communities speaking West Bengali dialects. « -y- » in a consonant nexus brings about epenthesis in Vaṇga and North Bengali, and to some extent in Varêndra; and the groups ক্ষ জ্ঞ হ্ম « kṣ, jñ, hm » , pronounced like « kkhy, ggy̆, my », behave in the same way ; Rāḍha is free now from this « -y- > -i- » epenthesis.

Eastern, especially South-eastern Vaṇga, is remarkable for further changes in phonetics. « k , p » initial or intervocal, tend generally to be spirantised to [x, ɸ], and [ɸ] frequently is reduced to [h] in Chittagongese. There is elision of single intervocal stops and aspirates on a large scale in South-eastern Vaṇga (Chittagong) ; where also the groups « -l-s- > -l-z-, -r-s- > -r-z- » , (where the « -s- » is the verb root « āch, ch »), develop into « -lg(y)-, -rg(y)- » : *e.g.*, Standard Bengali চলিয়াছি করিয়াছি « calîyāchi, kariyāchi » *I have walked, I have done* = Chittagongese « tsâil-si, kâir-si > tsoilzi, koirzi > *tsoilyi, *koiryi > tsoilgyi, koirgyi, tsoilgi, koirgi » ; Standard Bengali কুড়িয়া « kuṛiyā » *lazy* = Chittagongese « kuryā > kurgyā » , etc.

Morphological.

In the declension of the noun, ' South-west Bengali ' shows its affinity to Oṛiyā by possessing the affix « -mânʼ, -mēnʼ » for the plural, and the ablative affix « -u » : cf. Oriyā « -māna ; -u ». Rāḍha proper hast he affix « -ādi-ēra < -dērʼ » for the genitive plural and oblique plural ; and « -dērʼ » is found in Varêndra also, but seems to be absent in North Bengali, and not to be popular with the Vaṇga dialects. The literary dialect prefers « ādika + -era > * ādi-kēra > -digērʼ ». West Raḍha has the Common Bengali plural affix গুল « gulâ < kula » in the form of « gul-ā-k », East Rāḍha as « guno », Varêndra as « gulā », North Bengali as « gulā, gilā, glā, lā » , and Vaṇga as « gulāin, gun » ; and East Vaṇga « -āin < -āni » is an old affix which is based on the genitive plural affix « -ānām » of OIA. Rāḍha (' South-West Bengali,' West Rāḍha, West Central Bengali), Varêndra and Kāma-rūpa agree in having « -kē,-kʼ » as the proper affix

for the dative, whereas the Vaṇga dialects prefer « -rē » (except Chakma). The locative affix is « -t-ē » in Rāḍha, « -t-ē, -t » in Varêndra, and « -t » in Kāma-rūpa and Vaṇga. The post-positions are numerous, and each group shows its special predilections: *e.g.*, Rāḍha would prefer সঙ্গে « sâṇgē » *with*, but Vaṇga সাথে « sāthē », and in some parts লগে « lâgē ».

As regards pronouns, West Rāḍha has strong forms like « mōhâṛ / måhâṛ » *my* = Standard Bengali মোর « mōṛ », and North Varêndra and North Bengali show, apparently as a result of Maithilī influence, forms with « h- » like « ham- » for আমি « āmi- » *I* etc. The Vaṇga dialects have the affix « -gō » which is added to the singular genitive to form the genitive plural: *e.g.*, « mōr-gō, tōr-gō, tā-gō » *our, your, their.* This « -gō » affix is found in Rāḍha as well, but employed differently: « āmā-gō, tōmā-gō » *our, your.* In Varêndra and North Bengal, this « -gō » is apparently extended to « gō-r, ghō-r, ghâr » . South-east Vaṇga has developed a double form for the 3rd personal pronoun: « hi-tē » for সে « sē » *he, she.*

In conjugation, there are some noteworthy points of divergence, specially between Western Bengali and Eastern Bengali. 'South-west Bengali' has the affix « -u » for the second person: « tui câlu, câl-l-u (câl-n-u, cân-n-u), câl-b-u » *thou walkest, thou didst walk, thou shalt walk* : this « -u » is found in Varêndra and in North Bengal. The affix « -i » for the first person, past tense, is found in 'South-west Bengali' (as in Oṛiyā) and in Western Rāḍha: « mui di-l-i » *I gave*; but it is absent in the other dialects. The past first person affix « -(i)lum, -lũ, -ilõ » is found in Rāḍha and in Kāmarūpa, and obviously it existed in Varêndra as well: the Vaṇga form « -ilām » has been adopted in the 'sādhu-bhāṣā,' and « -ilām > -ilēm » has been super-imposed on most dialects, including even the West Central (*i.e.*, Standard Colloquial) Dialect. In the formation of the compound tenses, the progressive tenses show a difference in Rāḍha and Varêndra on the one hand, and in Vaṇga on the other: the latter formed it with the present participle in « -itē » + the verb substantive, whereas in the former, it seems to be made, not with the « -ite » participle, but with

a different verbal form + the verb substantive: *e.g.*, literary Bengali চলিতেছে (in prose) « cālitē-chē » , চলিছে (in poetry only) « cāli-chē » , both meaning *is walking*, = Rāḍha dialects, 'South-west Bengali,' West Rāḍha, and East Rāḍha, respectively [c͡ʃol-ṭhe, c͡ʃol-c͡ʃhe, c͡ʃol-c͡ʃe], Varêndra [c͡ʃol-se], which are forms without « -itē » ; but in West and South Vaŋga [tsoilte-se]. West Rāḍha occasionally has a past perfect with the adjective in « -l- » : *e.g.*, গেল্‌ছিল « gēl̤-chilā, » for Common Bengali গিয়াছিল « giyā-chilā » *had gone*. Eastern and South-eastern Vaŋga dialects are characterised by the « -r- » forms for the progressive tense: which are discussed at their proper place in *Morphology*.

74. Political and social reasons have brought about the present unity of speech in Bengal, despite the fact of dialects. From the time of the Pālas, the greater part of Bengal formed portions of one empire. Gauḍa and Vaŋga are frequently spoken of together, Gauḍa meaning North Central Bengal, West Bengal, and the Western part of the Delta, and Vaŋga including not only Bengal beyond the Brahmaputra, but also a considerable part of the Delta. Brahmans were settled in the country from very early times in the history of Aryan Bengal. They first established themselves in the Aryanised parts, Varêndra and Rāḍha, and thence spread to Vaŋga and elsewhere; and they formed a common intellectual aristocracy for Bengal, bound together by the closest ties of social unity. The Brahmans, both of Varêndra and Rāḍha, who trace their descent from a common ancestry, rendered, together with the Kāyasthas, who were partly the landed aristocracy of Bengal, perhaps the greatest service in uniting the four Bengals, the masses of which could not have any notions of kinship and union. Rāḍha and Varêndra Brahmans formed settlements in Vaŋga, and those who were settled in Vaŋga kept up their marital and social relations with their kinsmen in the West, even when separated by hundreds of miles, throughout the medieval (Moslem) times down to the present day. It was an object lesson in social and communal unity for the other sections of the people. If it had not been brought about by some sort of political union under the Pālas just when the foundations of the Bengali language were laid, and

by the dispersion of a well-organised Brahman community all over Bengal, and Kāyastha participation in their efforts, the evolution of a common nationality and of one type of culture and literature among the people of heterogeneous origin in West Bengal, in East Bengal, in North Bengal, would have been extremely problematic. There would have grown up, linguistically and culturally, three Bengals—Rāḍha, Varêndra and Vaṇga,—North Bengal going to Kāma-rūpa (Assam), and the Delta being divided up between Rāḍha and Vaṇga: and each of these Bengals almost as self-contained as Orissa or Assam. In this way, Bihar has been split up into two tracts: the Ganges has its share in this division, no doubt, but the absence of political union and of a common intellectual aristocracy are among the reasons that the very slight dialectal differences between Maithilī and Magahī have not been bridged over by a common literary language, and the two peoples speaking these dialects united into one.

Of all the extra-Bengali dialects contiguous to Bengali, namely, Maithilī, Magahī, Assamese and Oṛiyā, it is the last which has the greatest sense of closeness with Bengali. Magadha lost all her ancient culture and her glory, and she gradually became a part of Hindostan. Maithilī and Bengali scholars kept up an intimate intellectual communion for some centuries, but socially Mithilā Brahmans and Bengal Brahmans formed distinct communities, and when from the end of the 16th century the University of Nadiyā took up the study of Nyāya seriously, Bengal students ceased to go to Mithilā, and all *entente* with the 'Tirahuṭa' or Maithila Paṇḍits ceased. Orissa, with her independence, and her high culture, her contiguity to a great Dravidian people, the Telugus, and her openness to be influenced culturally by the Dravidian South, as well as with her developing her peculiar alphabet from that current in Bengal and all Eastern India, would have drifted away from Bengal as much as Mithilā and Assam. But the shrine of Jagannātha at Puri has always attracted Bengali pilgrims, and in this way some sort of connection with the heart of Orissa was kept up by the Bengali people; and the personality of Caitanya, who was received with as much enthusiasm in Orissa as in Bengal, served as a strong link in binding the two peoples. The Vaiṣṇava

revival under Caitanya gave an additional impetus towards effecting the solidarity of Bengal. It gave an exalted expression to religious impulses and emotions which are peculiarly Bengali ; and it considerably increased the stock of national literature. The Vaiṣṇavism of Caitanya spread into Orissa, where it was whole-heartedly received ; and there it did not weaken Oṛiyā culture, but on the other hand gave a distinct impetus to Oṛiyā literature, which became as firmly established as that of Bengal. Through the Vaiṣṇavism of Caitanya and his personality, a communion of spirit between the Oṛiyā and Bengali peoples has been established, in which the speakers of the other Magadhan speeches have no part.

Assamese under her independent kings, and her social life entirely self-contained, became an independent speech, although her sister dialect, North Bengali, accepted the vassalage of the literary speech of Bengal. In the Mahāpuruṣiyā movement of Śaṇkara-dēva, who was an elder contemporary of Caitanya, the Assamese language and literature came to their own, and union between a self-conscious Assamese people with that of Bengal in matters linguistic and literary is unlikely, when such a union would mean the merging of Assamese into Bengali.

75. With the Moslem conquest, the united tracts of Rāḍha, Varêndra, Bāgaṛī (the Delta), Vaṇga with Śrīhaṭṭa (Sylhet) and Caṭṭala (Chittagong), and West Kāma-rūpa received a common name, ' Bangālah ' or Bengal, which is merely an extension of the appellation for the people of Vaṇga or East Bengal. The various dialects of the provinces which were members of one family group did not rejoice in a common name even when a literary standard was fixed and generally adopted. These now came to acquire the common name of the ' Language of Bengal,' Bengali. The Persian-using Moslems (and following them the Portuguese) first called the language by the name which came to be applied to the whole country—« zabān-i-Bangālah » (and « Idioma Bengalla »). The people themselves spoke of their native speech merely as « bhaṣā » or *current speech*, as opposed to Sanskrit or Persian : and the word « prākṛta », to mean the language of the land, was frequently used by the Paṇḍits. The term Gauḍa, which at first referred to West and North Central Bengal generally, the tract the speech of which

was regarded as the standard form of Bengali, came gradually to be used with regard to the language. In the 16th century, Nadiyā is described as being within Gauḍa-dēśa; and the Vaṇga country or East Bengal, as well as the dialect of Vaṇga, is contrasted with the land and speech of Gauḍa. The first native name for Bengali was thus « Gauḍa-bhāṣā, » probably coming into use as early as the 16th century. This name continued down to the beginning of the 19th century, nay, even later, side by side with the new name « Vaṇga-bhāṣā » or « Bāṇgālā-bhāṣā ». Rājā Rām Mōhan Rāy, the first Bengali to write a grammar of his mother tongue, called his work 'Gauḍīya Vyākaraṇa' (in English, 'Grammar of the Bengali Language,' published in 1833, but finished several years earlier). Madhusūdan Datta, the poet, refers to the people of Bengal as গৌড়-জন « Gauḍa-jana » in his 'Mēghanāda-vadha Kāvya,' in the sixties of the last century. The Persian name for the language, « zabān-i-Bangālah », and the Hindōstānī form of it, « Bangālī zabān », were heard in the law-courts; and the name « Bangālah », in its Bengali form বাঙ্গালা « Bāṇgālā », later বাঙ্গলা, বাঙ্‌লা, বাংলা « Bāṇgālā, Bāṇgalā, Bāṇlā », became familiar to Bengalis as a name for their language. Even Hindōstānī borrowed the word again from Bengali in the form बंगला « Bāṇgalā » *the Bengali language*. And the English, following the Portuguese and the Mohammedan rulers of Bengal, used no other name. In 1778, Nathaniel Brassey Halhed published his 'Grammar of the Bengal Language' from 'Hoogly in Bengal'—the first book printed in Bengali characters. Some 35 years before that, the Portuguese Padre Manoel da Assumpçam had written his 'Vocabulario em Idioma Bengalla, e Portuguez' (Lisbon, 1743). In the title-page of the Serampore edition of Kṛtti-vāsa's 'Rāmâyaṇa' (1804), we see the note কৃত্তিবাস বাঙ্গালি ভাষায় রচিল « Kṛtti-bāsa Bāṇgāli-bhāṣāy racilā » *K. composed in the Bengali language*. The term 'Gauḍīya bhāṣā' or 'Gauḍīya sādhu-bhāṣā,' which was common enough in Bengal, gradually fell into disuse. 'Bāṇgāli-bhāṣā' is the name given in the 'Hutōm Pēcār Naksā' (1862). বাঙ্গ(া)লা ভাষা, বাঙলা, বাংলা ভাষা « Bāṇg(ā)lā-bhāṣā, Bāṇlā, » and in the high style, বঙ্গভাষা « Bāṇgâ-bhāṣā » are the Bengali names for the language now in universal use.

APPENDIX A

A NOTE ON THE AFFINITIES BETWEEN THE NORTH-WESTERN AND THE EASTERN GROUPS OF NEW INDO-ARYAN LANGUAGES, UPON WHICH GRIERSON BASES THE THEORY OF A CONNEXION BETWEEN THEM AS MEMBERS OF AN 'OUTER' GROUP (AS IN §§ 81 FF. IN SIR GEORGE A. GRIERSON'S PAPER ON INDO-ARYAN VERNACULARS, IN THE 'BULLETIN OF THE SCHOOL OF ORIENTAL STUDIES, LONDON INSTITUTION,' VOL. I, PART III, 1920). (See Page 32.)

76. A. *Phonetic.*

(a) Retention of final « -i, -e » (and « -u ») in the North-western and Eastern languages. Grierson compares Kaśmīrī « achⁱ », Sindhī « akhⁱ » *eye*, with Bihārī (Maithilī, see p. 92) « ākhⁱ , aŋgōr < aŋgārᵘ , dēkhathᵘ » = *eye.,charcoal, let him see.*

The retention of final vowels, fully or slightly pronounced, cannot be adduced as an evidence of close connexion between the two groups of speech. All IA. vernaculars at some time or other retained the final vowels. Some are conservative in this respect: *e.g.*, Oṛiyā, and certain forms of Eastern Hindī and Western Hindī, which still cling to them. Others have begun dropping them, and the almost inaudible « ĭ ŭ » which we find are only what can be expected during the transitional stage: Maithilī and Sindhī present this stage, although in Maithilī there seems to be a greater advance towards the dropping of these final vowels than in Sindhī. In others, again, the final vowels have been entirely got rid of; as in the case of Hindōstānī, Marāṭhī, Gujarātī, Bengali (in the last, however, *tatsama* and foreign words ending in two consonants have a vowel after them). Bengali has আখ « ăkh » *eye* as an archaic word in the colloquial, and আঁখি « ăkhi » , the fuller form, obtains in the language of poetry. Five hundred years ago, the final vowels were pronounced in Bengali. They are pronounced even now in Oṛiyā, in which language

they say « jāḷā, Gōpāḷā, Nārāyāṇā, Rāmā, » and even « sārādārā » for the Hindōstānī (Persian) « sardār ». Hindōstānī (Hindī) has dropped the final vowel « -a » or « -u » in words like « Kaśyap, sumiran, santāp, dān, bīc, ucit, sukh, puttr, anugrah », etc., but the final vowels were retained in Western Hindī (Braj-bhākhā of prose) at least as late as the first half of the 17th century, as can be seen from a late Middle Hindī text (Commentary on the 'Śṛṇgāra-śataka' of Bhartṛhari; see 'Journal of the UP. Historical Society,' Vol. I, No. 1, article by R. P. Dewhurst). Even at the present day, the final « -i, -u » are not absent in Braj-bhākhā and in Kanaujī, which are representative Midland speeches: *e.g.*, in the Braj of Aligarh, we have « bāṭu » *share*, « mālu » *property* (from the Perso-Arabic « māl »), « sabu » *all*, « akālu » *famine*, « kaṇgālu » *poor*, « phiri » *again*, « pēṭu » *belly*, « auru » *and*, « dūri » *distance*, « naukaru » *servant* (Persian), « jwābu » *answer* (Perso-Arabic « jawāb »), « ēku » *one*. (LSI., IX, Part I, pp. 281-282.) Kanaujī has similar forms in « -i, -u ». In Braj, the present participle affix is both « -tu » and « -t »; and the verb indeclinable has « -i », *e.g.*, « kari, dhari, bhari, dēkhi, jāi » = Hindōstānī « kar, dhar, bhar, dēkh, jā ». Similar final « -i, -u » pronunciation obtained in Eastern Hindī at the time of Tulasī-dāsa: there is ample evidence in his poetry, and in the deed of arbitration written out by Tulasī-dāsa (Grierson, 'The Modern Vernacular Literature of Hindustan,' Calcutta, 1889, pp. xxvi-xxvii), we find forms like « taphasīlu » (= Perso-Arabic « tafṣīl »), « Ānanda-rāmu, Ṭōḍara-malu » and « tīnī ansa » *three shares*, and even « hujatī » (= Perso-Arabic « ḥujjat »). Modern Eastern Hindī has retained the final vowels even at the present day: *e.g.*, in a recent Hindī drama ('Nētrônmīlan Nāṭak,' by the Miśra Brothers of Allahabad, Calcutta, Saṁvat 1971; Act III) a character, speaking the Awadhī *patois*, employs the forms « sāću, jhuṭu, hāṭhu, dinu, agahanu = Agrahāyana, sāthu, āju, hālu (= Perso-Arabic ḥāl), mānu, kāmu, kāju, parapañcu, cūru, khētu; laṛi, pahiri, bēci » etc. In Eastern Panjābī, associated with Western Hindī, an indistinct « -ə » is frequently heard at the end of words. In the Bihārī dialects, the suggestion of a final vowel occurs only in Maithilī: it is lost in Magahī and in Bhōjpuriyā.

In the matter of retention of final sounds, it seems no inference can be drawn, connecting the Eastern (Magadhan) speeches with those to the west and north-west of the Midland speech. All NIA. languages which have dropped the final vowels passed through the transitional stage, which is now noticeable in Maithilī and Sindhī, and also in dialectal Western Hindī.

(b) Epenthesis is certainly present in the Eastern languages, and it is specially a characteristic of Eastern Magadhan (Bengali-Assamese-Oṛiyā). On the other hand, it is absent in Marāṭhī and in Sindhī among the 'outer' languages of the West, although it is found in Gujarātī, and Lahndī, as well as in the Dardic Kaśmīrī. In the Midland speech, sporadic cases of epenthesis do occur: *e.g.*, in Śaurasēnī Prakrit, we have « para-kēra-ttaṇa=para-kārya-tvana, pēranta = paryanta, sundēra= sāundarya » (Pischel, 'Gramm. der Prakrit-Spr.,' §176). But epenthesis cannot be said to characterise Western Hindi. Epenthesis is entirely absent in Old Bengali, and it developed only in the Early Middle Bengali period. Maithilī epenthesis, and that in Western Panjābī (and Kaśmīrī) are also admittedly late; and it would be extremely hazardous to refer the epenthesis as found in the modern Eastern and in some of the modern Western speeches to a common source in a hypothetical 'outer' Aryan dialect.

[The Bengali word quoted by Grierson under this head, বাগুন « bāgun » *aubergine*, as being from « *vaŋgaṇu », is a dialectal from,=Standard Bengali বেগুন « begun », from « bāigon, bāigan < bāïgaṇa <bāïŋgaṇa » (the last form found in Old Oṛiyā as in the inscription of Nṛsiṅha IV, A. C. 1395),= Skt. « vātiŋgana »: the « -u » affix, as in « *vaŋgaṇu », is typically Western, and not Māgadhī. The word আগুন « āgun » *fire* is not from a form like « *agaṇu », but it is a *semi-tatsama*, আগুনি « āguni < agni », « agni » being pronounced like [ŋggəni] in the Māgadhī Apabhraṅśa stage, the neutral sound of [ə] becoming [u] in Old Bengali through the influence of the preceding velar consonant. The old *tadbhava* আগি « āgi < aggī, *aggiă < *agnikā » occurs in Middle Bengali].

(c) Pronunciation of « i » as « e », and of » u » as « o ». In the eastern languages, especially Bengali, « i » and « u » are lax vowels,

like the vowels of English *pit, put.* Naturally, as the tongue does not have a very high position, there is a tendency to turn them to the low sounds of « e, o » . In the Prakrit stage, « ĭ » before two consonants often became « ĕ », and short « ŭ » similarly became « ŏ »: *e.g.*, « bĕlla = bilva, pŏkkhara = puṣkara, pŏtthaa = pustaka » . Alternation of « i : e, u : o » is not unknown to Western Hindī: *e.g.*, Braj-bhākhā « mōhi : muhi, tōhi : tuhi »; and the fact that the short forms of « ē, ō » are « i, u » in the causal and other forms in W. Hindī, *e.g.*, « bōlnā : bulānā ; dēkhnā : dikhānā ; ēk : ikaṭṭah » etc., shows that there was the lax pronunciation of « i, u » and the close one of « ē, o » , approximating to each other, as in Bengali. (Cf. also Kellogg, ' Hindī Grammar^2', p. 3).

(d) Change of « u » to « i » is not a *characteristic* of the Eastern languages, although it is found in them, as in all other NIA. speeches, more or less. It also occurs in W. Hindī: *e.g.*, « khilnā » beside « khulnā » *to open, as a bud*; « chiṇgulī » beside « chuṇgulī » *little finger* = « *kṣull'-aṇgulikā »; « phislānā, phuslānā » *lead astray by sweet words.* Against W. Hindī « bālū » *sand*, with « u » , Skt. « vālukā », = Bengali বালি « bāli » , cf. W Hindī « ginnā » *count* = Bengali গুণন « guṇânâ » (« i » in W. Hindī, but « u » in Bengali, for « ă » of OIA.).

[The word « tanik » *a little*, derived from a Māgadhī Apabhraṁśa form « *taṇukki » , by Grierson, is not Bengali, but it is good Western Hindī, being found in Sūra-dāsa, among others.]

(e) The change of « ai < aï » and « au < aü » to an open « è » = [ɛ] and open « ò » = å [ɔ], is not a characteristic of the Eastern ' outer ' speeches, although it is found in Rājasthānī-Gujarātī, Sindhī, Lahndī, and other Western ' outer ' dialects. It is also a noteworthy characteristic of modern Western Hindī as well: so much so that at the present day, the English sounds of [æ] (as in *man*, which is a rather low kind of [ɛ]), and of [ɔ] (as in *hot*), are indicated respectively by the letters ऍ « ai » and ऑ « au » in High Hindī: *e.g.*, हैट् *hat*, मैनेजर *manager*, हैरिसन *Harrison*, डॉटर beside डाटर *daughter*, etc. In a Hindī translation, from English, of Victor Hugo's ' Les Misérables,' the name *Cosette* is written कोसेट. Cf. « kahi > kaï > kai > *[kɛ:] > kē ; kahu > kaü > kau > * [kɔ:] > kō ; ai,

au<aï, aü » are ordinarily pronounced with rather low tongue position in the Western Hindī homeland : « hai » sounding as [fiɛĕ, fiɛ:], or even as [fiæ:], « aur » as [ʌŏr, ɔŏr, ɔ:r].

[ঔ « au » in *tatsama* words, = « āu » of Sanskrit, is pronounced [ou] in Bengali, much like the Southern English *o* in *joke* [ʤoŭk] ; and of course, in *tadbhava* words, « āu » of Skt. occurs as « ō » . The Assamese pronunication given by Grierson, « ōxodh » for « āuṣadha » , is a late *semi-tatsama* pronunication, coming from an earlier [ɔᵘʃodfiə], [ɔᵘ] changing to [o]. Similarly, we have « āi » > [ɔi] > [o] in East Bengali : « āikya » = [ɔikkĭɔ > ɔikkɔ > ɔikkɔ > okkɔ], « āiśvarya » = [ɔiʃwɔrʃʒjɔ > oʃʃordzo]. The Bengali ভাল « bhālā » is pronounced ভালো [bʃɑlo], and some reformers of Bengali spelling write the word as ভালো : it comes from an Old Bengali « *bhālāẘā » = Māgadhī Apabhraṅśa « *bhallaẘa, bhallaa », Māgadhī Prakrit « *bhallaga », Skt. « bhadra-ka », « aẘa » of Old Bengali changing into « å » *i.e.*, long « å » in Early Middle Bengali, and then to « ō » in New Bengali. Bengali ভাল « bhālā, -ō » cannot be from « *bhālaü > bhālau », which would be a Western Apabhraṅśa nominative form : the Bengali form is the mere base ; and the nominative form from Māgadhī Prakrit expected in Bengali would be either « *bhāli < bhallē = bhadraḥ » , or « *bhālē < * bhallaï < *bhallagē = bhadrakaḥ » .

(f) The change of « c, j » to « ts (s), dz (z) » is found only in East Bengali and Assamese, and is absent in West Bengali and ' Bihārī.' The Assamese and East Bengali dentalisation of the palatal affricates is due probably to the influence of Tibeto-Burman (see p. 79) ; and in Parbatiyā and other Pahāṛī, a similar source for dentalisation can be postulated. In Southern Oṛiyā, dentalisation similarly occurs through the influence of Telugu (LSI., Vol. V, Part II, p. 369) ; and in Marāṭhī, where the palatal pronunciation is found before the front vowels, « cē, cĭ, cī », and the dental before the back ones, « tsă, tsā, tsō, tsŭ, tsū », we have also probably the influence of the Dravidian Telugu. Even in Assamese and East Bengali, the palatal « c, j » pronunciation is not absent. The dental affricate sound in NIA. does not in any way prove specially intimate connection between those languages or dialects which have it. Grierson

himself explains some of the statements of the Prakrit grammarians with regard to the pronunciation of the palatals to mean that in Śaurasēnī, the source of Western Hindī, and in Mahārāṣṭrī, IA.« c, j » had developed the « ts dz » sound. (This question has been discussed later, under *Phonology*—Phonetic History of IA.) Later, according to him, North Śaurasēnī « ts dz » again became « c, j ». (Cf. JRAS., 1913, pp. 711 ff., 'The Pronunciation of the Prakrit Palatals'.) So that, if that were so, Māgadhī, an 'outer' language, which did not dentalise, disagreed with Śaurasēnī, the Midland, 'inner' language, on a point in which the latter agreed with Mahārāṣṭrī, another speech which is relegated to the 'outer' group. Further, the dental sounds are not found in the 'outer' speeches Sindhī and Lahndī. So that this point would prove no greater connection between the Eastern and Western groups than between the Western and Midland groups. Moreover, although full « ts dz » sounds seem to be absent in the Midland language, opinion differs on this point: Hoernle observes ('Gaudian Grammar,' §11, following Kellogg) that 'the W. Hindī palatals are rather more dental than the English; *i.e.*, more like *ts dz*;' while Prof. Daniel Jones (in the course of a private talk) regarded the Hindōstānī « c, j » as being more like pure palatal stops than affricates; and my own observation is that they are palatal affricates [c͡ʃ, ɟ͡ʒ], rather than the tongue-tip alveolars ones [t̪͡ʃ, d̪͡ʒ].

(g) The letters ঙ, ঞ « ŋ, ñ » represent, intervocally, the sounds of «w̃, ỹ» in Early Bengali, and to some extent in Modern Bengali. These arise commonly from a single « m » between two vowels. In practice, these letters indicate only a mere nasalisation of the connected vowel: the the word গোসাঞি « gōsāñi » = « gōswāmī » is also of written গোসাইঁ, গোসাঁই « gōsāi » in Bengali. Assamese গোসাঞি is really [goxãi]. The palatal nasal, « ñ » [ɲ], such as is found in French, Italian and Spanish, does not occur in NIA. W. Hindī words like « bhūī, gusāī » can also be written with ञ « ñ »: this is only a device in spelling.

[The words « ṭhāw, ṭhāñi », quoted by Grierson, are probably developed thus: OIA. « sthāman » *place*, whence Śaurasēnī Prakrit «*ṭhāma» and Śaur. Ap. «*ṭhāwu», resulting in W. Hindī « ṭhāw »;

Māgadhī Prakrit « *ṭhāmē » > Māgadhī Ap. « *ṭhāw̃i », whence Bengali « ṭhāi », written ঠাঁই, ঠাঁই.]

(h) The use of « r » for « l » and « ṛ < -ḍ- » is almost as common in W. Hindī as in the 'outer' languages Sindhī and Bihārī. In the Braj-bhākhā, as in the poems of Sūra-dāsa and Bihārī-lāla, and others, we find words like « bara (bala), gara (gala), jarai (jalai, jalē), pakarai (pakaṛai), larihaũ (=laṛũgā), bigarai (=bigaṛē), sābhāra (samhāla-), bīrā (bīṛā), kiwāra (kiwāṛa), paw̃āra (=prabāla), bijurī (bijlī), dubara (=durbala), ghari (ghaṛī), phari (=*phalikā, phalaka), pajaryō (=prajvalita), baura (=mukula), sāra (=śalya), tamōra (=tāmbūla), bahuri (=vi-ā-√ghuṭ-), jura (=juṛa), bhīra (=bhīṛa), sarāha-(=√ślāgh-) » etc., etc., instances being numerous. Lallū-lāla in the 'Rāja-nīti' has « syāṛa (=śṛgala), (found also in Hindōstānī), nikaryau (=nikaḷā), bēr (=vēla) », among others.

This confusion betwween « ṛ r l », with preference for « r », is unknown to Bengali (dialectal Bengali confuses « ṛ » and « r », but never these sounds with « l »), to Oṛiyā, to Maraṭhī, and to Lahndī. In this matter, however the Eastern (Māgadhī) Prakrit, the hypothetical source of the 'outer' languages of the East, stood apart from all other forms of MIA., and possibly also OIA., in having only « l », and no « r ».

(i) Interchange of « d, ḍ » cannot be called a peculiarity which is shared in common between the languages of the East and of the West, in contrast to the Midland speech. The case of the Sindhi « ḍ̂ḍ̂ » = [ḍ'] is peculiar. In Assamese, the substitution of alveolars for both cerebrals and dentals is unique among Indian languages, Aryan, Dravidian, and Kōl, and is undoubtedly due to the influence of Tibeto-Burman. The Eastern languages generally maintain a rigid distinction between the two classes of sounds, whatever may be the case in dialectal forms of Lahndī (Thalī) and Gujarātī (Pārsī dialect). « d > ḍ » is not an uncommon phonetic change in the Midland language too: *e.g.*, in the 'Satasaī' of Bihārī, we have « ḍīṭhi (=dṛṣṭi), ḍyōṛhī (=dēhalī), ḍōṛhā (=dvyardhaka) ». In High Hindī we find « ḍābh (=darbha), ḍāṛhā (=ḍaḍḍha, dagdha), ḍāṛhī

(=daṅṣṭrikā), ḍārim (=dāḍimba), ḍāṇḍī (=daṇḍikā), ḍẵsnā (= √daṅś), ḍōlī (= √dul) » ; cf. Hindōstānī « ḍēṛh » = Bengali দেড় « dēṛ৲ » , 1½.

(j) Change of « d » to « j » through influence of a preceding or following palatal vowel is an extremely rare phenomenon in IA., although change of « d(h)y » to « j(h) » is a regular phonological law. It certainly cannot be described as a *characteristic* common to the 'outer' languages, because we have at the best only some unique sporadic cases in East Magadhan (*e. g.*, Bengali « jhī » , Oṛiyā « jhiâ » = « dhītā, duhitā »), in Marāṭhī (« nīj » = « nīd, nidrā »), in Sindhī (« g̃gijhu » = « giddhu, gṛdhra »).

(k) « -mb- > -m- » is a change found also in W. Hindī, and « -mb- > ~b » is found in the Eastern languages, at least in Bengali. W. Hindī has « jāmūn » besides « jẵbū » (=jambuka) ; and in W. Hindī « nīm » is more common than « nīb » (=nimba). But cf. Bengali dialectal আঁব ভেঁবা « ãb৲ (āmra), tẵbā (tamra) » , besides আম, তামা « ām৲, tāmā » ; Bengali has লেবু, নেবু « lēbu, nēbu » for the Hindōstānī « lēmū » (=nimbuka). In Early Bengali, « ~b » and « -mb- » both are found : Old Bengali « tẵbola » (Caryā 28) ; Middle Bengali « cumba, jāmb(h)īra, lambā » etc.

[The form « lām » given by Grierson, = « lambā » , is not Bengali.]

(l) Elision of intervocal « -r- » : it cannot be said to be specially noticeable in the 'outer' speeches, and it is also found in W. Hindī : *e.g.*, « kari > kai » *having done* ; « apara > avaru > auru, aru > aur, au » *and* (« au » an Indo-Aryan word, rather than from Persian « u » < Old Persian « utā », Avestan « uta ») ; « pari > par, pai » *upon* (from « upari », rather than from « prati »). Omission of « r » in the middle of a word before a stop or aspirate is a characteristic of folk-Bengali even of the present day, and it is a Prakritic habit which still persists in the language ; but intervocal « r » is never dropped in Bengali.

[The word মৈলাম « mailām », quoted by Grierson as an example of loss of intervocal « r » in Bengali, is archaic and dialectal in Bengali, and is from « *maẏa + illa + amha < *mṛta + ila + asma » : « mṛta > maẏa » is a Prakritic form, the counterpart of which is found in « muā » in W. Hindī, which would be a case of exactly similar kind of early loss of « r » .]

(m) Change of intervocal « -s- » to « -h- » is not a specially 'outer' characteristic, and it is found in a few instances in W. Hindī also: *e.g.*, « tasya > tassa > tāsa > tāha > tā- (tā-kō, tā-hi etc.) »; « kariṣyati > karissadi > karīsaï > karihaï »; in the second instance, future « -sy-, -ṣy- > -h- », the Western 'outer' languages preserve the sibilant: *e.g.*, Gujarātī « karśē », Rājasthānī (Jaipurī) « karśī », Lahndī « karēsī ». In the numerals, the change of « -s- » to « -h- » is found in all MIA. and NIA.: *e.g.*, W. Hindī « igārah, bārah, cauhattar » etc., and it cannot be determined where these forms originated: but it looks as if they are Midland in origin (the Pali forms resemble the Hindōstānī ones most closely, but they do not show the change from « -s- » to « -h- », which took place in the late MIA. period). Isolated words like « kēhari » (=kēsarin), « pāhan » (=pāṣāṇa) are met with in Braj-bhākhā. The word « pōhē » *cattle* (=paśu ?) is a good Hindōstānī word.

The change of initial « s (= ś) » to « h » in dialectal Bengali, and of « s (= ś) », initial and intervocal (and final) to the guttural spirant [x] in Assamese, is something remarkable, and is paralleled by what we see in Siṅhalese and in Kaśmīrī. But this is also noticeable in other IE.: *e.g.*, in Iranian, in Hellenic, and in Celtic (Welsh); so that this agreement, and quite imperfect at that, between Kaśmīrī and dialectal Bengali cannot be regarded as a proof of a particularly intimate connection between them.

(n) « ś » for « ś, ṣ, s » is a peculiar Māgadhī characteristic, and there is nothing like it in the other groups of IA. This « ś » of Māgadhī is irrespective of the connected vowel. But « ś < ś ṣ s » in Marāṭhī and Gujarātī is the case of an earlier dental « s < ś ṣ s » becoming palatalised through the influence of a palatal vowel, « i, ī, ē », or of « y »: « s » before the back vowels, and « ś » before palatal ones, being the rule. *E.g.*, Marāṭhī « dzōśī » (=jyōtiṣin), « śikṇē » (=śikṣaṇam), but « sakṇē » (<√śak), « saṇ » (=śaṇa); Gujarātī « karśē » (=kariṣyati), but « sād » (=śabda). (Influence of Sanskrit, however has determined some spellings with « ś » in Gujarātī and Marāṭhī). The MIA. 'outer' dialect Mahārāṣṭrī, according to the testimony of the Prakrit grammarians, did not palatalise the sibilants, exactly like the Midland dialect Śaurasēnī.

(o) The tendency to disaspiration of « kh, gh, ch, jh, ṭh, ḍh, th, dh, ph, bh » as well as of « ṛh, nh, mh, lh » is a noticeable thing in Bengali, no doubt, but it is an entirely new thing, and can be taken to present only one more coincidence with Marāṭhī, Gujarātī-Rājasthānī, and Sindhī. In the Eastern (Māgadhī) group of speeches, disaspiration of intervocal and final stops is more or less common at the present day, but this is not more than 300 years old. Disaspiration of initial aspirates is unknown to West Bengali, and is very uncommon in the case of the unvoiced aspirates in East Bengali and Assamese, although initial unvoiced aspirates also tend to drop their « h » in some East Bengali dialects. Disaspiration and transference of aspiration are of occasional occurrence in W. Hindī as well: *e. g.*, « bahin < *bhaïnī < bhaginī », cf. Oriyā « bhaiṇī » ; « nahlā-duhlā < nhālā-dhulā » *bathing and washing* ; « ũṭ < *ũṭh < uṭṭha, uṣtra » *camel* ; « cāṭnā » *lick* < « *cāṭhanā <*caṭṭhanaa<caṣṭa- » ; « īṭā <*īṭhā < iṣṭaka » *brick* : « tiwārī < *tiwāṛhī < tripāṭhin » *a Brahman surname*. But disaspiration is extremely rare in the Midland language ; and on the other hand, it must be admitted, aspiration is frequently noticeable in the Midland ; *e.g.*, « bhēs < bēśa < vēśa ; bhabhūt < bibhūti < vibhūti ; phin, phuni < punaḥ ». This entirely opposite tendency is also found in some specially Bengali forms : *e. g.*, ফেলে « phēlē » *throws down* = Middle Bengali পেলে « pēlē » < Māg. Ap. « pellaï = prērayati » ; Middle Bengali ফুকরে « phukârē » *shouts*, cf. Hindī « pukārē » ; Middle Bengali পাখড় « pākhâṛ্h » *catch*, cf. Hindī « pakaṛ » ; খাবল « khābâl্h » *handful, grasp*, = Skt. « kabala » ; ঝুনা « jhunā » *old, dried up* = « juṇṇa-, jūṛṇa » .

The Panjābī change of the voiced aspirates « gh, jh, ḍh, dh, bh » to « k, c, ṭ, t, p », with accompanying low tone making up for the loss of aspiration and voice, is something unparalleled in New Indo-Aryan phonetics.

[In the words given by Grierson, কুড়ালী « kuṛālī » *axe* is the proper Bengali form, and not « kuṭāri » ; and « bhāp্h » *steam* is a case of transferred aspiration, from « *bhappa, bappha, bāṣpa », and the word is found in W. Hindī as well. All the Bengali words quoted by Grierson

have the aspirate, or had it (in final positions) till Late Middle Bengali times.]

(p) The Eastern speeches (Bengali, Assamese, Oṛiyā, Maithilī, Bhōjpuriyā, and Eastern Hindī) as well as Gujarātī-Rājasthānī and Marāṭhī agree with the Midland speech in simplifying the MIA. double consonants and in lengthening the preceding vowel as compensation: only in the Eastern Magadhan area, the orthography does not ordinarily record this lengthening in the case of « ī, ū », but always does in the case of « ā », Sanskrit orthography having interfered in the spelling of the « ī, ū » words: *e. g.*, ভিখ for ভীখ « bhĭkh্a » for « bhīkh্a », cf. « bhĭkṣā »; পুত for পূত « pŭt্a » for « pūt্a », cf. « pŭtra ». This simplification of consonant group *cum* lengthening of the preceding vowel is a great point common to the Midland speech and those of the East, and the Western speeches (Sindhī, Panjābī and Lahndī) disagree with other NIA. in this matter, but agree herein with the Dardic Kaśmīrī. This may show a special point of contact or affinity between Western NIA. and Dardic, but this rather emphasises the difference between the former and the 'outer' speeches of the South-west and the East.

[In the Midland speech, we have numerous instances of forms in which there has been no compensatory lengthening, although one consonant has been dropped: and a few such cases are found in the Eastern and South-western NIA. also: in fact, in all NIA. This may be due to dialectal influence from the North-western regions, first upon the Midland speech, and then, through the latter, upon those of the East, and the South-west: *e.g.*, W. Hindī « săc, săcā » besides « săcc, săccā, sãcā » *true* (Bengali সাঁচ্চা « sãccā » borrowed from the West; সাঁচা « sãcā » seems to be native); « kăl » *yesterday, tomorrow* for « *kāl »; « căk » *district* (cakra); « căkh » (cakṣu); « bărhai » (vardhatē); « lăkh » *sight* (lakṣa); « bhălā » (bhadraka); « săb » (sarva); « nĭt », beside « nīt », a *semi-tatsama*, (nitya). Shortening of a long vowel in a weak syllable in a compound or other form is a different thing: *e.g.*, « gānā » *to sing*; but « găwaiyā » *singer*; « kājar » *lamp-black*; but « kăj্arauṭā » *casket for collyrium*; « bhāt khānā » *to eat rice*, but « bhăt-khăuwā » *rice-eater*.]

77. B. *Morphological.*

(a) The « -ī » affix for the feminine took the place of the common OIA. affix « -ā » , which was reduced to « -ă » , from the Apabhraṅśa period. The « -ā » termination is lost to all *tadbhava* feminine forms in NIA. In Hindōstānī as in other NIA., « -ī » is quite a common feminine affix ; and this affix cannot be said to be a special bond of union only among the Eastern and Western 'outer' languages.

(b) Bengali ablative post-position হইতে, হৈতে, « haitē » , Early and Dialectal Bengali হন্তে, হোন্তে « hantē, hōntē » , from « *ahitē < *ahĕntē, *ahantē, < *as-ant- = s-ant », certainly agrees with the Sindhī « sandō » , W. Rājasthānī « handō » ; and what is more, Bengali থে, থেকে, থাকিয়া « thē, thēkē, thākiyā » *having been* as an ablative post-position is the exact counterpart of the Gujarātī « thī, thakī » . But the use of these verbal derivatives as post-positions is certainly a new thing in IA., being not earlier than late MIA. ; and the use of the substantive verb to denote case relation would only be natural in the various NIA. languages.

[The MIA. forms « suntō, hintō » do not seem to be connected with the Bengali হইতে « haitē » . This is discussed later, under *Morphology* : Declension.]

(c) A synthetic declension is said to exist specially in the 'outer' languages, and to be present only as relic in the Midland one, thus bringing in a point of contrast between the 'outer' languages and the 'inner' language. As a matter of fact, the old synthetic declension is preserved but fragmentally in the NIA. languages ; and where one language preserves a particular case-form, another retains a different one. The persistence of one old inflected form (instrumental? genitive?) in the Midland language, as the oblique case, is at the root of the distinction we find between W. Hindī and other IA. declensional systems : *e.g.*, W. Hindī « ghōṛē kā < ghōḍahi kaa » = « ghoṭasya + kṛta » ? or « ghōṭaka » + instrumental plural affix « hi < -bhiḥ » + « kṛta » ? : here the oblique « ghōṛē » preserves a synthetic case ; but in Bengali ঘোড়ার « ghōṛārʳ = ghōṭaka + kara », and Bihārī « ghōrāk = ghoṭaka + kṛta ? ghōṭaka + -ka, -kka ? » , we apparently do not have an earlier synthetic form, which is

lost, but we have a compound formation. Not considering post-positions, we find that this is how W. Hindī, Bengali, Marāṭhī and Lahndī (the three latter being described as 'outer' speeches) stand with reference to each other in the matter of preservation of the earlier, synthetic declension of MIA.:

Western Hindī.

Nominative Singular: « ghōṛau » (=MIA. nominative singular, preserved in Braj); « ghōṛā » (Hindōstānī base form); « gharu » (Braj neuter form).

Nominative Plural: « ghōṛahi, ghōṛaĩ, ghōṛē » (=MIA. instrumental plural? with genitive influence?)

Agent-instrumental: affix lost in nouns, but cf. « maĩ = *mayēna », « taĩ » =*tvayēna » ; and post-position « -naĩ, -nẽ = *kaṇṇaĩ, *karṇakēna ».

Dative-oblique Singular: « ghōṛahi, ghōṛē » (=MIA. genitive singular? or MIA. instrumental plural, transferred to the singular?).

Dative-oblique Plural: « ghōṛan(i), ghōṛõ, ghōṛã̆ » (= MIA. genitive plural).

Locative Singular, rare form: « ghar-ē, āg-ē » ; « hindōr-ē » *in the swing* (Bihārī-lāla), « māth-ē » *on the head* (Sūra-dāsa), etc. (=MIA. locative).

Ablative Singular (rare, dialectal): « bhukkhã̆ » *from hunger*, in Vernacular Hindōstānī and Bāngarū dialects; « bhūkhan, bhūkhõ » (Braj, Kanaujī) (=MIA. ablative+genitive plural?)

Bengali.

Nominative: affix lost.

Agent-instrumental Singular: এ « -ē »: ঘোড়াএ, ঘোড়ায় « ghōṛā-ĕ » (=MIA. instrumental: « -ēna > -ēṇa > -ẽ > -ē »).

[Oṛiyā Ablative: « -u: ghōṛā-u, ghōṛā-r-u » (=MIA. singular ablative?)]

Genitive Singular, lost: except in the pronoun, where it occurs as আ « -ā » তা-র « tā-ra », যা-র « jā-ra » etc. (=MIA. genitive singular).

Genitive Plural, as rare relics, in the affix ন্, আন্, ইন « -n, -ān -in », dialectal আনি, আইঁ « āni, āĩ »: *e.g.*, ঘোড়াগুলান, -গুলিন « ghōṛā-gulān, -gulin » *horses*; তান « tānṇ » *his* (honorific) < *their* = (MIA. genitive plural). [In Oṛiyā, this MIA. genitive plural was preserved: « ghōṛå-ŋ-kå » *of horses*: see p. 137.]

Locative (merged into Instrumental) : ে « -ē » : ঘরে « gharē » (=MIA. locative singular). [In Assamese, base + aflix « at » : « ghar-at ».]

Marāṭhī.

(See Jules Bloch, 'Langue Marathe,' *Declension.*)

Nominative : preserved partially, in the plural.
Instrumental : preserved in Old Marāṭhī, but now obsolete.
Oblique Singular = OIA. dative : preserved.
Oblique Plural = OIA. genitive : preserved.
Ablative : extremely rare.
Locative : rare, in Old Marāṭhī.

The Marāṭhī form in « -ā-s < -ā-si », *e.g.*, « ghōṛ-ā-s », which was explained formerly as being the OIA. genitive in « -asya », is shown by Bloch to be really the oblique (=original dative) singular in « -ā » + the post-positional word « -s, -si » (Bloch, *op. cit.*, § 198).

Lahndī.

(See LSI., Vol. VIII, Part 1, pp. 252-258.)

Nominative Singular : traces of the « -u » affix in umlaut forms only ; Plural : traces of the late MIA. « -a » affix : *e.g.*, « jaŋgul < *jaŋgaḷu », pl. « jaŋgaḷ < *jaŋgaḷa », *forest.*

Agent-oblique : Singular : traces of the late MIA. genitive (?) : « jaŋgaḷ < *jaŋgaḷaha (?) » ;

Agent-oblique Plural : « -ã : jaŋgaḷã » (=late MIA. genitive plural).

Ablative, in « -õ » : « jaŋgaḷõ » (=late MIA. ablative singular + genitive plural ?).

Locative-Instrumental : « jaŋgiḷ < *jaŋgaḷi », plural « jaŋgaḷī » (=late MIA. locative singular, and locative singular+genitive plural).

Taking into consideration the nett remains of the earlier, MIA. synthetic declension, it cannot be said that Bengali, Marāṭhī and Lahndī, as 'outer' languages, are synthetic to any special degree when compared with the Midland W. Hindī. The post-positional declension of NIA., with help-words reduced to the status of inflections, is a different thing ; and

it must be admitted that, through phonetic decay, certain words in Bengali and Marāṭhī, which used to be combined with or affixed to base or oblique forms of nouns, have been worn down to mere inflections, and thus formed the nucleus of a new synthetic declension: *e.g.*, Bengali ঘোড়ার, ঘরের « ghōṛārɾ, ghårērɾ < kara, kēra = kārya », ঘোড়াদের « ghōṛādērɾ < -ādika + kēra » ; Marāṭhī « ghōṛācā » < -kṛtya-ka » . But the W. Hindī speech is not free from this in its declension, although it has not joined up the genitive post-position to the noun in a synthetic declension : *e.g.*, « ghōṛē-nɛ̃ » = oblique of « ghōṛā » + instrumental of « karṇa-ka » ; the ' outer ' speech Lahndī here agrees with the Midland form not only in preserving an analytic genitive, but also in building up a new synthetic agent and dative case : *e.g.*, Lahndī genitive « ghōṛē dā » = oblique of « ghōṛā » + « dā < diā < *dita-ka = datta-ka » (cf. W. Hindī « ghōṛē kā » , where « kā = kaā, kiā < kṛta-ka »), but agent and dative « ghōṛē nɛ̃, -nũ » , where « nɛ̃, nũ » = oblique forms of « karṇa-ka » , as in Western Hindī. In W. Hindī, in the speech-feeling of many speakers, the post-positions « kō < kakṣa, sē < sama ? sahita ? , par < upari, mɛ̃ = madhya » are as much organic inflections as are the Bengali genitive and locative affixes « -ārɾ, ērɾ, -ē, -tē » etc ; and many writers of High Hindī advocate the writing of the post-position with the noun as one word. The influence of Persian (with its separate *pre*-positions) on W. Hindī may have been partially responsible in instilling into the minds of some speakers of W. Hindī the idea of a separate existence of the post-positions.

In any case, there is nothing in the declinational system of the ' outer ' languages to mark them off from the Midland speech, and to bind them closely as being similar in spirit: Western Hindī and Lahndī and Sindhī agree with each other in spirit as much as they do with Marāṭhī and Bengali and Maithilī.

(d) Except in Lahndī and Sindhī, where it may very well be due to the influence of the contiguous Iranian and Dardic, affixed pronouns are not used with *nouns* in other NIA. In Assamese, however, there is a restricted pronominal affixation with nouns of relationship, which Grierson has connected with the affixed pronouns of the North-western languages

(JASB., 1895, Part I, p. 347); but some of the Assamese forms, *e.g.*, « tōr zīyēr » *your* (non-honorific) *daughter*, and « tōmār zīyā, zīyērā » *your* (honorific) *daughter*, where the affixes are « -ēr » and « -ā » or « -ērā », are obscure in origin. It is very unlikely that this isolated phenomenon in Assamese is connected with Dardic: rather, this may be a case of Tibeto-Burman (Boḍo) influence, Boḍo possessing the peculiarity found in the Aryan Assamese (cf. LSI., Vol. III, Part II, p. 16).

(c) The formation of the past tense of transitive roots with the help of the passive participle adjective, which qualified the object, the subject being in the instrumental, came to be fixed in MIA. with the loss of the OIA. inflected, finite verb-forms. All NIA. languages inherited this passive construction for the past tense of the transitive verb from their respective source Apabhraṁśas—Bengali and Bihārī included. But while the passive construction is preserved in the Western and Southern 'outer' languages—Lahndī, Sindhī, Gujarātī-Rājasthānī, Marāṭhī,—Eastern Hindī and the Magadhan speeches have now entirely given up the passive form and have developed the active one. This is done by making the passive participle adjective a verb-form, and adding to it pronominal affixes for the 3 persons. The Western speeches (Lahndī, Sindhī) add pronominal affixes to the passive participle, but they fully retain the old passive idiom, in that the verb form agrees with the object in gender and number. The use of the pronominal affix is rendered necessary in the Western speeches from the fact that the agent case in them does not always retain the proper post-position (= « -nē̃ » of W. Hindī), and is often merely the simple oblique form. There might be some influence of the neighbouring Iranian is this matter: *e.g.*, Persian « kard-am » *I did*, Paṣtō « kṛ-am < *kaṛ-am » *I do* = Old Iranian « *karta, kərəta + mē » : Lahndī « kiu-m » = Skt. « kṛta + mē ». In any case, there is a fundamental agreement between W. Hindī and Lahndī etc. in idiom and in speech-feeling, in maintaining the passive idea; and Marāṭhī and Rājasthānī-Gujarātī agree with W. Hindī in preserving the passive construction. From this point of view, NIA. speeches are capable of being divided into two broad groups, Eastern, or 'Active,' and Western, or 'Passive':

I read (past) a book.

Western group :

(Passive Construction)

W. Hindī :	« maĩ-nẽ	pōthī	paṛh-ī »
Gujarātī :	« mẽ	pōthī	vãc-ī »
Marāṭhī :	« mī	pōthī	vāc-il-ī »
	by-me	*a-book*	*read (fem.).*
Sindhī :	« (mũ)	pōthī	paṛh-ī-m[e] »
Lahndī :	« (maĩ)	pōthī	paṛh-ī-m »
	(*by-me*)	*a-book*	*read (fem.) + by-me.*

The Northern languages (Pahāṛī dialects—Khas-kurā, Garhwālī, Kumāūnī, and the Western Pahāṛī speeches), on the whole, agree with the Western group, with which they are intimately connected.

Eastern Group :

(Active Construction)

E. Hindī :	« maĩ	pōthī	paṛheũ »
Bhōjpuriyā :	« ham	pōthī	paṛhalī »
Maithilī :	« ham	pōthī	paṛhalahũ »
Bengali :	« āmi	puthi	påṛilām
	(mui	puthi	påṛili, -lum) »
Oṛiyā :	« āmbhē	pōthi	påṛhilũ
	(mũ	pōthi	påṛhili) »
	I	*a-book*	*read (past, 1st person).*

The neuter construction, which characterises all the members of the Western group, is not present any longer, or at the best is very much obscured, in the Eastern group ; and surely in this matter a grouping of Bengali and the Eastern languages together with Sindhī, Lahndī and Dardic would be hardly allowable. (The present-day formation of the past paradigm of the verb in the Eastern languages agrees remarkably with that of modern Dravidian.)

(f) The adjectival « l » affix is an Indo-European inheritance in NIA., and occurs in the Midland speech as well: only, in the Eastern languages and in Marāṭhī, it forms the basis of the past tense, and in Gujarātī and Sindhī, it is regularly employed in a passive participle form. Panjābī and Lahndī do not have this as a characteristic affix, thus disagreeing with the other 'outer' speeches. W. Hindī instances of it are plentiful: *e.g.*, some 26 separate examples of it, like « lajilī » *bashful*, « raṇgilē » *coloured, sportive*, « chaila » *handsome*, « kaṭilī » *cutting* etc., are found in the 'Satasaī' of Bihārī-lāla; and it is not uncommon in Eastern Hindī as well.

78. C. *Glossic.*

On examining the common roots and words of Lahndī, Sindhī, Gujarātī, Marāṭhī, W. Hindī, Bihārī and Bengali, it would be easily found that Biharī and Bengali do not have a special agreement with the Western languages, or with Marāṭhī: the agreement with W. Hindī, which is so very close, is often forgotten, when a word not found in W. Hindī is traced to exist in common in the Eastern and the Western languages. The question of lexical affinity cannot be always insisted upon as a strong argument for a genetic relation. To take an important root, that of the substantive verb, « āch, ach », we find that among the Magadhan languages, Bhōjpuriyā and Magahī do not use it now, but there are traces of its use in Early Bhōjpuriyā remains (*e. g.*, in a poem ascribed to Kabīr—« achalaŭ mana bairāgī » *I was a* bairāgī *in* (*my*) *mind*, quoted by Jñānêndra-mōhan Dās, in his 'Bengali Dictionary,' Calcutta, San 1323, under আছ « √āch »); Early Awadhī (E. Hindī) shows this root, although it is not found in Modern E. Hindi; of the other 'outer' languages, Sindhī and Lahndī have not got it, but it is found in Gujarātī and in some forms of Rājasthānī, and in Pahāṛī. The Dardic Kasmīrī also shows it. There is no trace of it in Western Hindī now, but it seems to have occurred in Śaurasēnī, according to the testimony of Vararuci ('Prākṛta-prakāśa,' XII, 19), and is found in Pali. It can be well expected that some OIA. roots and words have been preserved in common in certain widely separated dialects, and lost in others contiguous to these.

79. The phonetic grounds for postulating a connexion between the North-western and Eastern groups of NIA., as being more intimate than that between these and the Midland group, are not convincing,—as phonetic peculiarities supposed to be shared only by the 'outer' groups are found to occur in W. Hindī as well. Again, in certain points, W. Hindī agrees with the Eastern languages: *e. g.*, OIA. initial « v- » occurs as « b- » in W. Hindī, E. Hindī and the Magadhan languages, whereas in Gujārātī Marāṭhī, Sindhī, and Panjābī it remains as « v- »; and in other points, the agreement is between W. Hindī and the Southern and Western speeches as against the Eastern ones: *e. g.*, the tendency to make « ai, au » into open « è, ò » [ɛ, ɔ] sounds. The 'outer' languages in their declinational system agree with the central language; only the circumstances of development were slightly different in Hindōstānī, the most important W. Hindī language, the speech which came under the influence of Persian more than any other. The conjugational system, again, manifests a uniform spirit in the North-west, in the South, and in the Midland; and it is only in the East that a new construction has been evolved. It may be assumed that the dialects which were the sources of the North-western and the Eastern groups possessed characteristics which were not present in those that gave rise to the Midland speech. But that does not warrant us in assuming *two* independent groups in the earliest period, as it might also be shown that the North-western and the Midland dialects show agreement in points where the Eastern group disagrees, and so on. The evidence of the older stages of IA. is against it. The Aśōkan Prakrits show three varieties of speech, differing from each other in phonetics and to some extent in morphology: North-western, South-western, and Eastern. (See pp. 44, 47, 54—61.) The differences between the North-western speeches, and those of the East, were profound in the oldest period of which we have records: if the North-western and the Eastern languages were specially connected, we should expect them to show greater agreement at an early stage. But the contrary is the case. Beyond assuming the possibility of a number of popular dialects, modern representatives of which have in some cases retained, in others dropped, some of their

words and forms (§ 32), there are no convincing proofs for the categorical subdivision of IA. into (1) a Midland group, of different origin from (2) a surrounding ring of 'outer' speech,—the first being Indo-Aryan *par excellence*, the immediate relation of Sanskrit, and the second being allied to Dardic.[1] From racial (anthropological) reasons, the North-western (Lahndī and Sindhī) speakers are entirely distinct from the speakers of the Eastern languages, whereas there is affinity between the former and those (at least among the upper classes) of the Midland. The division would appear to be into *Western*, and *Eastern*, the « Udīcya » and « Madhyadēśīya » on the one hand, and the « Prācya » on the other: the outstanding characteristic in these two groups within one IA. family being in the resistance to cerebralisation and in the retention of « r » in the Western group in the OIA. and early MIA. periods; and at the present day it is in the fact that the Western group preserves the passive construction in the past of the transitive verb, whereas the Eastern has made it active: and in both the cases, it is the West which has been the more conservative.

[1] Cf. A. Meillet, 'Introduction a l'E'tude comparative des Langues indo-européennes,' 5th ed., Paris, 1922: 'Il ne s'y trouve presque rien qui ne s'explique par la langue védique. Les documents du moyen indien donnent une idée du developpement de la langue mais ils ne permettent pas de supposer qu'il y ait jamais eu dans l'Inde à date ancienne un dialecte qui ait différé de celui que représente le védique autrement que par des détails d'importance secondaire.' (Pp. 37, 38.)

APPENDIX B

Points of Similarity between Indo-Aryan and Dravidian, showing probable Influence of the Latter.

80. A. *Phonetic.*

(a) Paucity of diphthongs. The avoidance of hiatus in Vedic and Sanskrit must have been maintained by the insertion of « ẏ, ẇ » between *udvṛtta* vowels, after the dropping of intervocal stops, and, rarely, of a nasal (in a compound word), in spoken MIA., down to NIA. times, although MIA. spelling (barring that obtaining in Jaina Ardha-māgadhī, where « ẏ » was used) does not ordinarily represent it. This euphonic insertion of the palatal and labial semivowels, in connection with front and back vowels respectively, and of « n », is characteristic of Dravidian. (In certain forms of very recent NIA., *e.g.*, Bengali, numerous diphthongs have been developed from the elision of the earlier euphonic glides).

(b) Comparative absence of spirants (see p. 37). The change of the Indo-Iranian spirant « ź (źh) » to the stop « j (jh) » might have been brought about in India in Dravidian surroundings. (But opening of the voiced aspirated stops « gh, jh, dh, bh », leading to their transformation to « h », seems to have characterised the basic dialect of the Rig-Veda speech, which in all probability was a western dialect contiguous to Iranian ; and Iranian favoured spirantisation : see p. 34).

(c) The occurrence of cerebrals. « ṭ, ḍ, ṇ, ḷ, ḻ » (the last = a cerebral fricative, [ɻ]) are peculiarly Dravidian sounds, and are not found in any other ancient IE. speech than Vedic and Sanskrit. In Modern Swedish, among New IE. tongues, however, « ḍ » has developed out of « r+d », which is paralleled by a similar cerebralisation in Old Māgadhī. (In Māgadhī, however, « r » always became « l », and « r » + dental stop > cerebral

stop was in all probability a case of « l » + dental stop > cerebral stop in OIA., due to indigenous influence). Then, there are cases of spontaneous cerebralisation in IA. from very early times. The pronunciation of intervocal « -ḍ- -ḍh- » as « ṛ, ṛh » in NIA., and possibly also in MIA., is found in Dravidian also.

(d) Insertion of short vowels by anaptyxis (« svara-bhakti, viprakarṣa ») in consonant groups, which is such a characteristic feature of MIA. and NIA. (*e. g.*, in words like « kilēsa, sinēha, harisa, ratana, sumiraṇa, parāṇa, barāmhaṇa » etc., etc.), is paralleled out in Dravidian (*e.g.*, Kannaḍa « barāmaṇa », Tamil « pirāmmaṇaṉ » = *a Brahman* ; Tamil « śinēgam = snēha, mittiraṉ = mitra, tiru = śrī, Kiruṭṭiṇaṉ = Kṛṣṇa, śandiraṉ = candra » etc. etc.). The general view is that Dravidian did not have consonant groups initially, and had only double consonants medially ; and this trait was imposed upon the Aryan speech in the MIA. Period. But J. Bloch contends (' Les Consonnes intervocaliques en Tamoul,' MSL., XIX, pp. 85 ff., translated in the IAnt., 1919, pp. 191 ff.) that in the Old Dravidian speech of several centuries B. C., groups like « tr-, dr- » existed initially as much as in IA. : the word « dramiḍa, draviḍa », with initial « dr- », being in all likelihood a true ' Old Dravidian ' word, slightly Aryanised, of which « tamiḷ » was a development in the Tamil language at a post-Christian epoch, through an intermediate form « *damiḷa », borrowed in Pali and in Old Sinhalese as « damiḷa », and occurring in a Greek transcription « *damirikē » > « damirice » (Latin) = « *damiḷakam » *the Tamil land* : simplification of the consonant groups was thus a phonological development which occurred parallelly in both Aryan and Dravidian. (In the matter of simplification of OIA consonant-groups by assimilation, which gave rise to MIA., it was probably internal, as it took place also in Italic, among other IE. languages : but here IA. reached that stage at least a thousand years before Italic ; contact with Dravidian, as well as the adoption of the Aryan speech by Dravidians early in the history of IA., had probably something to do with it.)

In other points of phonetics, *e.g.*, change of « c, j » to « ts, dz », of « s » to « h », the voicing of intervocal unvoiced stops, the retention

of a final vowel, etc., Dravidian influence has been postulated (cf. Grierson, 'Indo-Aryan Vernaculars,' BSOS., I, § 72). But in certain cases, the change was only normal: *e.g.*, modification of an intervocal « -k-, -t- » to « -g,- -d- »; but in certain tracts at least, early Dravidian influence is likely.

81. B. *Morphological*. :

(a) The most noteworthy thing is the gradual disuse of prepositions. All other IE. languages developed the *prepositions* as aids to the declinational system; and when the inflections died out, the prepositions took up their place, as in English and Persian, French and Bulgarian. Prefixes, or prepositions, as modifiers of the meanings of roots, still continue in the above languages. In Primitive IE., the preposition, in origin an adverb, came before or after the noun; but it is remarkable that the development of it in India, where it is not entirely suppressed, should be post-positional (as in Sanskrit); that and in late MIA. and NIA., a series of help-words of a different kind, the post-positions of nominal and verbal origin, should come in.

The declinational system of NIA., with its agglutinated words like « gaṇa; -kula > gulā; sarva>sab; mānava>māna; lōka> lōg; sakala » etc. for the plural, and with new post-positional affixes derived from nouns etc. like « madhya>mẽ, mã; kakṣa > kō; sthāma > ṭhãi; pārśva > pās; sahita >sẽ; *dita- > dā; kṛta- > kā; » etc., greatly resembles Dravidian. The use of verbal forms—participles and conjunctives—as post-positions in declension (*e.g.*, Bengali হইতে « haitē », লাগিয়া « lāgiyā », থাকিয়া « thākiyā », দিয়া « diyā », and similar forms in other NIA.), is a special point of agreement between NIA. and Dravidian (*e.g.*, Tamil « kattiyai-kkoṇḍu » *with a knife*, literally *having taken a knife*; « avan-ōḍu », from « oṭṭu » *touch*, = *with him*; Tamil « inru, ninru » *standing, having been* = Bengali and Gujarātī থাকিয়া « thākiyā » and « thakī », ablative post-position). (Cf. R. Caldwell, 'Comparative Grammar of Dravidian [3],' London, 1913, pp. 252 ff.; Julien Vinson, 'Manuel de la Langue tamoule,' Paris, 1903, §§ 28, 29.)

The absence of the dative-accusative case with the affix (« kō, kē, ku » in NIA., « -ku » in Dravidian) for neuter nouns is found in both the families.

The above are cases where we can look for Dravidian influence, in the *inherent principle of formation* only, quite legitimately. But in the development of NIA. post-positions and affixes, which took place towards the end of the 1st millennium A. C. and in the first centuries of the 2nd millennium, it would be too much to expect direct borrowing from Dravidian, or building up on the model of Dravidian, as it has been suggested in a number of cases by various scholars. Thus, *e.g.*, the NIA. « -k- » affix for the dative, as in W. Hindī « kō », Bengali « kē », Oṛiyā « ku », coming ultimately from the Skt. « kakṣa » during the late MIA. and early NIA. stages, has nothing to do with the similar Dravidian affix « -ku » : the agreement is a case of pure coincidence. Similarly, for the Bengali plural affixes রা, গুলা (গুলি) « -rā, -gulā (-guli) » (see p. 97), which first came into use probably as late as the 14th century, it would be extremely hazardous to suggest a Dravidian affinity, in the Tamil plural affixes « -ar, -gaḷ » for instance, notwithstanding the partial agreement between the two that in Bengali « -rā » is restricted to intelligent beings, or creatures to which intelligence is ascribed, and the Dravidian « -ar » is employed with reference to 'high-caste' nouns, *i.e.*, names of intelligent beings.

An adjectival treatment of certain cases is noted in both Dravidian and NIA. : *e.g.*, Bengali সোনার বাটী « sōnāṛ bāṭī » *cup of gold* = Tamil « po*n*-*n*-i*n* kuḍam » *gold vessel*. (This, however, is found in many other languages, and it cannot be insisted that there is a specially Dravidian influence here.)

(b) Absence of affixes in the comparison of the adjective in both NIA. and Dravidian. The OIA. affixes « -īyas -iṣṭha, -tara -tama » are lost, and comparison is denoted by employing the positive form of the adjective with the noun with which comparison is made, the latter being put in the dative or ablative or locative with some nominal or verbal post-position : *e.g.*, Bengali এর চেয়ে ভালো » ēṛ cēyē bhālō » *better than this*, lit *good, having looked at this* ; সবার মাঝে ভালো » sabāṛ mājhē bhālō » *best of all*, lit. *good in the middle of all*, etc. This is also the Dravidian way to indicate comparison. [Modern IE. languages

outside India have either retained the comparative and superlative affixes, *e.g.*, Persian « -tar, -tarīn », Armenian comparative affix « -kuin < -goĭn », Modern Greek « -teros, -tatos », Russian comparative affix « -jeĭšiĭ, -jêe », English « -er, -est », or employed words meaning *more* and *most* before the adjective in question, as in English, in French (« plus, le plus ») and other Romanic speeches, in Modern Greek (« pleon, o pleon »).]

(c) With the want of prepositions to modify meanings of verb-roots, both NIA. and Dravidian have developed the use, in a most curious and idiomatic way, of conjunctives and participles with an adverbial function, giving rise to what is known as the 'Compound Verb': *e.g.*, Skt. « ni + √sad », English *sit down*, Bengali বসিয়া পড়া « bâsiyā pārā » = literally, *having sat down, to fall*, Hindī « baiṭh jānā » = *having sat down, to go*; English *rub off*, but Bengali মুছিয়া ফেলা « muchiyā phēlā » = *having rubbed off, to throw*. Dravidian has this usage as well.

(d) An almost wholesale disuse of OIA. moods and tenses reducing the verb-system of Aryan to an indicative present form (and in some cases an indicative future), a past participle forming the past, a present participle, a conjunctive, and some verbal nouns, and a passive indicative present. A similar decay has taken place in Iranian. But the whole principle of phrase-building tended gradually to become nominal or adjectival from verbal, in IA.; *e.g.*, the normal OIA. (Vedic) for *he went* would be « sō 'gamat » or « sō 'gacchat », or « sa jagāma »; but in MIA. and NIA., this verbal construction is changed to the adjectival: « sō gadō, sō gao, śē gaḍē, *śi gaẏilla, su gaü, so gaaü » etc., = Skt. « sa gataḥ », whence NIA. « sō gayau, gayā » (W. Hindī), « sē gēlā » (Bengali) etc.: and herein there is a possible influence of Dravidian, for in Dravidian the verb has an adjectival force, it being really a noun of agency with reference to the subject. (See LSI., Vol. IV, p. 295.) The Dravidian tenses developed out of participles; and in the development of Aryan, we find a gradually increasing employment of the participle forms, to the exclusion of the IE. finite verbal forms. The periphrastic future of Sanskrit, « kartā » = *a doer* for « kariṣyati » *he will do*, « kartâsmi » *I am a doer* = « kariṣyāmi » *I shall do*, is Dravidian in principle. The compound affix « -ta-vant- », rare

in the Vedic speech, may be compared with the Dravidian (Tamil) « -d-avan » : Skt. « kṛta » *done*, « kṛta-vant- » *one who has done* ; cf. Tamil « śey-du » *having done*, « śey-d-avan » *having done he = one who has done*. (LSI., Vol. IV, pp. 280-281). The structure of the modern Magadhan (Bengali, Oṛiyā, Maithilī, Magahī, Bhōjpuriyā) past and future verb, in showing the root + past or future (passive) participle affix + personal pronominal affix, affords a remarkable parallel to Dravidian. The importance attached to the conjunctive with the sense of *having performed or finished an act*, and its lavish use, *e.g.*, Tamil « koṇḍu vā » , NIA. (Bengali) লইয়া আইস, নিয়ে এস « lâiyā āïsâ, niē ēsō » (Hindī « lāo » may similarly be « lē + āo »),= *having taken, come*, to mean simply *bring*, is common to both Dravidian and NIA., and is undoubtedly an idiom borrowed by Aryan from Dravidian, very early in the history of Aryan.

The inflected passive of OIA. is lost to, or considerably restricted in NIA., which, like Dravidian, forms passives by means of compound verb constructions, in which the roots meaning *to go, to fall, to suffer, to eat* etc. are auxiliaries. Herein the idiom is probably Dravidian.

(e) Onomatopoetic formations on a lavish scale are a characteristic of both NIA. and Dravidian. (Cf. Rabīndra-nāth Tagore, 'Śabda-tattva,' Calcutta, pp. 22 ff. ; S Milne, 'Bengali Grammar,' Calcutta, 1913, Chap XX; Kellogg, 'Hindī Grammar^2,' § 849; Khansaheb and Sheth, 'Hints on the Study of Gujarati,' Surat, 1915, § 255, etc.: G. U. Pope, 'Tamil Handbook^7,'§ 273 ; A. H. Arden, 'Progressive Grammar of Telugu,' §§ 686, 687, etc.). Vedic is remarkably poor in onomatopoetics ; as we come down to MIA., and NIA., the number and force of onomatopoetics is on the increase. (Cf. B. C. Mazumdar, 'A Study of some Onomatopoetic Deśī Words,' JRAS., 1905, pp. 555-557; R. Morris, 'Pali Miscellanies—Some Onomatopoetics from the Jātakas,' Transactions of the Philological Society, London, 1885-1887.)

[Onomatopoetic words and jingles, however, are characteristic of Kōl as well : cf. P. O. Bodding, 'Materials for a Santali Grammar,' Part I, Dumka, 1922, pp. 31, 32. It may be that in this matter there is also Kōl influence on Aryan.]

(f) Presence of 'echo words.' A word is repeated *partially* (partially in the sense that a new syllable, the nature of which is generally fixed, is substituted for the initial one of the word in question, and the new word so formed, unmeaning by itself, echoes the sense and sound of the original word), and in this way the idea of *et cetera, and things similar to or associated with that,* is expressed. This is found in Modern Indo-Aryan and in Dravidian. *E.g.*, Bengali ঘোড়া টোড়া « ghōrā-ṭōrā » Maithilī « ghōrā-tōrā », Hindōstānī « ghōṛā-uṛā », Gujarātī « ghōṛō-bōṛō » Marāṭhī « ghōṛā-biṛā », Sinhalese « aśwayā-baśwayā » *horses etc., horses and other animals,* or *horses and equipage:* cf. Tamil « kudirai-kidirai », Kannaḍa « kudire-gidire », Telugu « gurramu-girramu ». So Bengali জল-টল « jal-ṭal » = *water and things, refreshment,* = Hindōstānī « jal-ul », Marāṭhī « jal-bil », Tamil « taṇṇīr-kiṇṇīr », Kannaḍa « nīru-gīru » ; Bengali দাঁত-টাঁত « dāt-ṭāt », Sinhalese « dat-bat » = *teeth etc.* In the formation of these 'echo words,' Bengali takes ট « ṭ- », and retains the vowel of the original word ; Maithilī takes the dental « t- », keeping also the original vowel ; Hindōstānī substitutes « u- », and Marāṭhī « bi- », for the whole syllable ; and Gujarātī takes « b- » for the original consonant ; Sinhalese similarly has « b- » with original vowel ; [the agreement of Sinhalese with Gujarātī and Marāṭhī in this matter is to be noted in connection with what has been postulated about the origin of Sinhalese : see pp. 15, 72-73] ; and the Dravidian languages substitute the syllable « ki-, gi- » for the initial one of the original word. (These 'echo words' are different from compounds like কাপড়-চোপড় « kāpaṛ-cōpaṛ » *clothes etc.*, or চাটী-বাটী « cāṭī-bāṭī » *pots etc.*, where compare চোপড় « cōpaṛ » with চুপড়ী « cupaṛī » = *basket*, and চাটী « cāṭī » = *earthen pot* : in such compound words, one element is usually an obsolete word, and not an unmeaning echo-form, as in the cases noted above.)

82. C. *Syntactical.*

Syntax is regarded as being of greater importance in linguistics, as an inherited peculiarity, than phonetics or morphology, which are easily acquired or modified. It is in syntax that Indian Dravidiandom and Aryandom are one. A sentence in a Dravidian language like Tamil or

Kannaḍa becomes ordinarily good Bengali or Hindī by substituting Bengali or Hindī equivalents for the Dravidian words and forms, without modifying the word-order, but the same thing is not possible in rendering a Persian or English sentence into a NIA. language. The most fundamental agreements are thus found between NIA. and Dravidian, and all this began from early MIA., as is seen from a comparison of the syntax of Pali and the Prakrits with that of the modern vernaculars. 'The syntactical arrangement of a Tamil sentence (*vākkiyam*, Skt. *vākya*) is in many respects similar to that of an ordinary Sanskrit sentence. As a rule, first comes the subject with its attributes, second the object with its enlargements, third the extension of the predicate, and lastly the verb. As in classical Skt., so in Tamil there is the usual predominance of gerunds and the clauses formed by them, of the relative participles which take the place of relative clauses, and of the *oratio recta* instead of the *oratio obliqua*.' (M. de Zilva Wickremasinghe, 'Tamil Grammar,' London, 1906, p. 74; cf. also LSI., Vol. IV, p. 281.)

The omission of the copula is preferred by both IA. and Dravidian: *e.g.*, Bengali এটা আমাদের বাড়ী « ē-ṭā āmādēr bāṛī », Kannaḍa « idu namma mane » *this* (*is*) *our house*; মানুষটী ভাল « mānuṣ-ṭī bhālā », Tamil « manīdan nallavan » *the man* (*is*) *good*.

The most remarkable similarity in idioms is found in both: *e.g.*, use of a conjunctive meaning *having said* (Bengali বলিয়া « bāliyā », E. Hindī « bōl-kē », Marāṭhī « mhaṇūn », Sinhalese « kiyā », Tamil « enru », Kannaḍa « endu », Telugu « eni »), in the sense of *as, because*, recapitulating and introducing a conditional clause; employment of the infinitive for the polite imperative, *e.g.*, W. Hindī « yah kām karnā », Kannaḍa « i kelasa māḍuvadu » *do this work*; use of the verb *to give* in forming the 'imperative' or permissive mood, *e.g.*, for Skt. « vadāni » *let me say*, cf. Bengali আমাকে বলিতে দেও « āmākē bālitē dēō », Hindōstānī « mujhē bōlnē dō », Telugu « nannu ceppan-iyy ». (In connection with this, it must be admitted that a similar idiom is found in other modern IE. languages outside India, *e.g.*, English *let*). IA. does not possess the above points of similarity with IE. tongues outside India, but with Dravidian;

and unquestionably herein we have the impress of the Dravidian mind on IA.

83. D. *Glossic.*

The Aryan speech has been borrowing words from the Dravidian ever since the former came to India. The Brahuis are a Dravidian-speaking tribe outside India: it is just possible that there were other Dravidian speakers in Iran, with whom contact was possible for the Aryans (Indo-Iranians) even outside India.

Caldwell, Gundert, Kittel and others have discussed the nature and extent of Dravidian loan-words in Indo-Aryan. A great many of the *dēśī* words, of which counterparts are not found in other Indo-European speeches, are probably Dravidian in origin (many are also Kōl, and possibly even pre-Dravidian and pre-Kōl). (Cf. F. Kittel, 'Kannada Dictionary,' Mangalore, 1894, Introduction; R. Caldwell, 'Comp. Gram. of Drav. ^{3},' pp. 565 ff.; Sten Konow, 'Notes on Dravidian Philology,' IAnt., 1903, pp. 449 ff.; LSI., Vol. IV, pp. 276 ff.; Grierson, 'Indian Vernaculars' in the BSOS., I, iii; A. A. Macdonell, 'Vedic Grammar,' p. 33; P. T. Srinivas Iyengar, 'Life in Ancient India in the Age of the Mantras,' pp. 6, 8, 15, 125, 126; F. E. Pargiter, 'Vṛṣākapi and Hanumant,' JRAS., 1913, p. 400; K. Amrita Row, 'Dravidian Elements in the Prakrits,' IAnt., Feb. 1917; 'Notes on some Hindi words from the Dravidian,' IAnt., Jan. 1916; B. C. Mazumdar, 'Bāṇgālā-bhāṣāy Drāviṛī Upādān,' VSPdP., 1320; D. R. Bhandarkar, 'Lectures on the Ancient History of India,' 1918, Calcutta University, pp. 26-27.)

APPENDIX C

Old Bengal Place-Names from Inscriptions.

84. [1] Dhānāidaha Copper-plate Grant of Kumāra-gupta: North Central Bengal, c. 432-433 A. C. (R. G. Basāk, 'Sāhitya,' Pauṣa and Caitra, 1323).

« Kṣudraka » Village; « Khādāpāra » or « Khāṭāpāra », a *viṣaya* or district. The reading « Khāṭā-pāra » would be better; the word would mean *Creek-ford* or *Creek-ferry*: « khāṭā » for « *khāḍā »: cf. New Bengali খাড়ী « khāṛī » *channel*; a « Khāḍi-viṣaya » in the same Puṇḍra-vardhana *bhukti* or province is mentioned in the Barrackpur grant of Vijaya-sēna (§ 106); the word « khāṭikā » is found in the Khalimpur grant of Dharma-pāla (§ 90) and in the Govindapur grant of Lakṣmaṇa-sēna (§ 108); and « khāḍī » also, in the Tarpaṇ-dīghī grant (§ 108).

85. [2] Five Dāmōdarpur Copper-plates of the Gupta Period: North Central Bengal. (R. G. Basāk, Ep. Ind., XV, No. 7, pp. 113 ff.)

(i) 443-444 A. C.: Village « Ḍōṇgā »: [« ḍōṇgā » a *dēśī* word = *high land, high,* occurring as ডাঙ্গা « ḍāṇgā », টং « ṭāṇ » *high land.* Derivatives from this word are probably Bengali ডাগর « ḍāgar » *big, grown-up,* Assamese « ḍāṇgariyā » *high one, Sir,* Bengali টেঙ্গরা, টাঙ্গরা «ṭēṇgaṛā, ṭāṇgaṛā » *upland* (as in হেঁটা টেঙ্গরা « hēṭā-ṭēṇgaṛā » *low and high, uneven*; cf. « ṭēṇkarī » in § 94). This *dēśī* word occurs in other NIA.: *e.g.,* W. Hindī « ḍuṇgar » *high place, hill* (cf. the words *ḍāṁg* and *ḍoṁgar* in the 'Index Etymologique' in Jules Bloch's 'Formation de la Langue marathe.')]

(iii) 476-495 A. C.: Villages « Palāśa-vṛndaka, Caṇḍa-grāma, Vāyi-grāma »; the last = « *Vāpī-grāma » = *Mer-ton* (?): cf. « Vāpikā-grāma » in the Tipperah Inscription of Lōka-nātha (§ 88), and « Rōlla-vāyikā » in the Ashrafpur grant of Dēva-khaḍga (§92).

(v) 533-534 A. C. Villages « Svacchanda-pāṭaka » (cf. Bengali পাড়া « pāṛā » *neighbourhood*; a word found in Bengal, Chota Nagpur and Orissa),

« Lavaṇga-sikā », « Sāṭu-vanâśramaka », « Paraspatikā », « Purāṇa-vṛndikā-hari » (where « -hari » <« *-gharia, gṛhika »; cf. « Vṛndaka » above).

86. [3] Three Copper-plate Grants from East Bengal: 6th century A. C. (F. E. Pargiter, IAnt., July 1910).

(i) Villages « Hima-sēna-pāṭaka », « Trighaṭṭikā » (Sanskritised from a form like « *Tighaṭṭia » = Modern Bengali তেঘাটী « *Tēghāṭī »); « Śīla-kuṇḍa » (probably for « Śila-kuṇḍa » *Rock-hill*, cf. Bengali কুঁড় « kũṛ৪ » *heap, mass, dunghill*: a *dēśī* word? = Telugu « koṇḍa » *hill, rock*: see pp. 66, 67. The editor of the inscription suggests the meaning as being *tank*).

(ii) Village « Navyavakāsikā » (any connection with « -sikā » as in « Lavaṇga-sikā » in [2] (v)? or « navya + avakāśikā » = *New Channel, for passage of water*?).

(iii) Village « Dhru-vilā-ṭi » = « *Dhruva-bila-vāḍī, -vāṭī » where « bila-vāḍī » = *house or village by the marsh (belonging to Dhruva)*?

87. [4] Inscription of the time of Jaya-nāga of Karṇa-suvarṇa: Central Bengal, 6th-7th century. (Unpublished: text and translation obtained through the kindness of Dr. L. D. Barnett, who is editing it for the Ep. Ind.)

« Ãudumbara » District (*viṣaya*); « Kutkuṭa » Village (Sanskritised from « kukkuḍa »?); Village « Amala-pāutika »; Village « Vappa-ghōṣa-vāṭa » (« Ghōṣa-vāṭa- » would give a New Bengali form like ঘোষাড়া, or ঘোষাড়ী « *Ghōṣāṛā, -ṛī »: cf. গোয়াড়ী « Gōāṛī » from « Gōpa-vāṭikā »); Village « Vakhaṭa-Sumālikā » (« Vakhaṭa », Sanskritised from « *Bahaḍa- », now found in Bengali as বহড়া বয়ড়া « Bâhâṛā, Bây৪ṛā »: < ?); « Gaṇgi-nikā », River (see § 89).

88. [5] Tipperah Grant of Lōka-nātha: 7th century (R. G. Basāk, Sāhitya, Kārttika, 1321).

District (*viṣaya*) of « Suvvuṇga (Subbuṇga?) »; « Kaṇā-mōṭikā » Hill (for « *kaṇā-mōḍia » = New Bengali কানামুড়ী « *kānā-muṛi » *Edge-twist*, « karṇaka + √muḍ, = Skt. √muṭ », *dēśī* root = *fold, wrap, twist*).

Villages « Paṇga » and « Vāpikā »: « Paṇga = ? paṇka » *clay from bottom of tank*: cf. the Faridpur village পাংশা « Pāṇg৪śā » = « *Paṇgâvāsaka » *abode of Panga* (?).

Village « Tāmra-pathara-khaṇḍa » = *Copper-stone district* (for « *Tamba-patthara- »).

89. [6] Nidhanpur Copper-plates of Bhāskara-varmman of Kāmarūpa : Central Bengal, 7th century. (Padma-nāth Bhaṭṭāchārya, Ep. Ind., XII, pp. 65 ff.)

« Gaṇgi(a)nikā » river = গাঙ্গিনী « Gāṇginī », modern Jalangī, branch of the Ganges : found also in [4].

[Personal names : « Khāsōka » the tradesman ; « Sōkya-kāra Kāliyā » *the engraver Kāliyā* (cf. New Bengali : সেকরা « sēkṛā » *goldsmith*, for which see *Appendix D, Vocabulary of Bengali* : Foreign Words in Bengali) ; « Śrī-kṣi-kuṇḍa » ; the Kāyastha « Dundhu-nātha ». « jāṭalī » tree = Modern Bengali জারুল « jārul(i) ».]

90. [7] Khālimpur Grant of Dharma-pāla: North Central Bengal, 1st quarter of the 9th century (Akshaya Kumār Maitra, 'Gauḍa-lēkhamālā' ; R. D. Banerji, 'The Pālas of Bengal,' ASB. Memoires, V, No. 3).

The territory (*maṇḍala*) of « Vyāghra-taṭī » (= বাগড়ী « Bāgṛī » ; see footnote, p. 74) ; the district (*viṣaya*) of « Mahantā-prakāśa » ; the villages of « Krauñca-śvabhra » (cf. « Haṁsā-koñcī » in [19]), « Mā̃jhā-śāmmali » and « Pālitaka » ; the territory of « Āmra-ṣaṇḍikā » *Mango-grove* ; the district of « Sthālikkaṭa » ; Village « Gō-pippalī » ; Village « Uḍragrāma » ; « Puṇārāma-Vilvaṅgârdha » stream ; « Nala-carmmaṭa » (= « *cammaḍa » = চামড়া « cāmṛā » *skin* in New Bengali) : « Nāmuṇḍikā-hēsadummika (?) » ; « Vēdasavilvikā (?)» ; « Rōhita-vā̃jī » (for « *Rōhia-bāḍī » = New Beng. রুহিবাড়ী « Ru(h)i-bāṛī » *Carp-fish-town*) ; « Piṇḍāra-viṭi-jōṭikā » = ? *the Channel of the House of the Piṇḍāra* (*tree*) ; « Uktāra-yōṭa » for « *Uttāra-jōḷa » *Stream-crossing* (?) ; « Viṭi-dharmāyō-jōṭikā » ; « Kāṇā-dvipikā » *Blind Isle* (?) *Edge Isle* (?) ; River « Kōṇṭhiyā » (cf. « Kōṇṭō-hāḍā » in § 102) ; « Jēnandāyikā » ; « Vesānikā-khāṭikā » (= « *khā̃ḷia » = New Bengali খাড়ী « khāṛī » *creek* : see [1]) ; « Haṭṭikā » (= New Bengali হাটী « -hāṭī » *market*) and « Tala-pāṭaka », village quarters (cf. « Tala-pāṭaka » in § 92, and « Haṭṭa-pāṭaka » in § 94).

[Personal names : « Dēvaṭa, Viṭaka, Bhōgaṭa, Subhaṭa (= Śubhaṭa ?), Tātaṭa, Vapyaṭa (= Vappaṭa) ; Dēḍḍa-dēvī ».]

91. [8] Tezpur (Assam) Rock Inscription, on the Brahmaputra: 1st half of the 9th century. (H. P. Śāstrī, JBORS., 1917, Part iv, pp. 508 ff.)

« Hārupapesvara-pura » ; « Nākka-jōsī » (cf. « Nōkka-, Nēkka- » in § 105); « Avara-parvata » = *Abor Hills*?.

[Personal name: « Lāha(i)lī-jhā », according to H. P. Śāstrī, = *Lāhiṛī Jhā* = the Varêndra Brahman surname লাহিড়ী « Lāhiṛī » + « jhā < adhyāpaka », or « ōjhā < upâdhyāya » (?). Words: « buṭṭika » for « * buḍia » = New Bengali বুড়ী « buṛi » *score*; « pravista », with dental « -st- », for « praviṣṭa », showing Assamese confusion of the cerebrals and dentals as early as the 9th century.]

92. [9] Ashrafpur Grants of Dēva-khaḍga: East Bengal, 1st half of the 10th century. (G. M. Laskar, Memoires of the ASB., I, No. 6, p. 86 ff.; R. D. Banerji, *op. cit.*, p. 67.)

Villages « Tala-pāṭaka; Dara-pāṭaka; Datta-kaṭaka; Markaṭâśī-pāṭaka (= *Markaṭâvāsika-pāṭaka: *Monkey-home-village*?); Nava-rōpya; Para-nāṭana; Dvārôdaka; Vvāra-mugguka (= « *Dvāra-mudguka », for a vernacular *Bāra-mug(g)ua [?]); Cāta; Jaya-karmânta-vāsaka; Ta(ā?)lyōdyāni-kara-taralā (?); Kōdara-cōraka; Palaśata; Śiva-hradikā-sogga-vargga; Śrīmēta; Para-nāṭana-nāda-varmmi (?); Rōlla-vāyikā; Ugra-vōraka (= vōla, pōla *field* ?); Tisanāda-jaya-datta-kaṭaka ».

93. [10] Nowgong Copper-plate of Bala-varmman of Prāgjyōtiṣa, c. 975. (A. R. Hoernle, JASB., 1897, pp. 285 ff.)

The word « koppam » *well* may be compared with Bengali কোপ « kōpa » *slash, dig*, কোপা কুপী « kōpā, kupī » *a vessel*.

94. [11] Sylhet-Bhāṭērā Grant of Gōvinda: 10th century? (Mm. Padma-nāth Vidyāvinōda in the VSPdP., 1328, pp. 175 ff.; Proceedings of the ASB., 1880, pp. 141 ff.)

The readings (as in the Proceedings of the ASB.) are extremely problematic, but in this inscription we find quite a long list of names of villages and of rivers, etc. The following are easily made out:

« Haṭṭa-pāṭaka; Cāṭā-paḍā; Vaḍa-gāma; Maharā-pura (= present day Maurā-pur); Haḍhī-thāna (= sthāna); Dēgigāna(ma ?); Navapañcānē

(=«Vara-pañcāla», the correct reading, = the present-day Baram-cāl, Brahma-cāl); Śiḍḍava; Amanāṭa; Guḍāvayīka; Kāṭā-bācha (Village?); Yithāyi-nagara; Yōḷātithārka (=যোড়া « jōṛā » *pair*); Bālūsī-gāma; Nava-chādī; Kaḍḍiyā; Savagā-nayī (=River Savagā); Ghaṭī (= *ghaut*); Kāniyānī (Kāliyālī? river); Yēgamya-gaṇiyā (?); Thava-sontī (*arrested stream* (?): « sthāpa-srōtas + ikā »: cf. Modern Bengali থো + সোঁত «√thō + sōtā < śonta [Old Bengali] < MIA. śonta < OIA. srōtas») ; Bhāskara-ṭēṇkarī (=Bhāskara Hill? cf. § 85); Nāṭayāna (= thāna? Village); Anī-kāthī, Āḍāna-kāthī (« kāthī = kāṭhī », showing confusion between cerebrals and dentals in the old speech of Sylhet? cf. New Bengali কাঠী « kāṭhī » in village names, §§ 97, 109); Bhōgāḍatta (?); Sāta-kōpā (= *Seven Springs*? cf. § 93); Cēdgambuḍīka (?); Naḍa-kuṭī-gāma; Haḍī-gāṇga (gāṇga: cf. New Bengali গাঙ্গ « gāṇgā » *stream*); Dhana-kuṇḍō-ḍī; Pōchāniyā; Bhāṭa-paḍā; Chaḍhā-thānā; Haḍḍipa-gṛha (?); Piāpi-nagara; Sihāḍava-grāma»: besides a number of other *tadbhava* and *dēśī*-looking names, which cannot be read properly or distinguished.

95. [12] Bāṇgarh Grant of Mahī-pāla: 9th year = end of the 10th century: (R. D. Banerji, *op. cit.*, p. 76; 'Gauḍa-lēkha-mālā').

« Gōkalikā-maṇḍala » (= Gō-kavalikā?); Villages « Cūṭā-pallikā, Karaṭa-pallikā, Hasti-pada, Cavaṭī » (the last = চটী « cāṭī » *inn, serai*; see p. 67).

96. [13] Bālâditya Inscription of the time of Mahī-pāla: 11th year. ('Gauḍa-lekha-mālā.')

Village « Tailâḍhaka » = New Bengali তেলাড়া « Tēlāṛā ».

97. [14] Rāmpāl Grant of Śrī-candra-dēva: East Bengal, 1st half of the 11th century (R. G. Basāk, Ep. Ind., XII, pp. 136 ff.).

« Nānya-maṇḍala »; Village « Nēha-kāṣṭhi » (= « snēha-kāṣṭhikā »?): cf. the affix কাঠী « kāṭhī » in village names in South-west Vaṇga: = *wood, forest* (§ 109).

98. [15] Gauhāṭī Copper-plate of Indra-pāla of Prāgjyōtiṣa; c. 1050 A. C. (A. R. Hoernle, JASB., 1897, pp. 113 ff.).

« Mākkhiyāna-villa » = *beel* (marshy lake) of the *Makkhāna* tree (?): « Kuntavita-khambhavā (?) » (= ? খাম্বা « khāmbā < khambhā < OIA.

skambha-, stambha- » *pillar*) ; « Makuti-Makkhiyāna-hasī- (?) » ; « Kuntavita-lākkhyavā (?) » ; « Kāśī-pāṭaka » Village ; « Svalpadyati (?) » ; « Digumma (= dvi-gulma ?) » river.

99. [16] Silimpur Inscription of Jaya-pāla of Kāma-rūpa : 11th century (R. G. Basāk, Ep. Ind., XIII, pp. 283 ff.).

Villages « Bāla-grāma, Śirīṣa-puñja, Kuṭumba-pallī » ; « Tarkārī, Śīyambaka », Districts or Villages ; « Śakaṭī » river ? ; « Vaicunda » tank.

[Personal names : « Sāhila » ; « Kaliyavvā = *Kali-parvā » and « Nitulā » , female names.]

100. [17] Bhaṭṭa Bhava-dēva Inscription of Bhuvaneshwar : 11th century (F. Kielhorn, Ep. Ind., VI, pp. 203 ff.).

« Hastinī-bhiṭṭa, Siddhala, Vandya-ghaṭī » , villages in West Bengal.

[Personal (female) name : « Sāṇgōkā » .]

101. [18] Belābō Grant of Bhōja-varmma-dēva : East Bengal, 11th century (R. G. Basāk, Ep. Ind., XII, pp. 37 ff.).

« Adhaḥ-patana-maṇḍala » ; « Kāuśāmbī-Aṣṭagaccha » (= « Āṭha-gāchā » *Eight trees*) subdivision ; Village « Upyalikā, » (« *Uppalikā = Utpalikā? »).

102. [19] Kamaulī Grant of Vaidya-dēva of Assam : latter part of the 11th century (A. Venis, Ep. Ind., II, pp. 348 ; ' Gauḍa-lēkha-mālā ').

« Haṅsā-koñcī » district (= « Haṅsa + krauñca » : cf. « Krauñca-śvabhra » in § 90) ; « Vaḍā-, Vāḍā-viṣaya » ; Villages « Śānti-, Santi-vaḍā » *Peace Village*, occurring also as « Santi-pāṭaka » ?. « Mandara » Village ; « Kaṅsa-pala » (= « -pōla » ? *Bell-metal field*) ; Dig(h)-dāṇḍi-dharā » Village ? (« dāṇḍi-dharā » = ? *Holding the high road* : cf. Oṛiyā « dāṇḍā » *main road of a village* ; cf. also « Lacchu-vaḍā » below ; « digh » = « dīrgha » *long* ? or « dīrghikā » *lake* ? or « dik, diś » *direction* ? : or any connection with New Persian « dih » ? [< Old Persian « dahyu » = *country*, Skt. « dasyu »], found in New Bengali as দিহি, ডিহি « dihi, ḍihi » ; Persian words were already being adopted in MIA. : see later, *Appendix D*, Vocabulary of Bengali ; see also §§ 104, 105) ; Village « Siṇgiā-dhara » = « śṛṇgika- » ; « Lēṇga-vaḍā » = ? ' *Shank-ham* ' ; « Kōṇṭu-vāḍa, Kōṇṭō-hāḍa » = ? ; « Navadharā » *youthful, graceful* (cf. New Bengali নধর « nādhārṛ < navadhara ») ; Villages « Śira-vaḍā » , « Śila-guḍi » (see p. 66) ; « Jaya-rāti-pōla » ; « Uṇai-pōla »

'*Spring-field*'? (cf. New Bengali উনুই < উনই « unui, unāï » *spring, well* < « unna—√ud, und » *flow*); « Pipā-muṇḍā » = ?; « Ajhaḍā-cau-bōla » =? *Treeless four fields*; « Vuḍhi-pōkhiri » *old lake*, or *lake of the Old Woman*; « Kulā-cāpaḍi » *Pond-hostelry village*; « Nai-pōśṛṇgārayō (?) » (« nai = naī = nadī » ?); « Lacchu-vaḍā » = ? '*Stral-ham*' (« lacchu » = Middle Bengali লাছ « lācha », MIA. [Māgadhī] « lacchā » = Skt. « rathyā » *street*) Village; « Ghāṭa-campaka »; « Vēlāvanīpaṭā-nava-pala (?) »; « Dhravōlaya » (= « Dhru-vōla? Dhruva-vōla? »); « Helā-vaṇā-muṇḍa » *Head of the Helā wood*; River « Naḍa-jolī » (= *Reed stream*, Skt. « nala », or *flowing stream*, cf. Bengali নড় « √nāṛ » *move*).

103. [20] Manahali Grant of Madana-pāla-dēva: c. 1108: North Central Bengal ('Gauḍa-lēkha-mālā;' N. N. Vasu, JASB., 1900, i, pp. 66 ff.; R. D. Banerji, *op. cit.*, p. 104).

« Halāvartta Maṇḍala »; Village « Kāṣṭhā (Kōṣṭha?)-giri »; Village « Campā-hiṭṭhī » (= *Champac Village*, New Bengāli চম্পটী « Campaṭī »).

104. [21] Inscription of Īśvara-ghōṣa of Ḍhēkkarī: West Bengal, 12th century (A. K. Maitra, 'Sāhitya,' Vaisākha and Jyaiṣṭha, 1320; R. D. Banerji, 'Bāṇgālār Itihās,' Vol. I, pp. 301-302).

« Ḍhēkkarī » town = New Bengali ঢেকুর « Ḍhēkur »; « Piyōlla Maṇḍala »; « Gālli-ṭipyaka Viṣaya » (= « *Gāli-ṭipā »: ? « √gal, gāl » *flow, exude* + « √ ṭip » *drip*); « Digghāsōdīyā » Village (= ? « dīrgha + āvāsa + dvīpaka »; for « dig- », see § 102, § 105).

[Personal name: « Nivvōka-śarmman ».]

105. [22] Copper-plate Grant of Dharma-pāla of Prāgjyōtiṣa: 12th century (Padma-nāth Bhaṭṭāchārya, 'Rangpur Sāhitya Pariṣad Patrikā,' X, No. 2, 1322 San).

Village « Khyāti-puni » (= « khyāti + puṇya »?); Village « Digḍōla » (for « dig- », see § 102, 104); « Pūraji Viṣaya »: « Nōkka (Nēkkā)-ḍēvvarī-pāla (?) »; « Gō-vāḍa-bhōga-ali(sa)nā (?) »; Village « Khaggāli » (= *Reed-bank*? « khaḍga > khagga », whence New Bengali খাগড়া « khāgaṛā » *reed*, + « āli » *embankment*); « Camyala-jōpī » river (= « cammala-jōlī? cammaḍa-jōlī? » *Skin stream?*); « Sovvaḍī » tank; « Jau-galla » river = *Molten Lac* (« jau = jaü < jatu » *lac* + « galla », cf. New Bengali গল « √gāl »

flow, melt, গালা « gālā » *molten stuff, molten lac, lac-stick* or *-cake*); « Nēkkā-dēulī » (cf. দেউল « deul < dēva-kula » *temple*); « Sik(ph?)-gaḍi-jōlī »; « Vadijjuratibhūḍī (?) »; « Nēkka-śarmmā »; « Avañci, -ca (?) »; « Thaïsā-ḍōbbhi-cākkōjāṇa (?) » (« ḍōbbhi » : cf. New Bengali ডোবা « ḍōbā » *puddle*); « Dijamakkā-jōlī »; « Nōkka-naḍā ». (« Nōkka, Nēkka » = ?; cf. « Nākka », § 91, also in an Assam Inscription); « pārali » = পারুল « pārul(i) » = pāṭali tree.

[Personal name—« Mānnō-satka » = *belonging to M.*].

106. [23] Āmgāchi Grant of Vigraha-pāla III: North Central Bengal, second half of 11th century. (R. D. Banerji, VSPdP., 1323, pp. 233 ff.)

Village « Brāhmaṇī » in Puṇḍra-vardhana *bhukti*, Kōṭi-varṣa *viṣaya*; « Krōḍañci » district ?; Villages « Matsyāvāsa, Chatrā, Pōsalī ».

[Personal name: « Khōdula-dēvaśarmman ».]

107. [24] Barrackpur Grant of Vijaya-sēna; 12th century (R. D. Banerji, Ep. Ind., XV, pp. 279 ff.)

« Kāntī-jōṇga »; « Ghāsa-sambhōga Bhāṭṭa-vaḍā » Village; « Khāḍi Viṣaya » (see § 84); « Tikṣa-haṇḍa » marsh.

[Personal name—« Śālāḍḍa (Śālāḍhya ?)-nāga »].

[25] Sītā-hāṭī Grant of Ballāla-sēna: Uttara Rāḍha or Central Bengal: early 12th century. (A. K. Maitra and R. G. Basāk, 'Sāhitya,' Kārttika and Agrahāyaṇa, 1318; R. D. Banerji, Ep. Ind., XIV, pp. 156 ff.; Banwārī-lāl Goswāmī, 'Pravāsī' for Phālguna, 1317.)

Administrative district (*śāsana*) of « Khāṇḍayilla » (= New Bengali খাঁড়ুলে « Khāṛulē ») ; *ibid.* of « Nāḍīcā, Ambayillā, Naḍḍīnā, Jala-sōthī, Mōlāḍandī » (present-day মুড়ন্দী, মুড়ন্দী « Muṛundī < Muṛandī » ; « Jala-sōthī » = « *jala-sōntī » ? *water stream*) ; « Āūḍā-gaḍḍi (? Āūhāgaḍḍiā), Sura-kōṇā-gaḍḍiā-kiyōttarāli, Simāli, Tarāli, Kuḍambamā »; Village « Vālla-hiṭṭā » (= বালুটে « Bāluṭē » in New Bengali) ; « Siṇgaṭiā » river.

[Personal name : « Ōvāsudēva-śarmman »].

108. [26] Five Grants of Lakṣmaṇa-sēna : late 12th century.

(i) Tarpaṇ-dīghī Grant of Lakṣmaṇa-sēna (R. D. Banerji, Ep. Ind. XII, pp. 6 ff.).

« Nica-ḍahāra » tank (= « *nīca-ḍahara » *low and deep* : cf. Bengali দহর, ডহর « dâhârɨ, ḍâhârɨ » *deep*) ; « Nandi-Hari-pā-kuṇḍī »? *spring of Nandi Hari-pāda ;* « Mollāṇa-khāḍī » (« mollāṇa = « mūlānām », or « mṛṇāla » *lotus stalk* : cf. Caryā 10 : মোলাণ = *lotus stalk* ; found also in dialectal Bengali. R. D. Banerji suggests that the word is the Perso-Arabic « mullā », and seems inclined to see in this word an indication of the existence of Musalmāns in 12th century Bengal ; which is not very unlikely, as we have traditions of the advent of Moslem preachers even before the Turkī conquest).

(ii) Gōvindapur Grant : West Central Bengal. (Edited by Prof. Amūlya-Charaṇ Vidyābhūshaṇa : unpublished : through the kindness of the editor.)

Village « Vēṭhaḍḍa » in « Paścima-khāṭikā », within « Vardhamāna » (Burdwan) district ; « Lēgha-dēva-maṇḍapī (?) » temple ; « Viḍḍara-śāsana (?) ».

[Personal name : « Cahala-dēvaśarmman »].

(iii) Anuliā Grant : Central Bengal. (A. K. Maitra, JASB., 1900, i, pp. 61 ff.).

« Mātharaṇḍiyā-khaṇḍa-kṣētra » in « Vyāghra-taṭi » (§ 90) district ; « Jala-pillā ? », forming a boundary line.

[The word « mālāmañca-vāṭī » *flower-garden house* = New Bengali মালঞ্চ বাড়ী « mālâñcâ-bāṛi »].

(iv) Sundar-ban Grant : Central Bengal (original lost : imperfect transcription in Rāma-gati Nyāya-ratna's ' Bāṇgāla-bhāṣā Ō Bāṇgālā-sāhitya-viṣayak Prastāv,[2] ' Chinsurah, San 1294, pp. 325-327).

« Khāḍī » district in Pauṇḍra-vardhana (see § 106) ; Village « Kāntalla-pura » Village ; « Śāntya-śāvi » ; « Citāḍī-khāta » ; « Mēṇḍala-grāma ».

[Personal names : « Viṣṇu-pāṇi Gaḍōlī, Kēśava Gaḍōlī »].

(v) Mādhāi-nagar Grant : North Central Bengal. (R. D. Banerji, Journal and Proceedings of the ASB., 1909, pp. 467 ff.).

Villages « Gaya-nagara, Guṇḍi-sthirā-pāṭaka, Dāpa(r)ṇiyā-pāṭaka » ; « Rāvaṇa-sarasiṣki-sthāna (?) ».

109. [27] Copper-plate Grant of Viśva-rūpa-sēna: East Bengal, 12th-13th century (Nagêndra-Nāth Vasu, JASB., 1896, i, pp. 6 ff.).

Villages « Aṭha-pāga ; Bārayī-paḍā (= New Bengali বারইপাড়া « Bāṛâï-pāṛā » *quarter of betel-vine growers*) ; Uñcō-kāṭṭhī (*High wood*) ; Vīra-kāṭṭhī ; Piñjō-kāṣṭhī ; Nārāntapa ».

[28] Edilpur Grant of Kēsava-sēna: East Bengal, 12th-13th century. (R. D. Banerji, Journal and Proceedings of the ASB., 1904, pp. 97 ff.).

Villages « Tāla-paḍā-pāṭaka ; Satrakā-dvī (=dvīpa) ; Sāṅkara-pāśā » (New Bengali পাশা « pāśā » = « pārśvaka » *side, quarter*, in village names) ; « Vāgulī-vitta-gadō (?) ».

[Word : « laggāvayitvā » = *having planted* (*trees*), based on an Old Bengali form].

110. [29]. Chittagong Copper-plate of 1243 A. C. (Prāṇa-nāth Paṇḍit, in the JASB. for 1874, i, pp. 318 ff.).

« Ḍāmbāra-dāma ; Kāmanapauṇḍiyā ; Navrāpālya ; Kētaṇgapālā ; Mṛtaccaḍā ; Bāgha-pōkhirā ». (For « Ḍāmbāra-dāma », cf. the town of « Ḍamara », mentioned in the ' Rāma-carita ' : R. D. Banerji, ' the Pālas of Bengal,' p. 91.)

[The word « lāla » = Chittagong dialect নাল « nāla » *arable land*.]

APPENDIX D

The Vocabulary of Bengali.
Tatsama, 'Semi-Tatsama,' Tadbhava, Deśī and 'Videśī.'

111. Following the terminology of the Indian grammarians, and slightly extending it, the vocabulary of a NIA. language can be said to consist of 4 elements: (1) *tat-sama*, (2) *tadbhava*, (3) *dēśī*, and (4) *vidēśī*. By *tatsama* the Indian grammarians (of Prakrit) meant only those words, in Prakrit, which were identical in form with Sanskrit: *e.g.*, « hari, sundara, kusuma, dēva, manda, cintā » etc. These words, as in the earlier forms of MIA., were among those originally inherited from OIA., but they were not phonetically modified in MIA., since in their sounds they were not against the genius of the speech in the MIA. stage. In the modern employment of the term, *tatsama* also includes the learned words introduced from classical Sanskrit into the Prakritic speech, after the latter became characterised as NIA. The word *tatsama* has thus come to cover, in NIA., both the unmodified words, exactly similar to Sanskrit, which formed a part of the speech from its birth, *plus* later arrivals from Sanskrit as loan-words (literary and other borrowings): this is rather a loose use of the word, which is only allowable on the ground that it is used with reference to the form of a word, and not with reference to the time or manner of its inclusion or admission into the language. Thus there would be *tatsamas* of the oldest period, like « kāla, dēśa, pāśa, māna, nīca, gāna, hāsa », etc., which may be described as being of the native element of the language; and these, from point of view of historical survey, should rightly come under *tadbhava* words, at least in certain cases. Then, there would be later *tatsamas* admitted at different times in the history of the language. When these later *tatsamas* were naturalised in the language, they also underwent changes according to the phonetic laws operating in it at the time, in addition to the slight modification in pronunciation which is bound to come when the word is introduced straight from a Sanskrit book.

It is quite possible to guess the time of admission of a *tatsama* word by noticing the change that has come to it: this change, in *tatsamas* admitted in later times, is of a different character, for instance, from that which turned OIA. to MIA., and MIA. to NIA. Thus, for example, the OIA. word « śrăddhā » *faith, devotion, desire, desire of a pregnant woman for any particular food etc.* (=« dōhada »), became in early MIA. « săddhā » (Śaurasēnī etc.), and « *śăddhā » (Māgadhī), whence in late MIA. (Apabhraṅśa), « *săddhă, śăddhă », and in early NIA. « sādhă, śādhă », later « sādh, śādh »: *e.g.*, Bengali সাধ « sādh্ », wrongly written with dental « s » through fancied connection with « √sādhaya- », but pronounced শাধ « śādh ». সাধ « sādh্ » is a living *tadbhava* word in Bengali, used in the sense of « dōhada ». But « śrăddhā » has been borrowed anew in the sense of *faith, devotion, respect*, after the formation of Bengali. In Middle Bengali times, this word, pronounced as « średdhā, śerdhā, chreddhā, cherdhā », became naturalised, and ultimately it has been vernacularised to ছেদ্দা « cheddā » in modern folk-Bengali. This modified form of the *tatsama*, « cheddā » occurs side by side with the genuine Sanskrit « śraddhā », now usually pronounced « sroddhā ». Grierson and other European scholars have employed the convenient name *semi-tatsama* for these modified loan-words from the Sanskrit, which are neither part of the inherited stock of the language, nor do they preserve their original Sanskrit forms (*i.e.*, to the extent they can do in the vernacular, and yet remain Sanskrit), but have accommodated themselves to the spirit of the spoken tongue. The same Sanskrit word, it can easily be seen, can have more than one *semi-tatsama* form in the same NIA. speech, following the time of admission, or dialect (local or communal) where they occur; thus, OIA. (Sanskrit) « śrāddhă » *funeral rites, funeral dinner*, does not occur in its *tadbhava* form in Bengali, which would have been শাধ « * śādh্ »; but we have, in addition to the *tatsama* form শ্রাদ্ধ (which is pronounced « srāddho »), two *semi-tatsamas*: an archaic, and rather rustic, ছরাদ « chărād্ », found also in Middle Bengali, and a current Modern Bengali ছেরাদ্দ « cherāddâ »; of which the former is earlier, being based on a pre-Bengali (Māgadhī Apabhraṅśa) modification, « *śarāddha > *śarăddha » (or possibly with « ch » for « ś »), whence Old

Bengali *semi-tatsama* « *charādha », becoming in late Middle Bengali « chårādd্ » ; the latter form, « cherāddå », would be from a Middle Bengali *semi-tatsama* pronunciation, « * chrāddhå, chĕrāddhå » .

The OIA. (Sanskrit) word « kṛṣṇa » with its modifications is another typical case. OIA. « kṛṣṇa » > MIA. « kaṇha » > NIA. « kānha, kāna », (found in Middle Bengali as কাহ্ন কান « kānha, kānd্ » and now, with two new affixes added, as কানু, কানাই « kān-u, kān-āi » *a pet form of the name Kṛṣṇa*), shows the normal development of the word. Side by side with this *tadbhava* form, we have the *tatsama*, কৃষ্ণ, pronounced in the old fashion as « kriṣṭõ, kriṣṭyõ », and in the new fashion as « kriśnå » ; and the various *semi-tatsamas*—« kaṣaṇa », now lost, in Old Bengali (Caryā 16 : « kasaṇa-ghaṇa gājaï » = *the black cloud rumbles*), which is based on a MIA. *semi-tatsama* ; কেষ্ট কেষ্টো « keṣṭà, keṣṭō », usually as the name, based on a Middle Bengali pronunciation « kreṣṭā, ke(r)ṣṭā » ; and lastly, কিষণ « kiṣàṇd্ » , as in the name of an image of Kṛṣṇa, *e.g.*, রাধা কিষণ জীউ « Rādhā-Kiṣaṇd্-jīu » *the images of Rādhā and Kṛṣṇa (in a temple)*, which is based on another Middle Bengali pronunciation, « *kriśand্ », modified by the pronunciation of Northern India : cf. Hindī « Kisan, Kisen » .

It is sometimes convenient to treat the *semi-tatsamas*, especially the older ones, along with the *tadbhavas*.

112. The *tadbhava* element is the genuine folk or native element of MIA. and NIA. It represents the bulk of words and forms derived from OIA. which underwent a natural modification through wear and tear of centuries; it forms the living and ever-moving stream of speech—its original waters, so to say, derived from its very source, to which the other elements are mere accretions and additions. This element represents the oldest basis of the Aryan speech at its normal transformation.

Side by side with the *tadbhava* element is a class of words which the Prakrit grammarians have called *dēśī*, and which also may be regarded, at least so far as late MIA. and NIA. are concerned, as forming a part of the native element. The term *dēśī*, in its present-day application, embraces a numerous class of words which cannot be traced to Aryan

roots and which obviously were derived from the pre-Aryan languages of the country, Dravidian and Kōl. The older grammarians, however, included within this term all onomatopoetic and other words which could not be traced to Sanskrit ; and also they classed as *dēśī* quite a number of genuine *tadbhavas*, which are as much Aryan as Sanskrit itself, because their derivation happened to be obscure and not obviously traceable to Sanskrit, or because their equivalents were not used in Sanskrit. The 'Dēśī-nāma-mālā' of Hēma-candra, for instance, has scores of such '*tadbhava dēśī*' words. The true *dēśī* words are relics from the dialects employed in the land before the masses took up the Aryan speech : and the Dravidian and other non-Aryan loan-words in Vedic (see p. 42) can be also described as forming a *dēśī* element in OIA. As time advanced, quite a number of these non-Aryan words became part of the language by the beginning of the MIA. stage, and many more came in subsequently. In the second MIA. ('Prakrit') period, these words forced themselves to the notice of the grammarians, especially when there was no similar Vedic or Sanskrit word to explain them : and the grammarians found a label for them in the word *dēśī*, meaning *of the country*, that is, *aboriginal*. In the late MIA. (Apabhraṅśa) and NIA. periods, *dēśī* words are as much a native element in the speech as *tadbhava* words : only *dēśī* words were not infrequently discarded in writing, as these, forming part of the small currency of daily speech, with their humble non-Aryan origin stamped upon them, were looked upon with disfavour by scholars and *littérateurs*.

It would be convenient to treat the *dēśī* words along with the *tadbhava* ones in discussing these elements in a NIA. speech, since they form part of the same inherited stratum.

113. The *vidēśī*, or *mlēccha*, *i.e.*, foreign or extra-Indian element is not much noticed by the older grammarians, first, because the number of foreign words was comparatively small, and secondly, because their origin was not always known. Yet words like « pika » *cuckoo*, « dīnāra » *a gold coin*, « dramma » *a coin* (= Latin « pīcus, dēnārius », Greek « drakhmē ») were recognised as foreign in ancient times. The foreign, *i.e.*, extra-Indian elements in the Aryan speech, before the contact of the Indo-Aryans with

the Iranians (Persians) in the Panjab after the Achæmenian conquest, are not properly known. Comparison has been made, however, between certain Vedic words and some from Mesopotamia (Sumerian and Semitic), and it has been thought that these words were borrowed by the Aryans (see p. 28, footnote). From the beginning of the 5th century B. C., when the Persians ruled a part of North-western India, there has been some sort of connection between India and Persia, sometimes intimate, sometimes distant. There was mutual influence between the two countries; and, as a result of the political and cultural influence of Persia on India, we have a number of Old and Middle Persian words in Indo-Aryan down to the period of the Moslem (Turkī) invasions in the 10th century. Words like « dipi » *writing, inscription*, « nipista » *written*, and « yōna (= yavana) » *Greek* (*Ionian*), found in the inscriptions of Aśōka, and « kṣatrapa » *satrap* (= Old Persian « dipi, nipišta-, yauna, xša*θ*ra-pāvan »), belong to the early or old (pre-Christian) period of Persian influence; and in subsequent post-Christian times, we have quite a number of Iranian words in the MIA. dialects of India: *e.g.*, « mihira » *sun* (= Middle Persian [Pāzand] « mihir », Old Persian « mi*θ*ra » = OIA. « mitra »); « maga » *a class of Brahmans* (= Iranian « maga- » *Magus, priest of the Zoroastrian faith*); « pusta » *book* (= Middle Persian [Pahlavī] « pōst » *skin, skin for writing*); « kunduru » *frankincense* (= Pahlavī « kundur »); etc. (See Berthold Laufer, 'Sino-Iranica,' Chicago Field Museum of Natural History, 1919, and other works, for the study of Iranian influence on Indian culture and speech). After the establishment of Moslem rule in India by the Turks, the Tājīks and the Afghāns, Persian was introduced into the country as the language of administration and as the culture-language of the Mohammedan courts; by that time, the NIA. languages had originated, and they came in direct touch with Persian, under its umbrage and influence. Persian had already entered upon the present *New* or *Modern* phase of its history.

Apart from Persian, Greek was the other extra-Indian language which influenced IA. (in the MIA. stage). Greek adventurers and officers in Persian service seem to have come to India even before Alexander's invasion

in 327 B.C. Intimate relations between the Greeks and Indians began from the next century, and continued down to the end of the 3rd century A. C. The Greek settlers in India, however, were rapidly Hinduised and absorbed. Greek contact with India has given a number of Indian words to the Greek language; and as a result of Greek influence on Indian culture, we have a number of Greek words in Indo-Aryan, the MIA. vernaculars and Sanskrit. (These have been studied by Weber: see I Ant., May 1873.)

Modern IA. speeches have inherited a number of Persian and Greek words from MIA. These words in their phonology conform to the *tadbhava* forms of the language. We have in Bengali the following words at least, which are old and inherited *vidēśī* words:

[1] From Old and Middle Persian > MIA.

পুথী, পুথি, পুঁথি « puthī, puthi, pūthi » *book, manuscript in the old Indian style*: earlier « pōthī »; MIA. « potthia »: Iranian (Pahlavī) « pōst » *skin, parchment*, Sanskritised to « pusta, pusta-ka, pustikā ».

পাইক « pāïkṛ » *foot-soldier, footman*: MIA. « pāïkka », from Iranian « pāīk ».

মুচি « mucī » *shoe-maker*, earlier « mōcī », as in Hindī: from MIA. « *mōcia »: from Middle Persian (Pahlavī) « mōcak » *shoe, boot* (whence New Persian « mōzah, mūzah », the source of the New Bengali word মোজা « mōjā » *boots* > *socks*).

সেকরা « sēkṛrā » [ʃekra] *goldsmith* = Old Bengali « *sēkārā », found in a Sanskritised form « sēkya-kāra » *engraver*, for a MIA. «*sekka-āra », in the Bhāskara-varmman (Nidhanpur) inscription of the 7th century (see page 181). The word « *sekka » is a loan-word from the Middle Persian, which had a large number of borrowed words from the Semitic (Aramaic). The Middle Persian source of « *sekka », probably a form like « *sikkah », is itself borrowed from the Aramaic « s y k t ' » *die for coining*. (Cf. S. Fraenckel, 'Die aramäischen Fremdwörter im Arabischen,' Leyden, 1886, pp. 192, 194. [I am indebted to Prof. Jules Bloch for the reference.]) « *sekka-kāra » therefore originally = *a die-engraver*, then *engraver*,

and finally *gold-* or *silver-smith*, in its Bengali form « sēkṛā ». (Arabic borrowed the word from Aramaic in the form « sikkat, sikkah », and in Persian the word was thus strengthened by the Arabic. The Perso-Arabic vocable was later introduced into India, and we have from the late Persian source the word সিক্কা « sikkā » *a coin, rupee.*)

[2] From Greek :

দাম « dāmṛ » *price*, দামড়ী « dāmṛ-ṛī » *a small value, ¼th of a pice* : MIA. « damma » = « dramma » in the speech of North-western India in the Transitional MIA. period, Sanskritised to « dramya » : from the Greek « drakhmē » .

সেওঁ, সিউঁই, « sēõ, sīũi = siwĩ » *Indian vermicelli*, = Hindōstānī « siwai, simai, siwaiyā » etc. : cf. Skt. « samitā, samīdā » *fine wheat flour* : Greek « semidalis » . The Greek word, with its close « e », approaching the sound of « i », possibly gave a 'Transitional MIA.' form « *simida », whence the NIA. word.

সুড়ঙ্গ, সুড়ং « suṛâṇgâ, suṛâṇ » *tunnel* : Sanskrit « suraṇga » , from Greek « surinks (syrinx) » .

The above foreign words, and possibly a few more, are among the inherited element from MIA. Persian and other foreign elements acquired after the beginning of the NIA. period, as direct borrowings or through the intermediary of sister speeches which have merely passed them on, are discussed in §§ 117 ff.

Classification of NIA. Words.

114. A rigorously chronological classification of the vocabulary of a NIA. language would be on the following lines :

[1] Inherited words, forming the 'speech commodity' of MIA., which changed into NIA., and consisting of—

(a) *tadbhava* words ;

(b) borrowed Sanskrit words, or old *tatsamas* and *semi-tatsamas* ;

(c) aboriginal borrowings, and words unexplained by Aryan roots : the *dēśī* words ; and

(d) a few foreign words, like the Persian and Greek ones noted in § 113.

[2] Borrowed words:

(a) Indian: Aryan.

(i) From OIA. and MIA.—from Sanskrit, Classical and Vedic: a very large number of recent *tatsamas* and *semi-tatsamas*; from Pali and other Prakrit: a few very recent admissions—*e.g.*, words like « thēra, kahāpaṇa, pāti-mokkha, avahaṭṭha » etc., which are restricted in use.

(ii) From NIA. sister-speeches: a very large number from Hindōstānī (*e.g.*, বানী « bānī » *making charges of jewelry* = Hindī « banāī »; কালোয়াৎ « kāloāt » *musical artist* = H. « kalāwa(n)t »; লুচি « lucī » *thin wheaten cakes fried in ghee* = « lucūī »; the affix ওয়ালা « -oālā » = « -wālā », etc., etc.); and some from the other Aryan speeches, coming through direct contact as well as through Hindōstānī, or, in recent times, through the English newspapers conducted by both Indians and Englishmen: *e.g.*, Panjābī « sikkh » = শিখ « śikh » *Sikh*; « cāhidā » *being wanted* = চাহিদা « cāhidā » *demand*; Gujarātī « haḍtāḷ » *closing of markets* = হড়তাল, হরতাল « hāṛtāḷ, hārtāḷ » *strike, closing of shops*; « garbā » *a kind of dance* = গরবা « gāṛbā », « kaṇvī » *a caste* = কুনবী « kunbī »; Marāṭhī « pāṭīl, kuḷakarṇī » = পাটিল, কুলকর্ণী « pāṭīḷ, kuḷkarṇī » *village officers*; « Māwalī » *a Marāṭhā tribe* = মাওয়ালী, মাউলী « māoālī, māulī ». Genuine *tadbhava* borrowings from NIA. languages other that Hindōstānī are rather rare in Bengali. We have in addition a number of Sanskrit (*tatsama*) and Persian words coming to Bengali through the intermediacy of Modern Indian speeches: *e.g.*, Marāṭhī « nyāyâdhīś » *judge* = Bengali « bicārṭ-kârtā »; « śrī-khaṇḍa » *a preparation of curds*; « bārgīr » *irregular cavalry man*, from the Persian, = বরগী, বর্গী « bârgī » *Marāṭhā raider*; and a whole host of Persian words from Hindōstānī.

(b) From the non-Aryan languages of India, and from extra-Indian non-Aryan speeches belonging to groups represented in India. This list is extremely small: and a few which are recent arrivals through English, like *cheroot* > চুরুট « curuṭṭ », from Tamil « śuḷuṭṭu, » should not be considered here.

(i) From the Dravidian languages : mainly caste-names, *e.g.*, « Nāmburi, Nāmbudrī (= Nambudrī), Pilē (= Piḷḷai), Cēṭi (= Ceṭṭī) » : names of the languages—তামিল « Tāmil » (= Tamiḻ), তেলেগু, তেলুগু « Tēlēgu, Tēlugu » (= Telugu), কানাড়ী « Kānāṛī » (= Kannaḍa), মালয়ালী, -লম্ « Mālayālī, -lam » (= Mālayāḷam).

(ii) From Kōl : বোঙ্গা, বঙ্গা « bōṇgā, bàṇgā » *god, spirit, godling* = Kōl « boṇga » ; হাঁড়িয়া « hāṛiyā » *rice-beer*, cf. Santali « hēṛe ».

(iii) From Tibeto-Burman : names of tribes ; besides a few words like লামা « lāmā » *lama* = Tibetan « blama » ; Burmese নাপ্পি « nāppi » *fish and meat condiment* = « ngappe », ফুঙ্গী « phuṇgī » *Buddhist monk* = « hponggyi », লুঙ্গী « luṇgī » *loin-cloth* = « lunggyi », চঙ « cāṇ » *monastery* = « kyaung », etc.

(c) Extra-Indian :

(i) Persian (= Persian ; and Arabic and Turkī coming through Persian), and other Iranian (see §§ 117-120 ; also *Phonology of the Foreign Element*).

(ii) European and other foreign (see §§ 121, 122 : also *Phonology of the Foreign Element*) :

(α) Portuguese
(β) English
(γ) French, Dutch (a few)
} through direct contact.

Foreign words generally, coming through the medium of European languages, should be considered as European words :—*e.g.*, চা « cā « *tea*, (Chinese), জুলু « julu » *Zulu* (Bantu), সাগু, সাবু « sāgu, sābu » *sago* (Malay), হারাকিরি « hārākiri » (Japanese), বলশেভিক « bālśēbhik » (Russian), কুইনাইন « kuināin » *quinine* (Peruvian), ম্যাজেণ্টা « myājeṇṭā », folk-Bengali ম্যাজেণ্ডার « myājeṇḍār » *magenta red* (Italian) etc., etc.

Tadbhava and Desī Words.

115. The *tadbhava* element is the most important one in the philology of a NIA. language. OIA. took special and definite forms in the different parts of the country, and became characterised as MIA. of the various tracts (*e.g.*, Udīcya, Madhya-dēśīya, Prācya ; Śaurasēnī, Mahārāṣṭrī,

Māgadhī). But no NIA. language of the present day is the result of an unimpeded development of a particular MIA. dialect. In a country like India (which, however vast it may be, presents one whole, and where intimate communication between even the most distant parts was never absent, both through the domination of political powers and through cultural and commercial contact), there have always been influences and cross-influences in the linguistic life of the people; and this has made the development of most NIA. speeches appear complicated and irregular in some points. At times it is impossible to unravel the tangle presented by the diversity and contrariness of development, in the *tadbhava* forms found in the same NIA. speech,—a diversity which is due to the influence of sister-dialects.

The main lines of development in a NIA. speech, however, are generally clear. In the section on *Phonology*, an attempt has been made to trace these main lines along which the sounds of OIA. have changed into Bengali: mention being made of those points where the lines are blurred, and the history is obscured. It is comparatively easier in Morphology.

Tadbhava words are connected with every-day life, and these had to do by far the greatest amount of work, so to speak, in the language. Frequently, through phonetic decay, the Modern Bengali forms have preserved but very little of their OIA. originals. Yet this whittling down of the forms of the words is only their historical development; and the lines along which this development has occurred, after they have been found out, give the *phonological laws* of the language. Thus, the Bengali word (Standard Colloquial) এয়ো, এও « ē(y)ō » is all that is left of the OIA. word « avidhavā » (« awidhawā > *aviðhavā > avihavā > *ăihăă > *ăẏihăẘă > āīhā > আইহ āihā > আয়া āyyā > ēō »); সুয়ো, সুও, সো « s(u)ō » [ʃ(u)o] *favourite wife* represents the OIA. word « subhagā » (« subhagā > *suðhagā > *suhăā > *suhăă > *suhā > *suā > suō > sō »); আয়ান « Āyāṇ » *a name in the Kṛṣṇa legend* is all that remains of « Abhimanyu » (« abhimanyu > *aðhimaṇṇu > ahivaṇṇa > *ăhianna > আইহণ āīhāṇā > *āiāṇā > āyāṇ »); ঝী « jhī » *daughter, servant-*

woman, of « duhitṛ » (« duhitā > *dihitā > dhītā > dhīdā > *dhīðā > *dhīā > dhīă > jhīă > jhī »); ওঝা « ōjhā » *scholar, exorcist, curer of snake-bites*, of « upâdhyâya » (« uvajjhāa > *ojjhāa > ōjhā ») ; পর « pâr » *to wear*, of « pari-dhā- » (« pari-ha- > *pairha > পহ্ pârhâ > pâr ») ; বাই, বেই « bai, bēi » *son's or daughter's father-in-law*, of « vāivāhika » (« vēvāhia >*vevāhī > *bēwāhī> *bēhāī > বেহাই bēhāi > বেয়াই bēāi > bai> bei »), and মাসী « māsī » of « mātṛ-ṣvasṛ » (« *mātṛ-ṣvasr-ikā > *mātuśśaśikā > *māduśśaśigā > *māðuś-śaśigā > *māüśśaśiā > *māüśśiă > *māüśī > *māuśī > *māiśī > māśī », written with « -s- »).

The study of the *dēśī* words is the least satisfactory part of IA etymology. We have the modern *dēśī* words in the various languages, from which, with the help of some of the Prakrit *dēśī* words, MIA. originals may be reconstructed. Quite a number of *dēśī* words begin with a cerebral sound, and many with a palatal. In Dravidian, initial cerebral is rare, if not non-existent (see footnote, p. 38): and *dēśī* words with an initial cerebral would thus seem to be not from Dravidian. Quite a number of words in IA. have been traced to a Dravidian origin (see references under *Appendix B;* also pp. 42, 64 ff.). A great many are undoubtedly Kōl or Austro-Asiatic. The new method inaugurated by J. Przyluski in the study of IA. borrowings from Kōl, by comparing forms in the Austro-Asiatic and Austro-nesian languages, has led to some sure results in this most obscure branch of IA. etymology. (Cf. J. Przyluski in the MSL., Paris, XXII, pp. 205 ff., XXIV, pp. 118 ff.; cf. also S. K. Chatterji, 'The Study of Kōl,' in the Calcutta Review for September, 1923). But in the absence of any knowledge of the Kōl and other Austro-Asiatic speeches of an early period (barring, however, the Khmēr of Cambodia: cf. G. Maspero, 'Grammaire Khmère,' Paris, 1915, p. 23), nothing definite can be said. There is also the possibility of non-Aryan speeches (other than Dravidian, Kōl and the later Tibeto-Chinese), speeches now extinct, being present in India during the first half of the first millennium A. C., and contributing some *dēśī* words and in other ways influencing Indo-Aryan. In the present state of our knowledge, the *dēśī* words in NIA. may be considered along with

the *tadbhava* words, as forming part of the inherited element, citing an attested non-Aryan word for reference only, wherever the latter, from similarity in form and meaning with a *dēśī* word in IA., offers itself for comparison.

The onomatopoetic jingles, so characteristic of Bengali as of Modern Indian speech in general, Aryan and non-Aryan (see *Appendix B*, p. 176), have been brilliantly studied by Rabīndra-nāth Tagore ('Śabda-tattva,' pp. 22 ff.) and by Rāmēndra-Sundar Trivēdī ('Śabda-kathā,' pp. 17 ff.): the latter writer has included a number of words as onomatopoetics which have an historical development from OIA. words, and happen to agree with the Bengali scheme of onomatopoeia merely as a coincidence. The onomatopoetic *dēśī* formations do not offer any scope for comparison with non-Aryan speeches, except in noticing a general agreement in principle.

Tatsama Words.

116. The *tatsama* element can be dismissed after a discussion of the modifications the Sanskrit sounds undergo in being pronounced by Bengali speakers. It will be interesting to note how persistent is the Prakritic or MIA. system of phonetics in NIA., in giving a *tadbhava* look to recently introduced *tatsama* words, in pronunciation, and turning them into *semi-tatsamas* going very close to *tadbhavas*, actually existing or possible,—although the spelling would scorn to note it: *e.g.*, বাহ্য « vāhya », pronounced [baJʃʃio] in the Standard Colloquial; cf. a possible *tadbhava* « *bājhɲ » ; শ্মশান « śmaśāna », pronounced [ʃ͡ʃon], cf. *tadbhava* মশান « mâśān » ; লক্ষ্মী « lâkṣmī », pronounced [lokkhi]; পদ্ম « padma », pronounced [poddo]. Words like বৎসর, মৎস্য « vatsara, matsya » were formerly pronounced [bɔcʃ͡ʃhər, mɔcʃ͡ʃhɔ], but now we have a new tradition in [bɔt-ʃ͡ʃor, mɔt-ʃ͡ʃɔ] ; so জিহ্বা « jihvā » আহ্বান « ahvāna » have yielded their old pronunciations [ʃʃibbʃia, abbʃian], to [ʃʃiŭʃia, ɔ̆ʃian]. This sort of compromise between the *tatsama* and the *tadbhava* forms, by allowing the former to reign supreme in the written (and printed) page, and the latter, as far as practicable, in the spoken word, has been instrumental in the gradual disuse from the spoken language of a very large number of good

old *tadbhavas*. And this has made the Bengali pronunciation of Sanskrit notoriously bad, from the Sanskrit standard, so much so that the most erudite Bengali Paṇḍit, following the traditional Bengali pronunciation, would be understood only with great difficulty when talking Sanskrit to a Paṇḍit from Benares, Poona or Conjeeveram.

The use of a large proportion of *tatsama* words has familiarised the Bengali reader and writer with a number of Sanskrit affixes, but the nicer points in the genuine Sanskrit forms cannot always be noticed by an ordinary writer or reader without a sufficient grounding in the grammar of the classical language. The result is that since Early Middle Bengali times (and the thing has never been so prominent as in the 19th century, which brought in 'journeyman work' in literature), Bengali has been flooded with solecisms, showing the vulgarisation of the Sanskrit forms. Wrong spelling, wrong *sandhi*, false gender, mistaken use of the various affixes like « -ta » and « -ita », changes of meaning, and hybrids with *tadbhava* and foreign words, new coinings not warranted by grammar, and barbarisms of all sorts are perpetrated. Even the best writers are not free from them. But forms like সৃজন « sṛjàṇ » for « sarjana », রজকিনী « rājàkinī » for « rajakī », পাশ্চাত্য « pāścātyà » for « pāścāttya », কিম্বা « kimbā » for « kiṁvā », পিতৃমাতৃহীন « pitṛ-mātṛ-hīnà » in the sense of *orphan* for « mātā-pitṛ-hīna », and a host of others, have become naturalised in Bengali; and as to false or incorrect forms, used by the lesser writers, their name is legion. Here and there we have protests from students of Sanskrit grammar, whose pedantic zeal for 'correct' writing and for strict adherence to Sanskrit grammar is in strange contrast to their total ignorance and neglect of Sanskrit pronunciation. (The wrong orthography and bad grammar of a large portion of the *tatsama* element in Bengali, borrowed and coined, has been ably treated by Lalit-Mōhan Banerji in 'Vyākaraṇa-Vibhīṣikā,' and in 'Bāṇān-Samasyā,' Calcutta, San 1320, where copious examples will be found.)

The Foreign Element: Persian.

117. The Persian influence on the Bengali language has been mainly

lexical. With the substitution of English for Persian as the language of the law courts in Bengal in the year 1836, it may be said to have come to an end. There is, however, the possibility of a revival of Persian influence in the language in the hands of Persian-knowing Mohammedan and Hindu writers of Bengali.

The language came to Bengal at the beginning of the 13th century, and the influence it has exerted on Bengali for nearly 600 years can be very well estimated now. The first Mohammedan conquerors of India (neglecting the Arab episode in Sindh at the beginning of the 8th century) were Turks who had settled in what is now Afghanistan : and they were not Afghāns or Paṭhāns. The Afghāns, right up to the 14th century, were confined to the south-eastern part of the country to which they now give their name, and they began to take a leading part in Indian affairs from the 15th century, after they had established themselves in the Peshawar region, in the highway between India and Persia. Before that, they were but not very important auxiliaries of the Turkī invaders of India, occasionally siding with the Indians as well. The Afghāns became dominant in India in the early part of the 16th century, only to be conquered finally, and to have their power broken for ever in India by the Moghals (who were at first a Turkī-speaking people), in the course of that century.

The Turks who had settled down in North-eastern Persia and 'Afghanistan' were Persianised in culture. They ruled over the Persian-speaking Tājiks, and the Turk and the Tājik both took part in spreading the Persian language in India. Persian exerted an enormous influence in Northern India; and the speech of Delhi, the head-quarters of the Mohammedan (Turkī, Afghān, Moghal) power in India, became saturated with Persian, and ultimately came to be transformed into Urdū. In Bengal, Persian did not have much influence before the time of the Moghals, *i.e.*, from the last quarter of the 16th century. Under the Turkī and Afghān rulers, the administration of Bengal was left mainly in the hands of Hindu feudatories, who were mostly Kāyasthas by caste, and ordinarily very little influence could be exerted on the life and language

of the people from the Mohammedan court at Gaur or Sonargaon. The Turkī and other foreign Moslems who settled down in Bengal came themselves to be influenced by their subjects. At the end of the 15th century and beginning of the 16th, we find that the Moslem king of Bengal and his lieutenants in Chittagong were active patrons of Bengali literature. But contact with the Moslems certainly brought in a number of Persian words into Bengali during the early period of Mohammedan rule. Many of the practices of the Sulṭān's *darbār* at Gaur were adopted by the petty chiefs of Bengal, and engrafted on the old Hindu court customs and etiquette which were preserved in the independent states of Orissa (Jājnagar), Vishnupur, Tirahuṭ, Tippera, Sylhet and Kāma-rūpa. This meant an addition of Persian terms to the vocabulary of the Bengali. The Moslem *Kāzī* (*Qāḍī*) or district officer, who had control over the general administration, the *Āmīn* or governor, and in later times the *Fauj-dār* or military magistrate, as well as the revenue officials, brought to the people of Bengal Persian words connected with justice, revenue and general administration: and the number of such words even now in use in Bengali is quite a large one. Constant fighting in Bengal brought in a number of Persian military terms like তীর « tīr » *arrow*, কামান « kāmān » *bow*, later *gun* (=kamān), কতল « kâtâl » *execution* (= qatl), কেল্লা « kellā » *fort* (=qilah), বুরুজ « buruj » *battlement, tower* (= burj), লস্কর « lâskâr » *army*, হাজারী « hājārī » *captain over thousand* (= hazārī), ফতে « phâtē » *victory* (= fatḥ), মুরচা « murucā » *intrenchment* (= mōrcah), etc., etc. The Mohammedan preacher taught the Bengali converts and their Hindu kinsmen words like কলিমা or কল্মা « kâl(i)mā » *creed*, কোরান « kōrān » *the Coran*, ভেস্ত « bhestâ » *paradise* (= bihišt), জাহান্নম or দোজক « jāhānnâm, dōjâkh » *hell* (= jahānnum, duzax), গোনা « gōnā » *sin* (= gunāh), পাক « pāk » *holy*, পীর « pīr » *saint*, পয়গম্বর « pâygâmbâr » *prophet* (= paygambar), কেতাব « kētāb » *the book* (= kitāb), খোদা « khōdā » *God* (=xudā), হজ « hâj » *pilgrimage* (=ḥajj), সুন্নৎ « sunnât » *circumcision*, রোজা « rōjā » *fast* (= rōzah), হারাম « hārām » *forbidden* (= ḥarām), and বোৎ, বুৎ « bōt, but », Indianised to ভূত « bhūt », *idol* (= but), etc., etc.

In all these ways, quite a number of Persian words came in by

the end of the 16th century, as it is attested from literature.[1] In the first century of the Moslem conquest, some Moslem names were in all probability familiarised to the people of Bengal, like তুরুক « turuk » *Turk, Mohammedan* (=turk), ম(হ)ম্মদ « mâ(ha)mmâd » *Muḥammad*, গাজী « gājī » *warrior* (=ġāzī), ফকীর « phâkīr » *mendicant* (= faqīr), সেক « sēk » *Sheikh* (= šayx). Intimate relations between the Turkī and other Moslem conquerors of Bengal and the Bengalis soon began. In the first quarter of the 15th century, the Varêndra Brāhman chiefs of North Bengal were a power in the Moslem state, so much so that one of them, Rājā Kāns or Gaṇêśa, made himself king, and his line, which became Mohammedan after his death, continued for some time. Persian as the cultural and administrative language of the Mohammedan rulers came to be studied by some Hindus in Bengal, probably shortly after the establishment of the Turks in the land: it may be from the beginning of the 14th century. During the first quarter of the 16th century, a Bengali Brāhman was the « dabīr-xāṣ » or private secretary of the Mohammedan king of Bengal. But it was not before the 17th century that Persian came to exert any preponderant influence on Bengali. In the middle of the 16th century, Jayânanda in his 'Caitanya-maṇgala' makes Caitanya describe the evils of the Kali age, among which are the wearing of a beard by Brāhmans, their reading Persian, putting on high boots, holding a stick and a bow, and reciting 'mansari' (= maśnavī?) (p. 139, VSPd. edition). These remarks show that many Brāhmans were reading Persian and doing all these things, but the orthodox thought it was wrong. In the 18th century, however, the poet Bhārata-candra's people were angry with him because he wanted to

[1] The following rough figures will give some idea of the rate of admission of Persian words into Bengali, in the course of the several centuries. Fourth quarter of the 14th century: 'Śrī-Kṛṣṇa-Kīrttana,' about 9,500 lines, only 4 Persian words; fourth quarter of the 15th century: Vijaya Gupta's 'Padmā-Purāṇa,' some 18,000 lines, about 125 words, including some names; middle of the 16th century, Māṇika Gāṅgulī's 'Dharma-maṅgala,' about 17,000 lines, over 225 words; fourth quarter of the 16th century, Mukunda-rāma Cakravartī's 'Caṇḍī-Kāvya,' some 20,000 lines, between 200 and 210 words; middle of the 18th century, Bhārata-candra's 'Annadā-maṅgalā,' some 13,000 lines, a little over 400 words.

read Sanskrit instead of Persian: and Bhārata-candra belonged to a good Brāhman family. The attitude apparently had changed.

The Persian language was most dominant in Bengal in the 18th century, when the importance of it in the country was like that of English at the present day. Hindōstānī, Bihārī and Bengali *Munshīs* taught Persian to sons of rich people, and there were *maktabs* and *madrasahs* frequented both by Hindus and Musalmāns. The Moghal rule in Bengal, which began with Akbar's conquest of the province from the Paṭhāns, caused the Bengali language to be exposed to a greater degree than before to the influence of Persian.

A direct and more intimate connection was established between the capital cities of Delhi and Agra and the distant *ṣūbah* of Bengal. The real ruler of the country was no longer the Hindu bhūyā or rājā,—the feudal chief or semi-independent ruler, as before; the bhūyā became the mere zamīn-dār or land-holder under the Moghal, and his powers were transferred to a great extent to officers of the emperor. The average Bengali came in greater touch with the administrative machinery than before. The services of Bengalis were largely requisitioned to carry on the complex business of the state—executive and judicial, fiscal and military. Bengalis looking for preferment had to pay greater attention to the Persian language. By coming in touch with the men in the court of the Nawāb Nāẓim (military ruler) and the Dīwān (civil administrator), by mixing with Hindu and Mohammedan officials sent out from Hindostan, the Bengali of the upper classes (who until recent times has always accepted the guidance of Upper India in matters of culture), became far more refined and polished, far more open in mind, and far more astute. New things—ideas and objects—freely came to Bengal, and for a time Bengal was no longer isolated, but became a real province of Hindostan. The Moghal empire united all Northern India; and the 17th century, which witnessed the zenith of Moghal power, saw also the establishment of a new *lingua franca* for India—Hindōstānī. In the 12th and 13th centuries, India was the battle-ground of two peoples, Hindu and Turkī-Tājik, with different sets of ideas. By 1605, when Akbar died, a synthesis

had been effected, out of which arose an Indo-Moslem culture, and the Hindōstānī speech became its vehicle. Hindōstānī made itself the inheritor and propagator of the Persian and Moslem spirit in India, from the 17th and 18th century; and it came to Bengal, and Persian words which formerly were brought into Bengali mostly directly, now began to be admitted in larger numbers through Hindōstānī into Bengali and the various other vernaculars of the land.

The result of it all was that towards the end of the 18th century, the Bengali speech of the upper classes, even among Hindus, was highly Persianised. But a turn came from the next century. A great many words which were used by the people in the 18th century continued to be employed till the middle of the 19th century, but they were not able to take root in the language (Cf. S. K. De, 'History of Bengali Literature, 1800-1825,' Calcutta University, 1919, pp. 142, 169, 279, 280, 283); although some still retain their place in the speech of Musalmān Bengalis, and have thus become class-dialect words. A few new words have been admitted, mainly through Hindōstānī, within the 19th century: *e.g.*, বীমা « bīmā » *insurance*, খাকী « khākī » *khaki*, আঞ্জুমান « āñjumān » *a society*, etc. But so far as the standard Bengali of the present day is concerned, the nett result of the Persian influence has been the imposition, as a permanent addition to the vocabulary, of some 2,500 words (as in Jñānêndra-Mōhan Dās's Bengali Dictionary: see § 123), which would be admitted as Bengalised words by most sections of the people: together with a few Persian affixes which have become thoroughly naturalised. (See under *Morphology*: Formative Affixes.)

118. These words can be roughly classified under the following heads:

(1) Words pertaining to kingly state, warfare, chase: some 200 such words are commonly found in Bengali.[1]

[1] *E.g.* আমীর, ওমরা, উজীর, খানদান, খেতাব, খেলাৎ, খাস, তক্ত, তাজ, দরবার, দৌলৎ, নকীব, নবাব, বাদশা, মীর্জা, মালিক, হুজুর, হজরৎ; আসোয়ার, কুচ, কাওয়াজ, কাতার, কাবু, খঞ্জর, গালিম, জখম, জিঞ্জির, জমাদার, তবক, তাঁবু, তোপ, দুশমন, নগদী, নেজা, ফৌজ, ফৌৎ, বাহাদুর, মনসবদার, রসদ, রেসালা, শিকার, শমশের, সরদার, হলকা, হিম্মৎ।

(2) Words relating to revenue and administration and to law: over 600 words under this head, besides a number now obsolete or restricted in use.[1]

(3) The Mohammedan religion[2]: naturalised words under this head, as understood by Hindus and others, cannot much exceed 100; but naturally Musalmān Bengalis employ a larger number of Persian (and Arabic) terms connected with their faith and its ritual. But in any case, the number of such words actually in use among Bengali Mohammedans can be laid down as not exceeding 300.

(4) Intellectual culture[3]: education, music, literature, general refinement: not more than 100 words.

(5) Material culture[4]: objects of luxury, trades, arts and crafts: some 400 words of this type are found in Bengali.

[1] *E.g.* আয়মাদার, আওলাদ, আদমশুমারী, আবাদ, এস্তেমরারী, এক্তিয়ার, ওয়াসীল, কব্জা, কসবা, খাজনা, খারিজ, গোমস্তা, চাকরান, জমা, জমী, জায়দাদ, তহবীল, তালুক, দারোগা, দপ্তর, নাজির, পিয়াদা, ফিরিস্তি, বাব, বীমা, মহকুমা, মাফ, মোহর, রাইয়ৎ, শহর, সন, সরকার, সুবা, হদ্দ, হিসাব, হিস্‌সা; অকু, অছিলা, আইন, আদালৎ, আর্দ্দাস, ইশাদী, উকীল, এজাহার, এলাকা, ওজর, ওয়ারিস, কসুর, কাজিয়া, কানুন, ক্রোক, খেলাফ, সেরেস্তা, ছোলেনামা, জওজ, জবান, জব্দ, জারী, জেরা, তকরার, তামিল, দরখাস্ত, দলীল, দস্তখত, নাকাল, নাবালক, নালিশ, পেশা, ফরিয়াদী, ফেরার, বখরা, বাজেয়াপ্ত, মকদ্দমা, মুনসেফ, রদ, রায়, রুজু, শনাক্ত, সাফাই, সালিস, হক, হাকিম, হাজৎ, হুলিয়া, হেফাজৎ।

[2] *E.g.* অজু, আউলিয়া, আল্লা, ইঞ্জিল, ইদ্দৎ, ইমান, ইসলাম, ঈদ, কবর, কাফন, কালন্দর, কাফের, কাবা, কোরবানী, খৎনা, গাজী, জবাই, জেহাদ, জুম্মা, তোবা, দর্গা, দরবেশ, দীন, দোয়া, নবী, নমাজ, নিকা, নূর, ফেরেস্তা, বিসমিল্লা, বুজরুক, মসজিদ, মহরম, মুরীদ, মোমিন, মোল্লা, শরীয়ৎ, শহীদ, শিরনী, শিয়া, হদীস, হালাল, হুরী।

[3] *E.g.* আখুন্জী, আদব, আলিম, ইজ্জৎ, এমতেহান, এলেম, কেচ্ছা, খৎ, গজল, তরজমা, দরদ, কসীদা, মজলিস, মুনশী, বয়েৎ, রেখতা, শাগরেদ, সরম (শরম), সেতার, হরফ।

[4] *E.g.* অস্তর, আয়না, আখনী, আঙ্গুর, আচকান, আতর, আতশবাজী, আবলুস, আরক, এমারৎ, কাগজ, কলপ, কুলুপ, কিংখাব, কিশমিশ, বরফী, কোর্ম্মা, কসাই, কাঁচী, খরমুজ, খাতা, খানসামা, খাসী, খাস্তা, গজ, গির্দ্দা, গোলাপ, গোস্ত, চরখা, চশমা, চাপকান, চাবুক, চিক, জরী, জর্দা, জহরৎ, জামা, জিন, জোব্বা, জোলাপ, তাপ্তা, তকমা, তরাজু, তসবীর, তাকিয়া, দালান, দস্তানা, দাওয়াই, দূরবীন, দোয়াত, নারাঙ্গী, পরদা, পাজামা, পোলাও, ফরাশ, ফানুস, ফোয়ারা, বরফ, বাগিচা, বাদাম, বারকোশ, বুলবুল, বেলোয়ারী, মখমল, ময়দা, মলম, মশলা, মালাই, মিছরী, মিনা, মুহুরী, মেজ, রিফু, রুমাল, রেকাব, রেশম, লাগাম, সানকী, শানাই, শাল, শিশি, সিন্দুক, সুরখী, সোরাই, হাউই, হাওদা, হালুয়া, হুঁকা, হৌজ।

(6) Some 30 to 40 names of foreign peoples.[1]

(7) Some 500 words relating to common things and notions of life.[2]

Over 2,000 words can thus be accounted for, to give a general idea of the character of the Persian vocabulary in Bengali. The rest consists of variant and dialectal forms, or forms which are obsolescent, which will come under one or the other of the above heads.

119. Among the speakers of Bengali, more than half are Mohammedans. The percentage of Hindus and Mohammedans in the various parts of Bengal is as follows (according to the census of 1911):

	Hindus.	Mohammedans.
West Bengal	82·3	13·4
Central Bengal	50·5	48·0
North Bengal	37·3	59·2
East Bengal	30·8	67·5

This may be compared with figures for other parts of North India:

United Provinces	85·0	14·0
Panjab	48·0	50·75
	(including Sikhs)	
South Bihar	90·4	9·3

The above tracts, along with portions of West Bengal, were exposed to Moslem influence from the beginning; and yet Islām could not win so many adherents in the lands round the seats of Mohammedan culture—Delhi, Lucknow, Jaunpur and Patna—as in far away Eastern Bengal: and the percentage in the easternmost parts of Bengal can compare well with that for Western Panjab, which lies in the highway of Mohammedan invaders—Turkī, Paṭhān, Persian, and has always had to bear the first brunt. The affiliation of the large masses of Eastern Bengal population to Islām

[1] *E.g.* আরব, আরমানী, ইংরেজ, ইউনানী, ইহুদী, উজবক, তিব্বতী, বিলাতী, হাবশী, (হিন্দু)।

[2] *E.g.* অন্দর, আওয়াজ, আকছার, আব-হাওয়া, আসমান, আসল, ইয়ার, ইল্লৎ, ওজন, কদম, কম, কায়দা, কারখানা, কোমর, খবর, খোরাক, গরজ, গরম, গুজরান, চাঁদা, চাকর, জলদী, জানোয়ার, জাহাজ, জিদ্, তল্লাশ, তাজা, দখল, দম, দরকার, দরুন, দাগা, দানা, দোকান, নগদ, নমুনা, নরম, নেহাৎ, নেশা, পছন্দ, পরী, ফুরসৎ, বজ্জাত, বন্দোবস্ত, বাহবা, বেকুব, বোঁচকা, মজবুত, মিয়াঁ, মোরগ, মুল্লুক, রকম, রোশনাই, সাদা, সাফ, হপ্তা, হাজার, হজম, হুঁশিয়ার, হজুগ।

is partly due to the hostility felt by the non-Brāhman people, who were followers of Buddhism, to Brāhmanism,—a hostility of which we find an evidence in that interesting Middle Bengali fragment—নিরঞ্জনের রুষ্মা « Nirāñjānēr Ruṣmā » *the Wrath of the Sinless One* (i.e., Dharma), in which it is stated that the Gods were angry with the Brāhmans because they persecuted the Saddharmīs or Buddhists, and they came down on earth in the form of Musalmāns and destroyed Hindu temples—a thing which meets with the evident approval of the Buddhistic writer ('Śūnya-Purāṇa,' VSPd., pp. 140-141). A form of debased Mahāyāna Buddhism seems to have been quite the popular faith in East Bengal before the advent of the Mohammedan Turks, and the masses could not be wholly weaned over to the Puranic Hinduism of the Brāhman, even when Brāhmans from Rāḍha and Varêndra settled in Vaṇga in large numbers after the conquest of West and Central Bengal by the Turks. The masses professed in large numbers the simple creed of the conquering Turk when the latter came to Bengal and to the eastern parts of the province. The Mohammedan invasion of Bengal took place just when finishing touches were being given to a newly-formed Hindu nation with a language and a mentality of its own; and the Moslem faith quickly affiliated to itself, even though in a nominal manner, a large proportion of the people about to be merged into this new Hindu nation. There was no greater amount of religious persecution of the people by the Mohammedans in East Bengal than in other parts of Bengal and Northern India. There was, however, a certain amount of Moslem missionary enterprise in East Bengal, from Northern India, and, it is said, from among the Arab merchants at Chittagong: this might very well have taken advantage of latent anti-Brāhmanical feelings among the masses and of the neglect of them by the Hindu higher castes.

But this large proportion of Moslems among the Bengali-speaking people did not produce any appreciable increase of Persian influence on the language: since the masses in East Bengal, inspite of their extra-Indian religion, remained culturally and mentally Hindu (or Buddhist, with a veneer of Hinduism), and carried on the native Bengali traditions in literary and other matters. The greatest Middle Bengali Moslem Poet

is Alāōl (17th century), whose Bengali version of Mālik Muhammad Jaisī's 'Padumāwatī' (see p. 13) is as Sanskritic in language as the works of any of his Hindu contemporaries. But during all these centuries, the Mohammedans of Bengal were acquiring a respectable Persian vocabulary, mainly in connection with their religion and to some extent of their social life as well.

The real conversion of the Bengali Mohammedans to Islām began from the commencement of the 19th century, when some reform movements seeking to bring their life and thought more in accordance with the cosmopolitan Mohammedan notions took place. Urdū began to exert a greater influence from a centre like Calcutta. The Musalmāns of the old school, however, in matters literary, continued to follow the old Bengali tradition; and Musalmāns trained in schools and colleges did not seek to differentiate themselves from their Hindu kinsmen in the style of Bengali they employed. Side by side with the Hindu writers of Bengali have come forward a number of Musalmān writers, some of whom have made a valuable contribution to the stock of national literature, and a young generation of Musalmān poets and prosateurs are taking a part in transforming the stilted literary Bengali into a natural language, on a Sanskrit basis, and keeping true to its native spirit as a Sanskritic language. But within the last century has been established, in the hands of some Urdū-knowing Maulavīs, a form of Bengali which is known as 'Musalmānī Bengali,' in which a considerable literature consisting of adaptations of Moslem and Persian stories and romances and religious works and tracts has grown up. Works like the 'Jang-nāmah,' narrating the tragedy of Karbalā, biographies of Muḥammad, legends of Mohammedan saints, Persian epic and romance like the 'Shāh-nāmah' and the 'Sikandar-nāmah,' Arab romance like the 'Amīr Hamzah' and the Arabian Nights, and a host of other works, have been rendered into 'Musalmānī Bengali,' and are quite popular with a large Mohammedan Bengali audience. The 'Musalmānī Bengali' employed in these works, however, is often too much Persianised; but the metres are Bengali, and a large percentage of Sanskrit words are retained, cheek by jowl with the

Perso-Arabic importations. It is the Maulavī's reply to the Paṇḍit's *sādhu-bhāṣā* of the early and middle part of the 19th century. The percentage of Persian words in a typical 'Musalmānī Bengali' work, the 'Baṛa Dāstān Āmīr Hāmzā' *the Great Tale of Amīr Hamzah*, is about 31·74, as seen from computing the words in 5 pages of a folio edition from the popular Baṭṭalā printing houses of Calcutta. This is to a considerable extent less than in literary Urdū: 5 *ghazals* in the latter language, by Dāgh, Maqbūl, Zafar, Ātish and Laṭīf, showing 235 Persian words in a total of 636, a percentage of about 40. The ordinary colloquial Bengali of the Hindu middle and upper classes of Calcutta, as in the 'Hutōm Pēcār Naksā,' shows 7·1 of Persian words (see §123). In the language of the Hindu women of the upper classes, the percentage would be somewhat smaller; and in a Bengali Moslem home, it would rise to higher than 7·1%, it may be even 15%, but it could never be as high as 30%, even in the most preponderatingly Mohammedan parts of Bengal. One of the features of 'Musalmānī Bengali,' which demonstrates its rather artificial character, is the frequent use of Hindōstānī words and forms (*e.g.*, পাঁও «pā̃w» for পা «pā» *foot*, ভেস «bhēs» *dress*, থোড়া «thōṛā» for একটু «ēkṭu» *a little*, মেরা তেরা «mērā, tērā» for আমার তোমার or মোর তোর «āmāṛ tōmāṛ, mōṛ tōṛ» *my, thy*, ওয়াস্তে খোদার «wāstē khōdār» for খোদার কারণে «khōdār kāraṇē» *for God's sake*, এছা তেছা «ēsā tēsā = aisā taisā» for এমন তেমন «ēmān tēmān», *in this way, in that way*, etc., etc.), which have no existence in the Bengali as spoken by the Musalmāns in the villages, within the different dialectal areas. 'Musalmānī Bengali' thus savours of the mixed Bengali-Hindōstānī-Awadhī jargon which is heard in the bazaars of Calcutta among Mohammedan working classes, cabmen, petty traders and others, who speak Calcutta Bengali and Hindōstānī equally badly, and unlike the Mohammedan masses in the country, have no proper dialect. Books in 'Musalmānī Bengali' begin from the right side, following the way of an Arabic or Persian book, although the alphabet is Bengali. The literature in Musalmānī Bengali has no merit, and some of the deathless tales of pre-Moslem Persia, as in the 'Shāh-nāmah,' and of early Islām, have been ruined by the hack

versifiers of Calcutta and Chittagong in rendering them in this jargon. The culture which is native to Bengali village life, Hindu and Moslem, is often entirely crushed out of it ; and we have still to fall back upon the songs, and folk-tales, and ballads, in the standard literary language, slightly modified by dialect, which are still current among Bengali Musalmāns in the countryside, especially in East Bengal,—to appreciate the literary tradition that yet lives among them. Educated Mohammedans of the present day have not taken kindly to this form of Bengali. The earlier Musalmān writers did not employ such a Persianised language : witness Ālāōl, who may be reckoned among the greatest poets of Early Bengal ; and witness the language of scores of late Middle Bengali works by Musalmān writers, as, for example, in Munshī Ābdul Karim Sāhitya-viśārada's Descriptive List of Bengali MSS., mostly from Chittagong ('Bāṇgālā Prācīn Puthir Vivaraṇ,' 2 parts, VSPd., San 1321). As an ever-increasing number of Musalmān writers of Bengali are coming to the front, the accession to the language of more Perso-Arabic words, specially relating to the Mohammedan religion and to Islāmic culture, will be in the nature of things : but this accession can very well be without interfering with the spirit of the language by introducing Urdū forms and idioms. (Muhammad Yākūb Ālī, born 1666, a younger contemporary of Alāōl, wrote a 'Jang-nāmah' in 1699 : his work as preserved in MSS. and in printed editions, shows an almost equally Persianised style as an ordinary modern work in Musalmānī Bengali of Calcutta ; but it is a question how far the current recensions, both in MS. and in print, represent the 17th century Bengali of the poet, as their Bengali is modern, and has modern Urdū forms,—the latter being as yet an undeveloped language in the 17th century : cf. 'Jaṇga-nāmā,' by Ābdul Gafur Siddikī, in the VSPdP., 1324, No. 2.)

120. By 'Persian Element in Bengali' is to be meant not only native Persian words, but also the host of Arabic words naturalised in it, and also a few Turkī words which the Persians received from their Turkī neighbours and rulers. It does not seem as if Turkī exerted any influence on Indian languages, although it was the home language of the Moslem

ruling houses in the early centuries of Moslem conquest and rule, and again in the early part of the 16th century when Bābar wrested the Northern empire from the Paṭhāns and the Rājpūts. Hindōstānī has less than 100 Turkī words (in Fallon's Dictionary the number is about 70), and Bengali does not seem to possess more than 40.[1] A few of these Turkī words in Hindōstānī and Bengali may have come direct from Turkī as spoken in India: but it is convenient to include them under Persian.

A few Paṣtō words, not even half a dozen, can also be included under Persian.[2]

[1] I have been able to find the following: আগা 'āgā' *master* (Turkī 'aga'); আলখাল্লা 'ālkhāllā' *a loose robe* (alxaliq); উজবক, -বুগ 'ujbak, -bug' *an idiot, an uncultured fellow* (Persian 'uzbag,' Turkī 'ozbek' *name of a Turkī tribe*); উর্দু, উদু 'urudu, urdu' *market, the Urdū language* (Persian 'urdū,' Turkī 'ordu' *camp*); কলকা, কলগা kalkā, kalgā *aigrette* ('qalga'); কাঁচী 'kāṁcī' *scissors* ('qaincī': but cf. Old Bengali of Sarvânanda [p. 109]—'kāsī'='karttarikā'); কাবু 'kābu' *possession, reduction to one's power* ('qapu' *gate, opportunity, possession, hold, grasp*); কুলী 'kuli' *porter* ('quli' *slave*); কোঁতকা 'kōṁtkā' *stick* ('qutka'); কোর্মা 'kormā' *meat stew* ('qawurma'); খাতুন 'khātun' *lady* ('xatun'); খান, খাঁ 'khān' *lord, prince* ('xān, xaqan'); খানুম 'khānum' *lady* ('xānum'); গালিচা 'gālicā' *carpet* ('qalica, galica'); চকমকি 'cakmakī' *flint stone for lighting fire* ('caqmaq'); চাকু 'cāku' *knife* ('caqu'); চিক 'cik' *screen made of finely split bamboo* (Persian 'cigh,' Turkī 'ciq'); তকমা 'takmā' *badge, shield-badge* ('tamga'); তবক 'tabak' *gun, rifle* ('tupak, topak'); তাগাড় 'tāgār' *trough, mason's lime-pit* ('tagār'); তুজুক 'tujuk' *regulation, retinue, pomp, dignity* ('tuzak'); তুরুক, তুর্ক 'turuk, turk' ('turk'); তোড়া as in তোড়া-বন্দি খানা 'tōṛā-bandī khanā' *feast with dishes arranged* ('torah, tora'); তোপ 'tōp' *gun, cannon* ('top'); দারোগা 'dārōgā' *an officer*; বকশী 'bakśī' *a surname* (Persian 'baxśi,' Turkī 'baksi' *pay master*); বাবুর্চী 'bāburcī' *cook* ('bawarcī'); বাহাদুর 'bāhādur' *brave* ('bahadur'); বিবি 'bibi' *a lady*; বেগম 'begam' *lady, princess* ('begum'); বোঁচকা 'bōṁckā' *bundle* ('bogca, buqca'); মুচলকা 'muclakā' *bond, note of hand* ('mucalka'); রক, রওয়াক 'rak, raoāk' *ledge, raised platform* ('rawaq'); লাস 'lās' *corpse* ('lās'); সওগাত 'saogāt' *present*; 'সুরুক, সুরাক 'suruk, surāk' *trick, ruse* ('surāg' *spying*); and the affix চী '-cī' in some words (*e.g.*, মশালচী 'maśālcī' *torch-bearer*, খাজাঞ্চী, খাজান্-চী 'khajañcī' = xazān-cī' *treasurer*).

[2] The word পাঠান=পটঠান 'pāṭhān<paṭṭhāna' from 'Paṣtāna,' is an Indianised form. The other Paṣtō words are তপাস 'tapās' *search* (a borrowed word in Paṣtō, from the Arabic 'tafaḥḥuṣ'), রোহেলা, রোহিলা 'rōhilā' (a tribal name, Paṣtō 'roh' *mountain*), besides a few other names of tribes.

Of direct Arabic influence, there has been practically nil, although the Urdū form of Hindōstānī in the hands of Mohammedan writers at the present day sometimes borrows Arabic words and phrases straight from Arabic itself, and not through Persian.

The Persian language was brought to India by the Turks, and some of the peculiarities characterising the language as used by Turkī speakers, in pronunciation and in vocabulary, are also found in the speech as employed in India. The Persian language has changed in Persia itself, but in India the early Persian pronunciation is still followed, *e.g.*, *majhūl* sounds of ز and ی. Persian words in Bengali naturally show an early Persian basis in their phonology. (See *Phonology of the Foreign Element*: Persian).

Portuguese, Dutch, French and English Words.

121. The other foreign elements in Bengali consist of between 100 and 110 Portuguese words, a few Dutch and French words, and an ever-increasing number of English words. The Portuguese words are names of objects and ideas introduced by the Portuguese into India, and they indicate the extent of the material culture which Bengal and India owe to the adventurous Lusitanians. The Portuguese came to Bengal early in the 16th century, and the influence of the Portuguese language continued down to the close of the 18th. (Cf. Abināsh Chandra Ghōsh, 'Vaŋgē Pōrtugīj-prabhāv Ō Vaŋga-bhāṣāy Pōrtugīj-padâŋka,' VSPdP., San 1318, No. 1; J. J. A. Campos. 'A History of the Portuguese in Bengal,' Calcutta, 1919, pp. 214-220. J. J. A. Campos, following R. Dalgado's lists in 'Influencia do Vocabulario Portugues em Linguas Asiaticas,' gives 174 words in Bengali as Portuguese. But some 8 of these are native Bengali, and about 100 are now obsolete, although they might have existed in 18th century Bengali; and a few are English rather than Portuguese, as their phonetics would show [*e.g.*, কৌচ « kōc » is from the English *couch*, the Portuguese *coche* would give in Bengali the form « *kuci » or « *kuśi »; কর্ণেল « kârnēl » appears rather to be from the English *colonel* than the Poruguese *coronel* from which the Bengali form expected would be « *kuronel »; so আর্গান « ârgān » is from English

organ, rather than Portuguese *orgaõ* which would give « *ârgām, ârgãu » in Bengali]. The following words, not noted in the above papers, are also from the Portuguese: কাতান « kātān » *a sword* = Portuguese *catano*; খানা « khānā » *ditch*, cf. Portuguese *cano*: and কোঙ্গা, কোঙা « kōṇ(g)ā » *bent double, as with age*, cf. Port. *cunha* = *wedge*).

The French and Dutch words do not appear to be over 10 in number. Of course, there are numerous French words *through English*, but very few are derived directly from French. French speakers (and Dutch speakers) had occasion to come in touch with Bengalis at Chandernagore (and at Chinsurah). The following words are from the French: কার্তুজ « kārtuj » *cartouche*, বারুশ « bārus » *baroucbe*, কুপন « kupān » *coupon*, ইস্কাতোর « iskātōr » *escritoire, écritoire*, আনীস « ānīs » *anis* (liquor); কাতুর « kātur » *quatre*, আঁশ « ãś » or ওঁশ « õś » *once*, দোশ or দুশ « dōś, duś » *douze*, and a few others, in connection with card games; and names of some European peoples, as in 18th century and modern Bengali: ফরাস, ফরাসী « phārās, -sī » *Français*; ওলন্দাজ « ōlândāj » *Hollandais*, দিনেমার « Dinemār » *Danemark*, এলেমান « ēlēmān » *Allemand*, and possibly also the form আংরেজ « āṇgrēj » *Anglais* for ইংরেজ « iṇgrēj » = Portuguese *Ingles*. The Dutch words directly borrowed are: the names of cards—হরতন « hār(à)tân » *hearts* = *harten*, রুইতন « ruitân » *diamonds* = *ruiten*, ইস্কাবন « iskābân » *spades* = *schopen* (but the name for *clubs*, চিঁড়িতন « cīṛitān » is Indian: cf. Hindōstānī « cīṛiyā » *bird*), and রুপ, তুরুপ « t(u)rup » *trump in cards* = *troef*; ইস্‌রুপ, ইস্কুরুপ « isk(u)rup » *screw* = *schroef*; বোম « bōm » *shaft of carriage*, '*beam*' = *boom*; and পিসপাস « pispās » *a dish of rice and meat* = *poespas*. In addition to the above, there are probably a few more from the French and Dutch, but they have not been identified. The Germans and the Danes also came to Bengal, but no German and Danish word seems to have been borrowed direct by Bengali.

122. Of English words it is not yet the proper time to estimate the number and character. There is a steady increase going on in the English element. The English loan-words are names of objects, ideas and institutions brought into India by the Britons. In some cases, there have been attempts to substitute for the English names of material articles or

of new ideas Sanskrit (and vernacular) neologues, but these have almost invariably failed when they referred to material objects: although Indian equivalents of the English idea words and institution words, being confined to the speech of the educated, have sometimes caught on: *e.g.*, বাষ্পশকট « bāspa-śakaṭa » for *railway*, কৌতুকাগার « kautukāgāra » for *museum* have failed, the speech of the masses employing either রেলওয়ে « rēloē » or রেলগাড়ী « rēl-gāṛī » or কলের গাড়ী « kalēr-gāṛī » = *machine-carriage*, and যাদুঘর « jādu-ghāra » = *magic-house*; but সম্পাদক « sampādaka » for *editor*, অধ্যক্ষ « adhyakṣa » for *manager* etc. are freely used in speech. Many of the English words admitted early in the 19th century have become completely Bengalised: *e.g.*, হাঁসপাতাল « hāspātāl » *hospital*, লাট « lāṭ » *lord*, ইস্কুল « iskul » *school*, ডাক্তার « ḍāktār » *doctor*, গেলাস « gelās » *glass*, আপিস « āpis » *office*, টেবিল « ṭēbil » *table*, বেঞ্চি « beñci » *bench*, মাষ্টার « māṣṭār » *master*, গারদ « gārad » *guard, prison*, লণ্ঠন « laṇṭhan » *lantern* etc., etc. The presence of the English language and the spread of a knowledge of the English words in their proper pronunciation is preventing a Bengalisation of the words admitted within recent years. A few vocables, however, have assumed a totally un-English appearance through folk etymology: *e.g. municipality* = মুন্‌শীপাল « munśī-pāl » = *band of clerical officers*, or *the officer-protecting; honeysuckle* = হানিশিকল « hāni-śikal » *a chain of injuries*, and *artichoke* = হাতিচোখ « hāti-cōkh » = *elephant-eye*, among the gardeners and vegetable dealers of Calcutta. These popularised forms are used only among those who have no English.

The English element is bound to be of the widest extent possible. Any newspaper would show the amount of English which finds place in Bengali journalese of the present day. Trades, literature, science, art, politics, history,—in fact almost all the avenues of life and of literature are favorable for the introduction of English terms: since English is the medium through which the Bengali (and Indian) mind holds commerce with the outside world. In the early part of the 19th century, and down to the 4th quarter of it, the words adopted by Bengali were mainly names of material objects, the achievements more or less of modern science. Intimate acquaintance with European life and thought, and ideas and

institutions, and the introduction of the latter into India, are responsible for a vocabulary of culture words from English, such as is absent in early 19th century Bengali. Words like ভোট « bhōṭ » *vote*, ব্যালট « byālâṭ » *ballot*, সেক্রেটারী « sēkrēṭārī », প্রিণ্টার « priṇṭār » , গেজেট « gējēṭ » *gazette*, টাইমটেবল « ṭāim-ṭēb(â)l » are in common use now; and even such words as রোম(য়)ান্স « rōm(y)āns » *romance*, রোমাণ্টিক « rōmāṇṭik » , ক্ল(য়)াসিক « kl(y)āsik » *classic*, ট্রাজেডি, কমেডি « ṭrājēḍi, kâmēḍi » (for « viyōgântâ, milânântâ nāṭâkṭ »), আর্ট « ārṭ » , ফিউচারিজম « phiuchāriz(â)m » *futurism*, প্রিরাফেলাইট « pri-ryāphēlāīṭ » *Pre-Raphaelite*, সায়েন্স « sāyēns » *science*, প্রোটোপ্লাজম « prōṭōplāz(a)m » *protoplasm*, প্লিষ্টোসিন « pliṣṭōsīn » *pleistocene*, ল « lâ » *law*, প্লট « plâṭ » *plot* (*of a story*), কেমিস্ট্রি « kēmiṣṭrī » *chemistry*, ফিজিক্স « phiziks », etc., etc., are being bodily adopted at the present day. Foreign names come to Bengali through English; and even Indian names of persons and places outside Bengal. These are written in Bengali according to the English pronunciation, although acquaintance with the original sources or source forms sometimes gives us, in more careful writers, Bengali forms near enough to the original, and not two degrees removed. Thus we have প্লেটো « Plēṭō », but also প্লাতোন « Plātōn »; but commonly it is the English forms that obtain: e.g., ইস্কাইলাস্ « Iskāilās » , এরিষ্টোটল « Eriṣṭōṭ(â)l » , ভল্টেয়ার « Bhâlṭēyār » *Voltaire*, গেটে « Gēṭē » *Goethe*, ভিক্টর হিউগো « Bhikṭâr Hiugō » ; and we have careful transliterations like গী-দে-মোপাসাঁ « Gī-dē-Mōpā-sâ » and রোদ্যাঁ « Rōdyâ » *Rodin*, টুরগেনিয়েভ « Ṭurgēniēbh » and কার্দুচ্চি « Kārducci » *Carducci*, side by side with আইটো « Âiṭō » = Marquis *Ito* of Japan and গিওকোণ্ডা « Giōkōṇḍā » for « Jōkōndā » *Gioconda*, ট্যাং « Ṭyāṃ » and সাং « Sāṃ » (= *T'ang*, *Thang* and *Sung* dynasties of China), and even ন্যাটিশান « Nyāṭiśān » and ভেঙ্কাটা « Bhēṃkāṭā » for the South Indian নটেশন্ and বেঙ্কট « Naṭêśan, Vēṃkaṭa » .

In considering the phonology of the foreign element, only those English words which occur in popular speech, and have become Bengali in form, alone have a right to be studied, side by side with the naturalised Persian and Portuguese words; and only such naturalised words have been treated in the present work. (See later, *Phonology of the Foreign Element*: English.)

PROPORTION OF THE VARIOUS ELEMENTS IN THE BENGALI LANGUAGE.

123. The latest Bengali dictionary, which is the biggest yet published, and by far the best (by Jñānêndra-Mōhan Dās: Calcutta, 1323 San = 1916), has, as the compiler states in the Preface, some 75,000 words and compounds. A rough survey of this dictionary showed between 32 to 33 thousand Sanskrit words (*tatsamas*); and there are some 2,400 Persian (Perso-Arabic) words, about 700 English, and some 100 Portuguese, with a few Dutch (not identified) and French and other foreign. The rest are either native Bengali (*tadbhava* and *dēśī*), or old borrowings from Sanskrit (completely naturalised *semi-tatsamas*), or borrowed from cognate NIA. speeches. Taking, in round numbers, the *tatsama* element at 33,000, and the Persian at 2,500, and the English and other European at 1,000 (considering possible omissions, and also the fact that many *tadbhava* words occur in different spellings), the percentage of words, on the basis of Jñānêndra-Mōhan Dās's dictionary, would roughly be—

Native Words (*tadbhavas*, *semi-tatsamas*) and *tadbhava* borrowings from sister-speeches ...		51·45
Tatsama or Sanskrit Words		44·00
Foreign Words	Persian	3·30
	English, Portuguese, etc. ...	1·25
		100·00

Somewhat less than half is thus *tatsama*: and this in a dictionary which is conspicuous for the large number of common *tadbhava* words it has included. In a dictionary, of course, all learned words have a place, and the percentage of the various elements in a dictionary is not the true guide to that in the ordinary speech.

The native *tadbhava* element has been suffering from curtailment ever since the characterisation of the language as Bengali. The 47 Caryā-padas contain, including repetitions, some 2,000 words and compounds (1,957, to give something like an exact number, from Mm. H. P. Śāstrī's lists in the 'Bauddha Gān Ō Dōhā'). Of these, 310 are spelt exactly as in Sanskrit, but a great many of these 310 are equally

tadbhava and *tatsama* in form : words like « kulisa, nalinī-vana, vivāha » are as much of the original stratum of the language as « bāja < vajra, « dŭdhu = dūdha < dugdha, rŭkha = rūkha < vṛkṣa », etc. There are a number of *semi-tatsamas* like « niti = nitya, jaütuka = yāutuka, sādhī = sādhu, adhiātā = adhyātma, avidā = avidyā, svapana = svapna » etc., etc. In fact, of the 310 words, real *tatsamas* are comparatively few. Genuine *tatsamas* like « sadguru » (occurring 7 times), « sadbhāva, vidyā, padma, -artha, avadhūtī, karṇa-kuṇḍala-vajra-dhārī, sva-, sarva, sukha, duḥkha, bhava-nirvāṇa, māṅsa, vāk-pathâtîta, saṁjñā, iṣṭā-mālā, dvādaśa, unmatta, caryyā, caṇḍālī, bhava-jaladhi, rāga, puṇya, avakāśa, nāukā » cannot be more than 100, at the highest computation : which would work to 5% for the language of the Caryās, leaving the remaining 95% pure *tadbhava* and *dēśī* words, with some *semi-tatsamas*, for the language of the 10th-12th centuries.

But Bengali began to lean on Sanskrit from the beginning. The old native *tadbhava* forms were dropped to a great extent, even from the popular speech, *tatsamas* and *semi-tatsamas* taking their place. It would be interesting to note the rate of admission of *tatsama* words. In Caṇḍī-dāsa's 'Śrī-Kṛṣṇa-Kīrttana,' out of 863 words (the sum total occurring in 7 pages taken at random from the printed edition of that work), 109 are pure *tatsamas* (at least in spelling), and the rest are *tadbhava* and *dēśī*, with a few *semi-tatsamas*. The percentage works out at 12·5 for pure *tatsamas*. Thus Early Middle Bengali has a marked excess over the Old Bengali of the Caryās. Words like « saala, sāara, mēha, bōha, naarī, niaḍa, naī » either wholly give place to their Sanskrit proto-types which most speakers of Old Bengali knew, like « sakala, sāgara, mēgha, bōdha, nagarī, nikaṭa, nadī », or are considerably restricted in use, as archaic, poetic or dialectal forms. But still, in the 14th century, a great many *tadbhavas* prevail, only to be gradually eliminated in the subsequent periods: although here and there in the dialects and in place-names we find old *tadbhavas* lingering (*e.g.*, Chittagong বয়ার « bâyār » = « vāta- »; North Bengali বাসোয়া « bāsoā » *ox* = « vasaha, vṛṣabha » ; Bengali poetic সায়র « sāyŭr » = « sāgara » ; নৈহাটী « Nai-hāṭī », name of a West Bengal

town, preserves নৈ « nai, naï » , but every one says নদী « nadī » and no one would understand নৈ « nai », although নৈ is a living word in Assamese). In ordinary Middle Bengali, as in the popular legendary tales which are understood by the masses everywhere, the percentage of *tatsama* words is 33·2, and that of *tadbhavas* (with *dēśī* and a few *semi-tatsama* and fewer foreign words) is 66·8, as worked out from the words occurring in 10 pages of the 'Vaṇga-Sāhitya-Paricaya' of Dīnēsh Chandra Sen, representing 5 works (2 pages from Kētakā-dāsa Kṣemânanda's 'Manasār Bhāsān,' c. 1650: 78 *tatsama* words out of 338; 2 pages from Kavi-kaṇkaṇa Mukunda-rāma, c. 1580: 119 *tatsama* words out of 322, of which 2 are Persian; Kāśī-rāma Dāsa's 'Mahābhārata,' 17th century: 147 *tatsamas* out of 336; Kṛttivāsa's 'Rāmâyaṇa,' 15th century: 89 out of 366 [the small proportion in this Early Middle Bengali work is noteworthy]; and Nārāyaṇa-dēva's 'Manasā-maṇgala,' Early Middle Bengali, but date unknown: 146 out of 313: total, 579 *tatsama* words out of 1,744).

It is noticeable that the use of Sanskrit words depends a great deal on the preference of the writer; but in the Middle Bengali literary language, a third of the vocabulary had become Sanskrit by the middle of the 17th century. The Sanskritising tendency was steadily on the increase, and although the inherent grace and vigour of the language was much encumbered by the gorgeous trappings of Sanskrit, it would not be quite correct to say that the language of Middle Bengali poetry, such as in Kavi-kaṇkaṇa or Kāśī-rāma Dāsa, or Bhārata-candra, was or is too learned for the masses. People were steadily becoming familiar with a Sanskritised Bengali ever since the 14th century: but the language was never stilted or artificial. It was when the Paṇḍits of the College of Fort William at Calcutta began writing text-books to order, that the vicious habit of writing in strings of Sanskrit words and phrases, with a Bengali verb or particle here and there, came in, and partly paralysed the Bengali literary style (in prose) for half a century. The work of the Paṇḍits did not affect the living Bengali speech at all: their legacy to posterity was a laboured prose style, like 18th century and 19th century journalistic Johnsonese in English; and this laboured prose in the hands of

capable authors like Akṣaya-Kumāra Datta, Īśvara Vidyāsāgara, and Bankim Chandra Chatterji in his earlier novels, as well as a host of lesser names, became an admirable instrument of expression, and formed the basis of the literary dialect of the present day.

In Modern Bengali, the colloquial has a surprisingly small percentage of Sanskrit words: one of the reasons, of course, is that in the language of ordinary conversation, the range of the vocabulary is not large. Taking four works in the colloquial style, one by Bankim Chandra (his 'Indirā,'—the grammatical forms in this work are the full ones of the literary language, but the style and vocabulary are entirely of the colloquial), the second by Girish Chandra Ghosh (his drama 'Praphulla'), the third a collection of folk-tales, in a slightly archaistic but none the less living speech of East Bengal villages, retold in the literary form going close to the Calcutta dialect (the 'Ṭhākur-dādār Jhulī,' one of the inimitable compilations of Dakshiṇā-Rañjan Mitra Majumdār), and, finally, the 'Hutōm Pēcār Naksā' of Kālī-Prasanna Siṅha (see p. 135), and counting up the words in several pages of each, and arranging them in classes, and then working out the percentage, the following figures are arrived at: 79·1% *tadbhava* and *dēśī*, with some *semi-tatsamas*; 17·1% *tatsama*; and 3·7% foreign, mostly Persian ('Indirā,' 5 pages = 536 *tadbhava* and *dēśī* + 153 *tatsama* + 7 foreign; 'Praphulla,' 4 pages, respectively 724 + 137 + 20; 'Ṭhākur-dādār Jhulī,' 5 pages, 734 + 125 + 14; and 'Hutōm Pēcār Naksā,' 1st edition, 4 pages, 576 + 140 + 81; total, 2,570 *tadbhava*, *dēśī* and *semi-tatsama*, 555 *tatsama* and 122 foreign words). In treating a literary, political or philosophical subject, the vocabulary has to be more Sanskritic, although the treatment may be entirely colloquial. Avoidance of *tatsama* words is almost impossible in Bengali; and long sustained narrative, as in the Hindī novels of Inshā' Allāh Khān and Hari Audh, in which a purely native, i.e., *tadbhava*, *dēśī* and *semi-tatsama* Hindōstānī has been employed, without Sanskrit or foreign words (see LSI., Vol. IX, Part I, pp. 103, 111), cannot be thought of in Bengali; although whole sentences in *tadbhava* Bengali are frequently met with in poetry, sentences perfectly natural and well-balanced. But the Sanskrit vocabulary of an ordinary newspaper

or novel of the present day is understood by all who speak Bengali. In the colloquial Bengali style discoursing of intellectual topics, the following statistics will give a general idea of the percentage of Sanskrit loan-words. In Rabīndra-nāth Tagore's discourse on Bengali metre (in the 'Sabuj Pattra' for Caitra, 1325), a most admirable treatment of an intricate subject entirely in the colloquial, 4 pages, presenting a total of 860 words, show 482 *tadbhava*, 352 *tatsama* and 26 foreign words: i.e., a percentage of 56·0, 40·9 and 3·0 respectively; and 4 pages of a paper on a political topic by Pramatha Chaudhuri (Mr. Chaudhuri is an active champion of the use of the colloquial in literature), a paper named 'Rāyatēr Kathā,' or *the Tenant-farmer's Standpoint* ('Sabuj Pattra' for Phālguna-Caitra, 1326), an aggregate of 857 words shows 495 *tadbhavas*, 247 *tatsamas* and 115 foreign words (Persian and English): a percentage of 57·7, 28·8, and 13·4 respectively. So that in Modern Bengali as used in literature by the best writers, the percentage of Sanskrit words does not exceed, generally, that of Middle Bengali. The early 19th century tradition of the Paṇḍits is not dead, but the language cannot be said to suffer from it any more. Some of the early works in the Sanskritic Bengali will always remain classics in style; and the best writers of the present day have passed through the discipline of the « sādhu-bhāṣā ». Percentage of words of various kinds from 5 pages of the 'Kādambarī' of Tārā-Śankar Tarkaratna will give an idea of the amount of Sanskrit in this kind of Bengali: 5 pages = 670 Sanskrit words and compounds + 328 *tadbhava* forms + 2 Persian, respectively 67·00, 32·8 and 0·2 per cent.

The percentage of the Persian element may be briefly reviewed. The proportion in Bengali, as in Jñānêndra-Mōhan Dās's Dictionary is less than 4·00 (see p. 218). In Rai Bahadur Yōgêsh Chandra Vidyānidhi's Dictionary (VSPd.), the number of Persian words is less than 1,450: the total number of words in this 'Śabda-kōṣa' does not seem to exceed 18,000, on a rough computation; and as these are mostly folk-words, the percentage of Persian words in the popular Bengali of West Bengal and West Central Bengal, as presented in this dictionary, would be about 8%. This is slightly higher than what we find in the living Calcutta colloquial of the

'Hutōm Pĕcār Naksā': in 15 pages of this book, taken at random, containing some 3,000 words at the rate of 200 words per page, 213 Persian words occur: the percentage is thus 7·1 for the speech of educated Hindus of Calcutta over 50 years ago; and this would seem to hold good at the present day as well. The percentage, 13·4, as in the article by P. Chaudhuri mentioned above, is due to the nature of the subject discussed, the land-tenure and law vocabulary of Bengali being mainly Persian. The percentage in Musalmānī Bengali, and in the ordinary language of Bengali Musalmāns generally, has been discussed before at p. 211.

APPENDIX E

Bengali Orthography.

124. The Bengali language has always been written in the Indian alphabet. The history of the origin and development of the Bengali alphabet has been treated in detail in 'the Origin of the Bengali Script' by R. D. Banerji (Calcutta University, 1919), and Mm. H. P. Śāstrī's paper to the VSPdP., Vol. XXVII, No. 1, 'Bāṇgālār Prācīn Akṣar,' is also to be mentioned. The story of the development of the various letters in their present-day forms is a complicated one, but the general pedigree is clear. The Bengali alphabet is derived from an Eastern alphabet current in what is now Eastern United Provinces, Eastern Central Provinces, Bihar, Orissa, and Bengal and Assam, from the 6th century onwards. This Eastern Alphabet is a variety of the Gupta script (400-550 A. C.), which is a sort of cursive development, through the intermediate Kuṣāṇa writing, of the primitive and monumental Brāhmī, the mother of all the national Indian alphabets. In the early and later history of this Eastern Alphabet, there was some influence of the script current in other parts of Northern India (except Kashmir) from the 8th century onwards, a script equally derived from the Gupta Alphabet, which later became the Dēvanāgarī. This western North-Indian script, which may be called 'Proto-Nāgarī,' was characterised in the Gujarat-Rajasthan and Midland tracts, and it seems to have spread into Eastern India and modified the local alphabet; and this might be noted in connection with what has been said about the spread and influence of the Western (Śaurasēnī) Apabhraṅśa in Eastern India (Bihar, Bengal), at pp. 91, 113 ff. The earliest graphic documents in Bengal are the Susunia Rock Inscription, end of the 4th century (see pp. 75-76), and the Gupta inscriptions, of the 5th century. From the 8th century onwards, we have a fair number of inscriptions in Bengal. It seems that there was in Bengal a cursive hand

which differed from the more formal and archaic inscriptional alphabet; the latter showing greater western influence. MSS. written in this cursive form of the Eastern alphabet, dating from the 7th century, the MSS. preserved in the temple of Horiuzi in Japan, have been found. This cursive Eastern alphabet is the immediate source of (1) Bengali-Assamese, (2) Maithilī and (3) Oṛiyā alphabets. (1) and (2) are practically identical: almost all the forms in (2) are found in old MSS. written in (1). In fact, Sanskrit MSS. in Maithilī characters used to be read quite easily by Bengali Paṇḍits, to whom these characters were known as তিরুটে « tiruṭē = tirahuṭiyā » letters (Tirahuṭi = Tīrabhukti = Mithilā). In Magadha, the same alphabet was in use as in Mithilā and Bengal, and numbers of pre-Moslem MSS. written at Nālandā and Vikrama-śilā in Magadha have been found preserved in Nepal. But the Moslem conquest put an end to the indigenous learning of Magadha; and in later times, after the land had come under the influence of Hindostan, the cursive or short-hand form of the old Dēva-nāgarī style of the Indian alphabet which prevailed in Northern and Western India (as has been said before) from the 7th century, namely, the « Kaithī » script, came to Magadha by way of the Bhōjpuriyā tract; and this Kaithī alphabet has held the ground till now. Kaithī because of its simplicity has spread to Mithilā as well, where only the Brāhmans and other upper classes keep up the old Maithilī character. The latter has never been printed from types; and Dēva-nāgarī, strengthened by the spread of Hindī, and by its special association with Sanskrit at the present day, is now employed in printing Maithilī. In Orissa, the old cursive alphabet of the East changed as early as the 15th century into the Oṛiyā alphabet as current now, with its characteristic top-loops and its minute essential parts. The peculiar form of the Oṛiyā letters, and their deviation from the Bengali-Maithilī norm, is due primarily to the writing materials used in Orissa, *viz.*, palm-leaf and an iron stylus, whereas the reed pen and ink and paper have kept up the angular shapes in Bengal and Mithilā. It is probable that the Oṛiyā script has unconsciously followed the model of the neighbouring Telugu alphabet, in which the absence of angular shapes is

a noticeable feature: the culture of Andhra or the Telugu-land has influenced that of Orissa in many ways.

The inscriptions and other early documents give us valuable hints as to contemporary habits of pronunciation. In the 7th century, the characters, for « b » and « v » (=ब, ব of Dēva-nāgarī) are confused, and evidence is not wanting for their loose use in the 5th century. After the 8th century, only one letter, that for « v », is used for both, showing that in the pronunciation of the eastern area, these two sounds had fallen together; and from the state of things in the 'Bihārī' speeches, and in Oṛiyā and Bengali, it can be seen that in Māgadhī Apabhraṅśa of the 8th century, and perhaps earlier still, all initial « v- » s of MIA. became « b- », and medially only the « v » or « w » sound occurred, merely as a euphonic glide. In later times, distinction between « b » and « v, w » was sought to be indicated in Bihārī and Assamese by means of diacritical marks on the letters for « b » (Kaithī ৰ = « b », ৱ = « w »; Assamese ৰ = « b », and ৱ = « w »; but in Maithilī, ৰ = « w », ৰ় = « b »). Misspellings of Sanskrit words, which are not infrequent, show vernacular pronunciation of the former: *e.g.*, « ri » for « ṛ », indiscriminate use of « ś, ṣ, s », use of « kṣ » for « kh », in one instance at least (Manahali Grant of Madanapāla-dēva, c. 1118)—« likṣita » for « likhita », showing the « kkh » pronunciation of « kṣ » in the 12th century: and we are thankful for these mistakes. The occurrence of the anunāsika (candra-bindu = ঁ), as distinguished from the anusvāra (°= Modern Bengali ং), is an indication of a nasal pronunciation in the eastern languages at least from the end of the 11th century.

In Bengali, the spelling has been influenced by Sanskrit to a very great extent during the 12th century. In Middle Bengali, too, this influence was present, and it prevented a tradition and a system for the *tadbhava* words from growing up. Scribes were careless, and they were careless even with regard to the Sanskrit words. There was no uniformity, the same word being written differently in the same page and even in the same line. Under the tutelage of the Paṇḍits well acquainted with Sanskrit, whose influence was great at the beginning of the 19th century,

when the modern literary style was established for prose (and when printing was introduced), a rigid adherence to the correct orthography for Sanskrit words naturally came in, and brought in a needed uniformity for *tatsama* words, in the place of the chaos which reigned before. But the scholastic tendency went beyond its legitimate area, and sought to model the spelling of vernacular *tadbhavas* on their Sanskrit prototypes and on theories of orthography: *e.g.*, জে, জাহা, জিনি, জত, √জাওয়া « jē, jāhā, jini, jàtà, √jāoā » etc. came to be written with য « y », instead of জ « j », because of the Sanskrit « yad » and « √yā »; « kārya > kajja > kāja » was written কায « kāya », « y » pronounced as « j », and not কাজ « kājā », as before; and the ণ « ṇ » of Sanskrit was restored to কাণ = কান « kāṇ < kaṇṇa = karṇa », and was brought in unjustifiably to রাণী, = রানী « rāṇī < raṇṇī = rājñī », etc., etc. The old group ওা « oā » for « wā », without the intervening, unnecessary য় (ওয়া « ōyā »), was given up as barbarous. Some sort of system was attempted in this way: but in the matter of writing the *tadbhavas*, especially the verbal and other forms which figure in the colloquial, Bengali orthography is still lamentably backward and ununiform. The old spellings of the MSS. are of very great help in tracing the history of the sounds, as they are frankly phonetic, when the scribes were not troubled by the ghost of Sanskrit.

According to Middle Indian notions, which form the basis of the mystical treatment of the *akṣaras* in the Tantric works, the number of primary letters or radical signs (« mātṛkâkṣara ») in Sanskrit, and following that, in the vernaculars, is 50,—16 vowels and 34 consonants. In this enumeration, there is both scholastic theorising and popular misconception. The former added ঌ « ḹ » to the list of vowels, although it is not found in any OIA. word or form (« ḹ » is recognised by the 'Kātantra'), to bring about symmetry; and anusvāra « ṁ (ṁ) » and visarga « ḥ » are classed under vowels—which may be justified. The latter is probably responsible for the inclusion of ক্ষ « kṣ » in the list of radical characters. Inclusion of « kṣ » among simple consonants is as old as the 'Lalita-vistara' (Chap. X), the romantic biography of Buddha in mixed Sanskrit, which goes back to the 1st century after Christ. This may have

been due to the differentiation, in the written form, of this consonant group from other consonant groups with « k », aided by some modification in its pronunciation in Sanskrit (which might have been that of a « kkh », or of « kkhy », or of the palatal stop and aspirate sounds of [cch]). A modification of the pronunciation of the group « kṣ », in Sanskrit words, from « k+ṣ » [kʂ] to something else, in early MIA. times,—to [kʃĭ], in all probability,—is at the basis of the Middle Bengali value of « kṣ » as « kkhy » (in *tatsama* forms) ; and this is perhaps not unconnected with the representation in the Kharōṣṭhī alphabet of « ch » when derived from OIA. « kṣ » by a separate letter from that used for an original OIA. « ch » (cf. A. M. Boyer, 'Inscriptions de Miran,' JA., Mai-Juin, 1911, pp. 423-430). In any case, the medieval Paṇḍits of Bengal had some justification for regarding ক্ষ « (k)khy » = ক্ষ « kṣ » as a special consonant, because of its « y » element. The ligature জ্ঞ = « jñ » which came to obtain the value of « (g)gy̆ » in medieval Sanskrit, ought to have been recognised as a separate *akṣara* in MIA. or early NIA. times, in a similar way. In Early Bengali, writers always speak of the '34 consonants,' and a class of composition, called চৌতিশা « Cautiśā » (= catustriṅśatikā), was very popular, in which consonants in their order, from « k » to « kṣ », would be used in successive verses for alliteration or for the head word.

The Indian alphabetical principle of *akṣaras*, i.e., of words being divided into syllables which were not closed by a consonant, was a result of the system of writing. This idea of *akṣaras* for a long time dominated the Bengali theory of versification. (See below, under *Phonology :* Accent.)

125. There has never been any attempt on a large scale to make the Bengali language adopt a different kind of writing from the one in which it was born, so to say. In the 18th century (and it may be earlier), some Musalmāns in Chittagong employed the Perso-Arabic script in writing Bengali. A number of these Perso-Bengali MSS. have been found (cf. Munshī Ābdul Karim Sāhitya-viśārada, 'Prācīn Bāṅgālā Puthir Vivaraṇ,' VSPd., Part I, No. 1, MSS. No. 87, 99, 124, 211, 278, for instance). But Musalmāns in other parts of Bengal knew of no other script for their mother-tongue than the national one, and consequently

the likelihood of the language being divided by the script has been averted. The language of these Perso-Bengali MSS. is good Bengali, with special Mohammedan religious and other terms. The spelling of the Bengali and Sanskrit words is phonetic, so far as the Arabic script would allow it, but Persian and Arabic words, naturally enough, follow their original spellings. Through the courtesy of Munshī Ābdul Karim, I have been enabled to obtain specimens of this Perso-Arabic writing for Bengali. They are highly interesting, and are valuable for East Bengali dialectal phonology. A few specimens are given below.

From the 'Yōga-Kālandar.'

آبْ اَتَشْ خَاكْ بَادْ اِچَارِيْ مَقَامْ

« ābŏ ataš xāk bād ĕ cārī maqām »

(= আব আতশ খাক বাদ এ চারি মোকাম।

« ābঽ ātāśঽ khākঽ bādঽ ē cāri mōkāmঽ »)

Water, Fire, Earth, Air: these are the four abodes:

مَنْدِيَا شُنُوْ كَهِيْ جَارْ جِئِيْ نَامْ

« mŏn diyyā šunū kahī jārŏ jĕ'ī nām »

(= মন দিয়া শুন কহি যার যেই নাম॥.....

« mânঽ diyā śunঽ kâhi jārâ jēi nāmঽ »)

Listen attentively, I tell the name of each .....

تَتَاتْ فِرِشْتَا اَسِ عَزْرَائِيْلْ پِهِرِيْ

« tatātĕ fĕrĕštā asĕ ʿazrā'īl pihrī »

(= তথাতে ফেরেস্তা আছে আজ্রাইল পহরি॥

« tâthā-tē pherestā āchē āzrāïl pâhârī »)

There abides as watch-man the Angel 'Azrā'īl:

بَاغِرْ اَكَارْ شِئِيْ دَهْرِيْ مُورَتِيْ

« bāgĕr akār šĕ'ī dahrayĕ mūratī »

(= বাঘের আকার সেই ধরয়ে মুরতি।

« bāghērঽ ākārঽ sēi dhârâyē mūrâti »)

A tiger's form is the figure he bears.

دَرْجَا اَسَئِی تَارْ اِدْرُئِي سَرْبَنْ

« darjā asa?ĕ tārŏ¦ĕ dū?ī sarban »

(= দরজা আছয়ে তার এ দুই শ্রবণ।

« dåråjā āchåyē tārå ē dui śråbåṇa »)

Doors there are to it,—these two ears.....

From the 'Nasiyat-nāmā.'

پَرَبُوْ اغِ شَرِي پَتِي زَانِيبِک بِشْ

« parabū āgĕ šarī pŏtī zānībĕk bĕš »

(= প্রভু আগে স্মরি পতি জানিবেক বেশ।

« prâbhu āgē smâri pâti jānībēk¦ bēś¦ »)

Thinking him even before the Lord, know the husband to be great.

پَتِي کِ شِيبِ نَارِي شَهِي دُکْ کِلِشْ

« pŏtī kĕ šēbĕ [=šĕbībă] nārī šahī duk kĕlĕš »

(= পতিকে সেবিব নারী সহি দুখ ক্লেশ॥

« pâti-kē sēbibâ nārī sâhi dukh¦ klēś¦ »

A woman serves (should serve) her lord, enduring sorrow and pain,

کُنُسْتَهَانْ هُتِ شَوَامِي زَدِي اَئِشِ گهَر

« kŏnŏ stahān hŏtĕ šŏwāmī zadī a?išĕ ghŏr »

(= কোন স্থান হ'তে স্বামী যদি আইসে ঘর।

« kōnâ sthān¦ hâ(i)tē swāmī jâdi āisē ghâr¦ »)

If the husband were to come home from somewhere,

شَبْ کَازِ تِيَاغِي نَارِي اَگِ دِبَا لَرْ

« šab kāzĕ tĕyāgī nārī āgĕ dībā lar »

(= সব কাজে তেয়াগি নারী আগে দিবা লড়॥

« sâb¦ kājē tēyāgi nārī āgē dibā lâṛ¦ »)

Leaving all works, O Woman, you should run.

پُتِیْک اُدّشِ نَارِیْ کَرِیْلِ غُمَنْ

« pŏtīkĕ uddĕši nārī karīlĕ g̱ŏmŏn »

(= পতিকে উদ্দেশি নারী করিলে গমন।

« pâtikē uddēśi nārī kârilē gâmân̤ »)

When a woman walks towards her husband,

مَکّہ اُدّشِ زِنْ جَاءِ حَاجِیْغَنْ

« mŏkkah uddĕši zēnŏ jā²ĕ ḥājī-g̱ŏn »

(= মক্কা উদ্দেশিয়া যেন যায় হাজীগণ ॥

« măkkā uddēśiyā jĕnâ jāy̤ hājī-gân̤ »

(*It is*) *as if Hājīs go towards Mecca.*

نَفَلْ نَمَازِ نِیَّت بَانْدِہ

« naful namāzĕ [du²i] niyyat bāndĕ²ĕ »

(= নফল নমাজে দুই নিয়ত বান্ধয়ে।

« nâphâl̤ nâmājē dui niyâtâ bāndhâyē »)

She performs regularly the nafl (*extraordinary prayers*) *and the* namāz (*prescribed prayers*) ;

ہِنْ شَم پُتِیْ زَدِیْ ڈَاکِیْ

« hĕnŏ šŏmĕ pŏtī zŏdi [nārīkĕ] ḍākĕ²yĕ »

(=হেন সমে [সময়ে] পতি যদি নারীকে ডাকয়ে ॥

« hēnâ sâmē pâti jâdi nārīkē ḍākâyē »)

If the husband were to call the woman at such a time,

(নমাজ এড়িয়া নারী দিবেক উত্তর ॥ [Perso-Bengali missing].

« nâmāj̤ ēṛiyā nārī dibēk̤ uttâr̤ »)

The woman will give a reply, leaving her namāz.

From the 'Ōkāt Rasul.'

جِبْرَائِيلْ شَغْ غِيسْ مِرْتُو وَدِيپَتِي

« Jibrā'īl šaggĕ (= šangĕ) gĕysĕ mirtū wadīpatī »

(= জিব্রাইল সঙ্গে গেছে মৃত্যু অধিপতি।)

With Jibrā'il, the lord of the death (= 'Azrā'īl) has gone to Muḥammad :

دِخِي زِيغْيَاشِلِنْتُ رَسُولْ مَهَامَتِي

« dĕxī zīggyāšilĕntŏ rasula mahāmŏtī »

(= দেখি জিজ্ঞাসিলেন্ত রসুল মহামতি॥)

Seeing him, the high-souled prophet asked :

كَهَبَائِي جِبْرَائِيلْ شَرُوپ بَصَنْ

« kaha bā'ī Jibrā'īl šarūp baṣan »

(= কহ ভাই জিব্রাইল স্বরূপ বচন।)

Tell me, brother Jibrā'il, the true words :

تُمَارْ شَغْتِي دِخِي وَهِي كَنَزَنْ

« tŏmār šaggatī (= šangatī) dĕxī wahī kanazan »

(= তোমার সঙ্গতি দেখি অহি কোনজন॥)

Who is that person I see in your company ?

Some lines have been given at length to show the nature of the orthography. Spellings like نِسْسَّئِي « nissa'ĕy » for নিশ্চয় « niścâyâ » *certainly*, پُسِ « pusĕ » = পুছে « puchē » *asks*, سَارِيَّا « sārīyā » = ছাড়িয়া « chāṛiyā » *having left*, بَائِي « bā'ī » = ভাই « bhāi » *brother*, پَرَبُو « parabū » = পরভু, প্রভু « prâbhu » *master*, بَائِكْ « bāikkŏ » = বাক্য « bākyâ », indicate

the typical East Bengal pronunciation ; and زِغّیاشِیلنْتَ « zɪgg̈yāšīlĕntŏ » = Middle Bengali জিজ্ঞাসিলেন্ত « jiggÿāsilentâ » *asked* (honorific), پِرْتِمبِی « pirtimbī » for পৃথিবী « pṛthibī » give folk-pronunciations of *tatsamas*. It would appear that in the spelling, there was not much of a rigorous system which was followed, গ « g » being represented by غ « g̈ » and گ « g », জ « j » by both ز « z » and ج « j », and খ « kh » by ک « k-h » as well as by خ « x »—the latter, however, indicating the dialectal Chittagong pronunciation. There was not much attention paid to the genius of the Bengali language, in the adaptation of such a different alphabet as the Perso-Arabic for it. But vowel quantity is ignored : and herein there is an agreement with the habits of early and present-day Bengali : the signs *zēr* and *pēsh* are used for এ and ও « ē, ō » ; and ِ ُ are used for ই ঈ, উ ঊ « i, I, u, ū ». But on the whole, the system lacks consistency, and compared with it, the orthography of Urdū is a scientific one. The Perso-Bengali script of the Chittagong MSS. now only remains as a curiosity—the outcome of a belief in the sanctity of an alphabet.

126. The Portuguese employed the Roman alphabet in writing Bengali books. We have evidence that Portuguese missionary activity began in Bengal from the third quarter of the 16th century, and before 1599 a translation of a Christian tract and catechism was made by a Jesuit Padre named Dominic Sosa, who 'indevoured to learne the Bengalan language,' and this work was taught to Christian children at school at Siripur ('Hakluytus Posthumus, or Purchas his Pilgrimes,' Glasgow, 1905, Vol. X, p. 205[1]). A Christian literature in Bengali, probably in the Roman charac-

[1] See J. J. A. Campos, 'A History of the Portuguese in Bengal,' Calcutta, 1919, pp. 100-101. Nikhil-Nāth Rāy, in his 'Pratāpâditya,' Calcutta, San 1313, has given (pp. 463 ff.) the original Latin letter of 1599 from the Portuguese Jesuit missionary Francisco Fernandes to Nicolas Pimenta, Visitor of the Society of Jesus, narrating the work of the Portuguese mission, including that of Sosa (de Souza), in Bengal, at Sripur and elsewhere : cf. also S. K. De in the VSPdP., No. 3, pp. 180-181. (For the reference to the passage in 'Purchas,' I am indebted to Dr. S. N. Sen.)

ter, thus seems to have grown up. Towards the end of the next century, we have the mention of another work in Portuguese-Bengali. Two at least of these Bengali works in the Roman character were printed, the *Crepar Xastrer Orthbhed* (see p. 136), and the *Vocabulario em Idioma Bengalla e Portuguez* (Lisbon, 1743), both by Padre Manoel da Assumpçam, and both are in existence. (S. K. De, 'History of Bengali Literature in the 19th Century, 1800-1825,' Calcutta University, 1919, pp. 69-76). The Kōṅkaṇī dialect of Goa was similarly written in the Roman character: but Portuguese-Roman Bengali did not take root.

Nathaniel Brassey Halhed in his Bengali grammar (Hugli, 1778) framed a scheme of Roman transliteration for Bengali on an English basis. There are MSS. of French-Bengali vocabularies (1781-83) by Augustin Aussant, the romanisation following the French values of the letters ('Catalogue sommaire des Manuscrits indiens etc.' par A. Cabaton, Bib. Nat., Paris, 1912, pp. 106-107; S. K. Chatterji in the 'Bhāratī' for Jyaiṣṭha 1330, pp. 136-137). Gilchrist's 'Oriental Fabulist' (1803) gives the fables of Æsop in several languages, including Bengali, in the Roman character, the system of transliteration being on the basis of English. At subsequent periods, in the 19th century and in the 20th, there have been sporadic attempts at making the Roman alphabet come into current use in Bengal (as well as in other parts of India), but so far they have not been successful.

127. In the border districts of Bengal, a number of alphabets allied to Bengali have been used to a small extent in writing the language, through contact with peoples using these characters: *e.g.*, Oṛiyā in Midnapore, Dēva-nāgarī and Kaithī in the extreme west of Bengal, and Maithilī in the north (in the Siripuriyā dialect). In Sylhet, a kind of modified Dēva-nāgarī, called 'Silēṭ Nāgari,' has a restricted use among the local Musalmāns, and this use of Nāgarī in distant East Bengal, and among Mohammedans, too, is explained as being the result of the influence of early colonies of proselytising Moslems from Upper India who wrote their vernaculars (Eastern and Western Hindī dialects) in Dēva-nāgarī—Persianised Hindī (or Urdū) being not yet in the field—and taught it to the local con-

verts: a tradition in employing this alphabet was thus established and has continued down to our times. Recently this alphabet has been used in printing. (Padma-nāth Śarmā, 'Silēṭ Nāgarī,' VSPdP., 1315, No. 4.) In Chittagong, the Chakma dialect of Bengali, spoken by Bengalised Maghs or Aracanese and other Tibeto-Burmans who are Buddhist by faith, is writen in an alphabet which is a modification of the Khmēr-Mōn (Burmese) system of writing, based ultimately on an ancient South Indian alphabet (LSI., V, Part 1, pp. 321 ff.).

The use of these various characters is a relic of the past, and the prestige of the native alphabet of Bengali has never been seriously assailed.[1] The language has become intimately associated with it, and Bengali speakers, like people everywhere, consider the alphabet as part of their language. It forms a great link with the past, with Prakrit, with Sanskrit: the phonetic history and the story of the development of the language are, howsoever imperfectly it may be, embodied in its alphabet and orthography.

[1] While admitting and appreciating all the arguments in favour of the Indian system of writing, I remain a believer in the Roman alphabet for all Indian languages, because of the simplicity of the symbols of which it consists, because of its true alphabetical nature is not subordinating the vowels, because of its manifold advantages in teaching, and in printing, and because of its wide use in the civilised world. The Roman alphabet, modified, supplemented and arranged according to the scientific scheme of the Indian one, would be a desideratum for India. But under the present conditions of the country, the idea cannot be taken up in earnest now for popular acceptance. Sentiments are stronger than convenience, and the sentiment in favour of the national script, which is natural enough among any people, here has something real to stand upon. The cause of the illiteracy of the masses is certainly not the so-called complicated nature of the Indian system of writing, as some missionaries and others fondly imagine. The use of the Roman alphabet in India will remain for a long time a matter of scientific and academic interest only. There must be fifty years or more of biliteralism, *after literacy in the current alphabets has sufficiently spread among the masses*, before the romanisation idea can filter down among the people from the more educated classes. But all that is rather remote; and abandoning the Roman alphabet as an impracticable thing for India at the present moment, I would strongly advocate the unity of our country in the matter of script through that truly national script of all India—the Dēva-nāgarī, as the next best thing.

PHONOLOGY

PHONOLOGY

CHAPTER I

PHONETIC HISTORY OF INDO-ARYAN

Old Indo-Aryan Sounds.

128. The OIA. Sound-system may be said to be represented by that of the Vedic speech, and it was the following :

Vowels.

	Back	Central	Front
Close (High) ...	u: u		i: i
Half-Close (High-Mid) ...	o:	(ə)	e:
Half-Open (Low-Mid) ...	(? ɔ: ?ʌ)		(?ɛ:)
Open (Low) ...	ɑ: ɑ		
Diphthongs ...	ɑ:ŭ		ɑ:ĭ(=? a:ĭ)
[Vocalic] ...			[r̥: r̥, l̥]

CONSONANTS.

	Glottal	Velar	Palatal	Cacuminal (Retroflex)	Alveolar	Bilabial
Stops ...		k g	c ɟ	ṭ ḍ	t d	p b
Aspirate Stops		kh gɦ	ch ɟɦ	ṭh ḍɦ	th dɦ	ph bɦ
Nasals ...		ŋ	ɲ	ṇ	n	m
Laterals ...				(ḷ ḷɦ)	l	
Flapped ...					r	
Fricatives ...	h ɦ	(x)	ç	ʂ	s	(ꜰ)
Semi-vowels ...			ĭ (j)			ŭ(w)

The symbols in the tables above are those of the International Phonetic Association.[1]

129. Of the above, it may be noted that—

[o:, e:], as in *bone, bane* in Northern (Scottish) English, were pure vowels, originating from earlier, pre-IA. short diphthongs [ɑŭ, ɑĭ] through

[1] Our materials for the reconstruction of OIA. Phonetics are the following: (i) Modern pronunciations in the various parts of India and Ceylon, which have preserved a great deal of the old pronunciation through a line of uninterrupted tradition for some 3000 years; (ii) Ancient theory and practice, as in the Śikṣās and Prātiśākhyas, and in Sanskrit grammatical treatises, representing faithfully the actual state of things in late OIA. times; (iii) Evidence of the Greek transcription of Indian words and names, and of Greek vocables into Indian speech, throwing a flood of light on Indian Phonetics of the end of the 1st MIA. and Transitional MIA. periods. (Chinese transcriptions, later than Greek, are practically of no value; and those in Iranian and Kuchean, as well as Mōn and Khmēr, Siamese, Tibetan and Burmese, Javanese and Malay, Mongol, and Arabic, are on rare occasions helpful for medieval Indian pronunciations): (iv) Evidence from the phonological development of MIA., and of the NIA. languages; (v) Evidence from that of cognate IE. languages like Avestan and Old Persian, Greek and Gothic, Church Slav and Latin: all these checked by (v) the Principles of General Phonetics, and phonetic development of Speech in general.

an intermediate stage of [ɔ:, ɛ:]. Ancient Indian grammarians were fully conscious of this diphthongal origin of [o:, e:], which were called « sandhyakṣara » or combined syllables. [a+u, a+i] regularly became [o:, e:] in Vedic and in Sanskrit; but the relation of [o:, e:] with « av, ay », i.e., [aw, aj], or [aŭ, aĭ], was quite patent, in groups like « śrō-tar : śrav-as, ē-ti : ay-ana ». It may be quite reasonably presumed that in the earliest OIA. period, [o:, e:] had the lower, more open sounds of [ɔ:, ɛ:], like the sounds of Southern English *awe, ere*; and, at that period, they might even have retained the original short diphthongal values of [aŭ, aĭ > aĭ ?] which obtained in Indo-Iranian.

[ɑ:; ɑ, ʌ, ə]: the short अ « ă » originally had an open, « vivṛta », sound, low back open [ɑ], and the long आ « ā » was the same sound with long quantity, [ɑ:]. But it is not impossible that the slightly close, « saṁvṛta », and withal back sound, traditionally = the *u* in Southern Englisn *but*, originated already in the early OIA. period; it certainly did, at least dialectally, at the time of Pāṇini (5th century B.C.), in the North-western speech. In an unaccented position [ɑ], or [ʌ], seems to have been pronounced as [ə], like the *a* in English *along*, as can be seen from elision in *sandhi* (« tē alaṇkṛtāḥ > tē' laṇkṛtāḥ »), and from cases of aphæresis and syncope in early MIA., *e.g.*, Pali « laṇkāra < alaṇkāra, numati < anumati, okka < *ukka < *utka < *ud'ka < udaka » (cf. E. Müller, ' Pali Grammar,' London, 1884, § 7; W. Geiger, Pali Grammar in the Grundriss der Indo-Ar. Phil. u. Altertumskunde, § 20).

[ɑ:, ɑ] were low back sounds; and although the short « ă » [ɑ, ʌ] has been raised in most MIA., there has never been noticeable any tendency to front it to [a][1]: the typical NIA. representatives of the OIA. [ɑ, ʌ] being all back vowels, *e.g.*, Northern Indian [ʌ], Bengali [ɔ], and Marāṭhī [v], the last being an [o] with spread lips.

[1] But possibly in the old Prācya speech, which changed OIA. '-as, -aḥ' to '-ē,' [a] before the *visarga* was fronted to [a, æ] before passing into 'ē': cf. the IA. change of Indo-Iranian '*-az-' to '-ē-' ('*mazdha-' > Skt. 'mēdhas,' Avestic 'mazda-'; '*azdhi' > Skt. 'ēdhi,' Avestic 'zdī,' etc.)

The long diphthongs [a:ŭ, a:ĭ (=a:ĭ?)] had their first elements long in the Vedic period, but later, immediately before the MIA. period, they seem to have become short, and converged towards [aŭ > o:, aĭ > e:], to be ultimately merged into original [o:, e:] in MIA. The quality of the « ā » vowel in ऍ « āi » it may be presumed, was fronted from the back [a:] to the front [a:] in connection with the palatal [i] forming the second element of the diphthong. The medieval and modern Sanskrit values of these diphthongs do not make the first element long.

130. As for the consonants, the glottal sound of [h] is the *visarga*, which is voiceless *h*, as in English *hand*, *happen*, occurring in OIA. only finally after a vowel, and after the unvoiced stops in aspirates ([kh, th etc.]); and [ɦ] is the fully voiced sound, the normal Indian ह « h », which is found commonly in an intervocal position in English, in words like *behind*, *perhaps*: [ɦ] is found in all positions except the final in OIA., and it occurred also in the voiced aspirates ([gɦ, dɦ] etc.).

[k kh, g gɦ] are well-known sounds; [ŋ] is the velar nasal; [x], the « jihvā-mūlīya » sound, that of *ch* in German *ach*, occurred only as a variant of [h] before [k]: « tataḥ kim » = [tatax kim].

The palatal stops and aspirates [c ch, ɟ ɟɦ] were made with the front of the tongue striking against the hard palate, above the teeth-ridge; there was very little of a spirant off-glide, and the sounds were rather different from the NIA. (and MIA.) affricates with a pronounced *sh* or *zh* element, into which they developed: they resembled *ky*, *gy*, or rather, were more like *ty*, *dy* sounds, than anything else; and in early MIA., in most of the dialects, « ty, dy » fell together with [c, ɟ]. [ɲ] is the French and Italian *gn*. The palatal fricative [ç] was originally pronounced, as its frequent interchange with [k] and [c] would show, like the *ch* in Standard German *ich*. Later, it developed, during the OIA. period, the sound of a forward kind of *sh*, [ʃ̟], such as is found in Bengali; and this can be seen from numerous cases of interchange with [s] in Vedic and Sanskrit; but in most MIA., [ç>ʃ̟] was reduced to the dental [s].

The retroflex or cerebral sounds, [ʈ ʈh, ɖ ɖɦ, ɳ], were produced by striking the curled tongue-tip well against the dome or the highest point of the

palatal arch. The retroflex sibilant, « ṣ » [ʂ], an *sh*-sound, seems to have been produced exactly in the same way. This would result in a sound approaching the velar spirant, [x] ; and it seems in certain forms of OIA., the [x] sound was actually the one employed for [ʂ], as we can infer from a medieval pronunciation of [ʂ] as [kh], which still obtains—[kh] being the nearest Middle Indian approximation to a traditional [x]. Cf. [-s->*ʂ, ʂ>x] in Slav: « snŭxa, synŭxŭ » = Skt. « snuṣā, sūnuṣu » etc. : compare also the dialectal Paṣtō pronunciation of [ʂ] or [ʂ] as [x]. In the MIA. vernaculars, [ʂ] fell together with [ʃ] or [s]. The retroflex laterals [l̤, l̤ɦ] seem to have occurred dialectally only, in the speech which formed the basis of the Rig-Veda dialect; they were from an original [ḍ, ḍɦ] in intervocal positions. Sanskrit does not use the [l̤, l̤ɦ], but Pali does.

[t th, d dɦ], according to the evidence of the 'Prātiśākhyas,' were « dantamūlīya » or alveolar sounds (like *t* or *d* of English), and not interdental (like the Italian sounds), which they are now. [n, l] have always retained their alveolar sounds. The vocalic [l̥], as in the second syllable in the English word *little* (without its guttural quality), was an exceedingly rare sound, and Vedic preserves it only in the root « kl̥p ». [r̥] was an alveolar sound: it is described in the 'Ṛk-prātiśākhya' as being produced in the « vartsa (= barsva) » *teeth-ridge* region. It is also described as a cerebral sound, owing probably to its influence in changing dentals to cerebrals in certain forms of early MIA. Probably it was, as in NIA., a slightly rolled alveolar sound, of about two flaps of the tongue initially, and medially a sound of one flap only. [r] was also vocalic or syllabic, occurring both long and short: ऋ, ॠ [r̥: , r̥]. The 'Prātiśākhyas' describe the [r̥] as being made up of a very short « ă + r + ă », forming $\frac{1}{4} + \frac{1}{2} + \frac{1}{4} = 1$ *mora* [r̥ = ᵃrᵃ]. This gives a sound like the Avestan « ərə », an Iranian equivalent of IA. [r̥]: it was evidently a sound of one flap of the tongue, when it was short vocalic. When it was long, [r̥:], it was in all likelihood a fully trilled sound. [r̥] has been described as a guttural sound by the 'Ṛk-tantra-vyākaraṇa': perhaps it was due to the back sound of [a] figuring in it [ᵃrᵃ].

The bilabial sounds do not require any note, excepting [ꜰ], which is the sound made in blowing out a candle, and is a very common phone in

NIA. speech. In OIA. it was found as a modification of [h]—the « upadhmānīya » sound—before a [p] : « punaḥ punaḥ » = [punaɾpunaḥ].

The semivowels were [ĭ] and [ŭ] : they preserved the vocalic character well in the OIA. period ; but by the time of Pāṇini, [ŭ] became a spirant, a denti-labial [v], in the speech which is treated in Pāṇini's grammar ; and a bilabial spirant value, [ʋ], quite a common IA. sound of the present day, seems to have been present in late OIA. [ĭ] became a spirant, which developed into a frank *zh*-sound, [ʒ], in Early and Transitional MIA.

The vowels in OIA. could be nasalised ; and the nasalisation was in a peculiar way, by bringing in a nasal glide, « anusvāra », after a pure vowel : अं इं उं « aṅ (aṁ), iṅ (iṁ), uṅ (uṁ) » being [a~, i~, u~], which practically resulted in [aã, iĩ, uũ]. Long vowels under certain conditions could be « anunāsika » or nasalised properly : *e.g.*, महाँ असि = [mahã: asi] ; so रश्मींरिव, सूनूंर्युवन्धून्रत् [raçmĩ:r iŭa, su:nũ:r ĭuŭanĭũ:r ut]. (Cf. W. D. Whitney, ' Sanskrit Grammar,' §§ 209 ff. : also §§ 70 ff.) In the case of [ɾ], it was evidently a question of a simple nasalisation following the sonant [ɾ], the vowel basis of the nasalisation being an [i, u, e, a] : *e.g.*, नॄंर् अभि = [nɾ:~r abhi]. That the « anusvāra » in OIA. was not a mere nasalisation, but a nasal continuation of, or a nasal glide following a pure vowel, is borne out by MIA., and also by the traditional pronunciations of Sanskrit in different parts of India, which have altered [~] of OIA. to a definite nasal [ŋ, n, w̃] : *e.g.*, OIA. [sa~skɾta, saãskɾta], in Bengali pronunciation [ʃɔŋ(ɔ)ʃkrito], Northern Indian [sʌnskrit], Western Indian [sʌw̃skrut].

Changes of the OIA. Sounds in Middle Indo-Aryan.

131. The Sound-system of OIA. was modified to a great extent during the First and the Transitional MIA. stages.

[ɾ:, ɾ, ɭ] were dropped, pure and simple vowels taking their places. [a:u, a:i] were altered to [o:, e:], and the fortunes of these were joined to those of the original [o:, e:]. A short [o, e] developed before double consonants.

Among the consonants, [h], the « visarga », was dropped, and also its modifications, which, however, left traces : *e.g.*, « duḥkha » = [duxkha], whence Pali « dukkha » ; « punaḥ punaḥ » = [punaʁ punaḥ], whence Pali « punappunaṁ » etc. [ʃ̣, ç > ʃ] fell together with [s] in the Midland ; in the East [ʃ̣] alone was retained ; and in the North-west, all the three continued side by side till the Second MIA. stage.

The consonants of the palatal and alveolar groups came to acquire a slightly more advanced articulation. The alveolars were possibly established as interdentals during the Early MIA. period. By the end of the Second MIA. period, the palatal stops had been advanced and modified into palato-alveolar affricates, made either with the front, blade or the tip of the tongue : [c, ɟ] changing to [c͡ç, ɟ͡j] [c͡ʃ, ɟ͡ʒ], or [t͡ʃ, d͡ʒ] ; and there was a further advancing of these affricatised palatals in some forms of NIA. to the dental affricates [t̪s̪, d̪z̪] and the dental sibilants [s, z].

MIA. Affricate Pronunciation of the Palatal Stops.

132. The affricate pronunciation of the palatal stops seems to have been only dialectal in the Early MIA. period, and in all likelihood originated first in the Prācya area. Greek transcriptions of Indian words refer to the conditions obtaining in India mainly in the Transitional MIA. period ; and from the Greek rendering of Indian « c, j » by « s, z, ss, tz, tĭ » and « z, dĭ » (« Candra-gupta = Sandrakuptos ; candana = tsándanon ; Pañcālāḥ = Pássaloi [pãc͡ʃa:la: ?], Pazáloi [pãʃ͡ʒa:la: ?] ; Caṣṭana = Tiastanos, Tiastánēs ; Ujjayinī, Ujjēnī = Ozḗnē ; Yamunā > Jamunā = Diamoúna : cf. J. Wackernagel, 'Altindische Grammatik,' I, § 119), we can conclude that the affricate value (denoted by « s, z, tz, ss ») and the stop value (= « tĭ, dĭ ») both obtained in Western and Northern India in the centuries immediately after Christ. The indiscriminate use of « kh » and « ch » after « i » in the Transitional MIA. (Midland dialect ?) equivalent of Sanskrit « bhikṣuṇī »—« bhikhuni-, bhichuni- » etc. at Bharhut and Sanchi (cf. Jules Bloch, ' Langue Marathe,' p. 7), show in all probability a palatal stop pronunciation of « ch », not far removed from a « kh » made after a palatal vowel. The name « Ciṭa », in a Buddhist inscription of the 2nd

century A. C. from Kathiawar, if it really is an Indian transcription of a Germanic (Gothic) name Hilda [xilda], would give us something like a « k͡y » value for « c » (cf. Sten Konow, JRAS., 1912, pp. 379-385).

The use of the ligature « k͡y » for a palatalised « k » in some of the Brāhmī inscriptions of the East (as at Kalsi and Ramgarh) shows that in some at least of the Eastern (and Midland ?) dialects, « c » had lost the stop pronunciation and had become an affricate by the 3rd century B. C.; otherwise there would not have been any necessity for using a digraph « k͡y » for a fronted « k », mainly when the latter occurred after « i ». Prakrit grammarians, from Vararuci downwards to Mārkaṇḍēya (17th century), imply or mention a twofold pronunciation of the letters of the « c » class in Second MIA. Grierson takes their statements to mean that a palatal affricate pronunciation obtained in the Māgadhī and Ardha-māgadhī areas (= [c͡ʃ, t͡ʃ]), and a dental one ([t̪s̪]) in the Mahārāṣṭrī and Śaurasēnī tracts; and he holds that later, in the North Śaurasēnī area, the clear, palatal sound [c͡ʃ, t͡ʃ] was revived, and it ousted the old dental one of [t̪s̪], so that the latter does not obtain any longer in Western Hindī. ('The Pronunciation of the Prakrit Palatals,' JRAS., 1913, pp. 391 ff.). But it seems that the not very clear remarks of the Prakrit grammarians may be taken quite in another way. Vararuci, our oldest Prakrit grammarian, explicitly states that in Māgadhī the palatals were pronounced distinctly and pronounced in full ('Prākṛta-prakāśa,' XI, 5: « ca-vargasya spaṣṭatā tath'ôccāraṇaḥ »). Apparently there was another pronunciation which could be characterised as « a-spaṣṭa » or indistinct, and which evidently obtained in Śaurasēnī and Mahārāṣṭrī: and such an indistinct pronunciation could not mean a dental affricate one, as Grierson is inclined to think, but rather, an elided pronunciation, in Śaurasēnī and Mahāraṣṭrī, as Basanta-Kumār Chatterji has rightly contended (in noticing Grierson's article in the VSPdP. for San 1320: 'Ca-vargīya Varṇa-samūhēr Uccāraṇ,' esp. pp. 201-203). At the time of Vararuci, who described MIA. of the second period, Mahārāṣṭrī had already dropped its intervocal stops « k g, c j, t d », but Śaurasēnī and Māgadhī retained them as voiced stops, and these voiced stops were really fricatives in the Northern Indian dialects. (See

pp. 83-86.) A simple stop pronunciation of the palatal sounds is easier to voice and to turn to an open sound, and thus elide it, than a compound affricate one, well-advanced with a prominent [ʃ] or [ʒ] glide: [c > c͡ʃ, t͡ʃ, t̪s̪] is commonly retained, or at the worst simplified to [ʃ], or to [s < t̪s̪]; but [c > ɟ > ɹ > zero], where [ɹ] is an open sound, would be an easy process. And according to the Prakrit grammarians, intervocal « -c-, -j- » in Māgadhī are never elided, whereas they are elided in Mahārāṣṭrī, same as « -k-, -g-, -t-, -d- »; and in Śaurasēnī, apparently the unvoiced stop « -c- » became voiced to « -j- », and this derived « -j- » and the original intervocal « -j- » both became open, i.e., the voiced spirant [ɹ, ʒ], and were elided: this can be seen from specimens of Śaurasēnī in an old drama like the 'Mṛcchakaṭika': *e.g.*, « bhōaṇa = bhōjana; pūijjanta = * pūjiyyanta = pūjyamāna; pūā = pūjā; vāṇia = vāṇija; vaaṇa = vacana; rāa (Māgadhī lāja) = rāja; vāēdu = vācayatu; mōāissasi = mōcayiṣyasi », etc.; also from Modern Western Hindī forms like « bain̪ = vacana; rain̪ = rajanī; gaïnda = gajêndra; bīā = bīja-; sūī = sūcikā », etc. It seems genuine Māgadhī words in Bengali retain the intervocal « -c-, -j- », *e.g.*, পাঁচীল « pāc̄īl̪ » = Sanskrit « prācīra »; বিজনী « bijānī » *fan* = « vyajanikā »; but such words are exceedingly rare, and non-Māgadhī forms with elided « -c-, -j- », like রাই « rāi » *mustard* = « rājikā », রায় « rāy̪ » = « rājan » are largely found in Bengali. (See below, under *Phonology*: the Palatals in Bengali.) In the North-western dialect, « -c-, -j- » both became spirantised, as in Śaurasēnī, during the Transitional MIA. period; and as can be seen from Kharōṣṭhī documents, this spirant pronunciation in the North-western speech was indicated by « y »: *e.g.*, « ayariya = ācārya; viyaa = vijaya » (see p. 84); « puyaē = pūjāyāi » (Taxila Vase Inscription, Ep. Ind., VIII, p. 296); « śuyi, suyi = śuci; gōyari = gōcarē; śōyati = śōcantē; ya(y)ēya = yajēyya, yajēta; pūyitō = pūjitaḥ; vayati = vrajati; payēti = Pali pācenti » ('Kharōṣṭhī Dharma-pada': see p. 86). The Aśōkan spelling « majulā (Kalsi), majūlā (Dhauli), majura (Shahbazgarhi and Mansehra) = mayūra- (cf. mōrā, Girnar) », showing « -j- » for « -y- », implies the presence of a fricative for the stop « -j- » in the 3rd century B.C. Vararuci does not give any rule for the treatment of « -c-, -j- » in Śaurasēnī: apparently

the rule for Mahārāṣṭrī («.....prāyō lōpaḥ», II, 2) held good here. For Māgadhī, Vararuci lays down the rule (XI, 4) that single «j» becomes «y» both initially and intervocally: «yāṇadi = jānāti, viyalē = vijala». This would imply a spirant pronunciation for «j» in Māgadhī as well, for there is ample evidence that «y» had a value like *zh* [ɹ, ʒ] during the Transitional MIA. period (see §133). Hēma-candra also notes «y» for «j» ('Siddha-Hēma-candra,' VIII, 4, 292). But *initial* «j» did never become a spirant, any more than the other initial stops. Vararuci and Hēma-candra in this case are to be supplemented by Mārkaṇḍēya, who apparently follows old authority when he says that in Māgadhī «c, j» have a «y» before them—«y͡c, y͡j» («ca-ja-yōr upari yas syāt»: XII, 21). The ligature «y͡c, y͡j» is undoubtedly a way of indicating a 'clear,' palatal affricate pronunciation, with the spirant glide, here represented by «y», properly identified, but placed before the letters denoting the original stop sounds. The affiricate pronunciation later came in no doubt in Śaurasēnī. One can compare the device employed in the Śāradā alphabet to indicate the palatal affricates of Kaśmīrī, by «c͡y, j͡y», to which Grierson draws our attention, after the original «c, j» developed the dental affricate values of «t̪s, d̪z» in that language (Grierson, JRAS., 1913, p. 395).

To sum up: it would seem that the OIA. palatal stops kept their stop pronunciation in the Midland and in the Western tracts of Āryāvarta at a time when these became pronounced affricates in the East. After the IA. speech was well on the Second MIA. stage, when Vararuci wrote his grammar, Mahārāṣṭrī and Śaurasēnī preserved, at least dialectally, the old stop values initially, and medially they were dropped or were reduced to a weak «y»-like sound; but in Māgadhī (dialectally at least), the clear affricates were heard, and to Vararuci as an easterner, this affricate articulation appeared as being decidedly clear and well-enunciated beside the stop palatals of the other areas with their uncertain acoustic effect; and Māgadhī affricates were not elided intervocally. But, from the evidence of Greek transcriptions, the affricate sounds seem to have developed, dialectally probably, in the Śaurasēnī and other Western areas

as well, in the Transitional MIA. stage; and in the late MIA. period, these became universal. Through the influence of the Midland speech, forms with elided intervocal palatal stops characterising Śaurasēnī (and Ardha-māgadhī) of the Transitional and Second MIA. stages were accepted in the younger forms of Māgadhī—Proto-Bengali etc. But the palatal affricate pronunciation of « c, j » had gradually spread over all IA.; and under new conditions, the palatal affricates further were dentalised in some of the NIA. dialects—Assamese, East Bengali, Southern Oṛiyā, Marāṭhī, and dialectal Gujarātī.

133. The intervocal cerebrals « ḍ, ḍh » were changed to « ḷ, ḷh » in the basic dialect of the Vedic speech. Pali also has this peculiarity. Sanskrit, except in the dialectal pronunciation followed in the South of India, retains the « ḍ ḍh » sounds. In all Indian speech, single « -ḍ-, -ḍh- » have become the so-called 'cerebral ṛ'—« ṛ, ṛh ». This sound is made by curling up the tip of the tongue and bringing it to the point of articulation for [ṭ ḍ], and then quickly making the tongue to move forward and strike against the teeth-ridge with the underneath side, and then lie flat. This modification possibly came in during the First MIA. period, if not earlier: Greek transcriptions like « Larikē = * Lāḍa-, Lāṭa-; karuophullon = * kaḍua-phala, kaṭuka-phala; Saraganos = * Sāḍa-gaṇṇa, Sāta-karṇi- (cf. Hāla < * Sāḷa < * Sāṭa < Sāta-) », belonging to post-Christian times, show evidently a « ṛ » pronunciation of intervocal « ḍ ».

य « y », a semi-vowel in OIA., [ĭ], became a pronounced fricative by the 3rd century B.C.; *e.g.*, Aśōkan North-western Prakrit (Shahbazgarhi) « badaya = * badaźa », for « *bādaśa = dvādaśa ». Epigraphical evidence from the Transitional MIA. period fully establishes the [ʒ] pronunciation of the letter for « y ». (Cf. 'Mathurā Lion Pillar Inscription,' F. W. Thomas, Ep. Ind., IX, pp. 135 ff.) The « ẏa-śruti » of Jaina orthography for Ardha-māgadhī, found also in the epigraphical remains of the Transitional MIA. period, stands equally for some sort of spirant value of « y » (see p. 85). It was this spirant value of « y » that apparently brought about the creation of the ligature « ŷs » for « z » in the Brāhmī alphabet, to write the « z » sound in the (Iranian) Śaka language from the 1st

century A. C.: « Y͡sāmōtika = Zāmōtika, Dāmay͡sada = Dāmazada »; East Iranian (in Brāhmī) « y͡sāra = zāra » *thousand*, « balyṣa = balza » *Buddha* (originally = *priest*). (Cf. H. Lüders, 'Die Śakas und die "nordarische" Sprache,' Sitzungsberichte der kön preuss. Ak. der Wissen., 1913, XXIII, pp. 406 ff.; cf. also E. Leumann, 'Zur nordarischen Sprache u. Litteratur,' Strassburg, 1912.) In the Kharōṣṭhī 'Dharma-pada,' « y » is also used for the spirant representative of OIA. intervocal « c, j » (*e.g.*, the examples quoted at p. 247).

[ǐ > j > ɹ > ʒ] became the stop [ɟ] or the affricate [ɟʒ, d͡ʒ] in initial positions in the Second MIA. period, and in this way fell together with the original OIA. « j » [ɟ-, ɹ- > ɟʒ-]: *e.g.*, OIA. « yōga », Early MIA. « yōga », Transitional and Second MIA. « jōga = jōga, jōa ». This spirantised « y » changed also the groups « ty, dy » to « cc, jj » = [cc, ɟɟ > cc͡ʃ, ɟɟʒ] in the Midland and in the West during the First and Transitional MIA. stages: [tǐ > tj > tç > tc > cc > cc͡ʃ; dǐ > dj > dɟ > ɟɟ > ɟɟʒ, dd͡ʒ (?)]; but in the East, « ty, dy » had a different development during the First MIA. period: « ty, dy > tiy, yy » respectively.

The bilabial semivowel व [ŭ] seems to have developed different values in the different dialectal areas—a rounded-lip bilabial semivowel [ŭ = w], a spread-lip bilabial spirant [ʋ], and a denti-labial spirant [v],—which one cannot very well find out now. Greek transcriptions give for the MIA. व the following: (i) « ou (= u), o »: « Ouindion = Vindhya; Sōastēs = Suvāstu; Peukelaotis = Pukk(h)alāvatī, Puṣkalāvatī; Imaos = Himavā(n); Deopalli = Dēvapallī; (ii) « b »: « Bidaspēs = * Vidastā, Vitastā; Bibasis = * Vivāsā, Vipāśā; Erannoboas = Hiraṇya-vaha »; and (iii) « hu », initially: « Huphasis = Vipāśā ». The characteristic NIA. pronunciation is that of a bilabial spirant. In the Gujarat area, from Girnar Aśōkan forms like « dv- > db-; tv > tp » beside « tm > tp », one can surmise that the व was a strong bilabial fricative in the First MIA. period, which became a stop in the 3rd century B. C., and assimilated the preceding dental to itself [dŭ = dw > dʋ > db > bb = Gujarātī b, Sindhī b'; tŭ = tw > tʋ > tꜰ > tp > pp; tm > tw̃ > tʋ > tꜰ > tp > pp].

UNEXPLODED STOPS IN CONSONANT GROUPS.

134. The affricate pronunciation of the palatal stops, the change of intervocal « -ḍ- » to « -ṛ- », the spirantisation of « y », which have been noticed above, and the later change of the stops « k g, t d, p b » to open consonants (noticed at pp. 83 ff., also in § 132), came in only gradually. The most important characteristic of MIA. is the assimilation of dissimilar consonantal combinations into double consonants; and this characteristic primarily marks off MIA. from OIA. This change was due mainly to the first consonant in a group of two stops like « -kt-, -pt- » being pronounced without explosion, so that it was reduced to a mere stop or closure, and its position was shifted to that of the next stop: thus « lip-ta, bhak-ta » became in late OIA. « bhaᵏ ta, lipᵖ ta » [bʱaᵏ|ta, lipᵖ|ta], which then became assimilated to « bhaᵗ ta, litᵗ ta = bhatta, litta ». Final stops, unvoiced, were similarly pronounced without explosion, as in « vidyut, marut, pariṣat, dharmāt, syāt, dhik, manāk »; and the final unexploded or implosive « t, k » were duly lost in MIA.: *e.g.*, Pali « vijju, maru, parisā, dhammā, siyā (assa), dhī, minā ». The 'Prātiśākhyas' have noted this characteristic in (late) OIA. pronunciation (R. Gauthiot, 'La Fin de Mot en Indo-Européen,' Paris, 1913, pp. 91-92). In the NIA. languages, in consonant groups resulting from the dropping of intervening vowels (as, for example, in Bengali বাপকে « bāpa-kē > bāpkē » *to the father*, থাকতে « thākitē > thāktē » *to remain*, Hindōstānī « āpa-kā > āpkā » *of self*, « sakatā > saktā » *is able*), there is complete explosion of the first stop, and this is helped by a consciousness, vague it might be, of the fact that the forms consist of essential or radical parts, and affixes. This method of fully articulating the first stop of a group, except in the case of the same stop 'doubled,' now obtains in the modern Indian pronunciation of Sanskrit and of *tatsama* words in the of vernaculars: *e.g.*, « śak-ti , ab-da »: but this is merely an extension of the vernacular habit of pronunciation. The unexploded stops of late OIA. thus brought in their train their complete assimilation in the next period.

This assimilation was accompanied by other simplifications in connection with the liquids and nasals, and sibilants. Possibly a habit of

speech which preferred an open syllable to a closed one also manifested itself. A great mass of IA. speakers, at the commencement of the MIA. period (at least in the East, to start with) probably had lost the sense of distinction between root and affix. Thus what were « dhar/ma, sah/ya, śuk/ra, yaj/ña, ak/ṣi, * spṛś/ta > spṛṣ/ṭa, śuṣ/ka » in the speech-feeling of the earlier generations in the OIA. period, became, after the speech had spread among peoples of different tongues, « dha-rma > dha-mma, sa-hya > sa-jjha, śu-kra > su-kka, ya-jña > ya-ñña, a-kṣi > a-kkhi (a-cchi), * spu-ṣṭa * hpu-hṭa > phu-ṭṭha, śu-ṣka * su-hka > su-kkha ». The principle of the Indian alphabetical system in having only open syllables was apparently based on this sort of syllabic division.

Stops and Spirants in MIA.

135. Open or spirant pronunciation of the single OIA. stops « k g, t d, p b » intervocally was established by the close of the Transitional MIA. period. This has been described before (pp. 83 ff.). After the assimilation of compound consonants, this was undoubtedly the most important change in the history of the IA. sounds. But owing to the NIA. languages having largely replenished themselves by borrowings from Sanskrit (or Perso-Arabic, as in the case of Urdū) and by new formations, the full significance and importance of this change in the history of IA. is not usually recognised. (Cf. Jules Bloch, 'Langue Marathe,' §§ 14, 81.) In Second and Late MIA., intervocally there were no single stops, only single spirants and double stops: and these spirants, too, were dropped from pronunciation, quite early in a dialect like Mahārāṣṭrī, and later in other dialects like Śaurasēnī and Māgadhī; and the elision had taken place in words inherited from OIA. long before beginning of the NIA. period. The Indian graphic system continued to employ the letters for the voiced stop sounds of [g, d, b] (generally however, व « v » was used for the last) where the corresponding open sounds or spirants were undoubtedly used in speech. The epigraphical evidence from the Transitional MIA. period, and the traditions of Prakrit spelling, with their hesitancy in using « g, d, b (v) », or omitting them, or substituting « y » for them, coupled with our knowledge

of what has happened or is actually happening in other languages, are enough to establish that. Conservatism in spelling is a common thing in languages with a long history, and letters are retained even when they have dropped from pronunciation. In Modern Spanish (Castilian), « agua, abogado » etc. are pronounced as [aŭa, avɔgaðɔ], the latter word even becoming [avɔgaɔ]. The OIA. « dyūta-, dviguṇa-, śuka-, tāpa, hṛdaya, dīpa-, śāba » passed into typical NIA. « jūā, dūnā, suā, tā, hiā, diā, chā » through an intermediate MIA. stage « jūða-, diguṇa-, suga-, tāba, hiðaa, dība-, chāba » : and this stage is that which was arrived at during the Transitional MIA. period. The rules of Prakrit (Second MIA.) grammar in this matter are inconsistent, and the examples in Prakrit literature for dialects like Śaurasēnī and Māgadhī are not always reliable. Even the very spirant sounds are not recognised by the Prakrit grammarians: any more than a Modern Bengali grammarian would ordinarily notice the under-articulation of consonants which obtains in Bengali (*e.g.*, ঠাকুরদাদা *grand-papa* [ṭhakurdada] is frequently pronounced [ṭhagurdaða], and is even reduced to ঠাউদ্দা ঠাউদ্দা [ṭhau(r)d:a]. (Cf. S. K. Chatterji, 'A Brief Sketch of Bengali Phonetics,' London, 1921, § 31.) We can see, however, that in genuine *tadbhava* forms in all the NIA. speeches, the single intervocal stops of OIA., « k, g ; t, d ; p, b », are not preserved. The intervocal palatal stops of OIA. « c, j » were likewise elided in *tadbhava* words in some forms NIA., but were retained in others ; and the intervocal cerebral stops « ṭ, ḍ » have in all NIA. been reduced to « -ḍ- = ṛ » Wherever a NIA. word agrees with its corresponding OIA. (Sanskrit) form in retaining a stop, voiced or unvoiced, or an aspirate, such a word is not a genuine, inherited *tadbhava*. OIA. stops in the body of a word are as a rule preserved in NIA. only when they are preceded by a nasal, and when they were doubled by assimilation in MIA. The intervocal single aspirated stops of OIA., through a similar process of spirantisation in the stop element in Transitional MIA., became a mere aspiration in Late MIA. and NIA. : *e.g.*, « mukha > mugha > muga > muha; laghu> laghu > lahu ; kathayati > kathēti > kadhēdi > kaðhēði > kahēï, kahē ; vadhū-> vaðhū-> vahū, bahū ; śēphālikā > *śēbhāligā > *śēbhāliga >

* śōhālia > Middle Bengali শিহ্‌লী śihalī > New Bengali শিউলি śiuli; gabhīra > gaƀhīra > gahīra », etc. « ch, jh » are rare as intervocal sounds; and « ṭh, ḍh » normally became « -ḍh- = ṛh » in all late MIA. and NIA. In MIA., an aspirate occurs in the body of a word only after its corresponding stop or nasal (and in NIA. *tadbhava* forms, only after a long vowel, simple or nasalised).

The state of things with regard to the stops and aspirates in Typical MIA. of the Transitional and Second MIA. period, *e.g.*, in Śaurasēnī of c. 200 A. C., was something like the following:

Initially only: « k- g-, c- j-, ṭ- ḍ-, t- d-, p- b-; h-; kh- gh-, ch- jh-, ṭh- ḍh-, th- dh-, ph- bh- ».

Medially: « -ɣ-, -y- (= [ʒ]), -ḍ- (= [ɽ]), -ð-, -ƀ-[ʋ]; -h-; -kk(h)- -gg(h)-, -cc(h)- -jj(h)-, -ṭṭ(h)- -ḍḍ(h)-, -tt(h)- -dd(h)-, -pp(h)- -bb(h)-; -ŋk(h)- ŋg(h)-, -ñc(h)- -ñj(h)-, -ṇṭ(h)- -nḍ(h)-, -nt(h)- -nd(h)-, -mp(h)- -mb(h)- ».

The double consonants of MIA. derived by assimilation continued till NIA.,—to be simplified to a single consonant, with compensatory lengthening of preceding vowel: and this resultant single consonant of NIA. has persisted generally.[1]

But in one dialect of MIA., the Ardha-māgadhī of the Jains, in texts which from their language apparently go back to the Transitional MIA., we meet with a few cases of elision of the normal MIA. double consonants—the group « tt »: *e.g.*, « āẏā = attā, ātman; pāẏa = patta, pātra; gōẏa = gotta, gōtra; rāī = rātrī (rādī also, in Mahārāṣṭrī); saẏarī = sattari, saptati; cāri = cattāri, catvāri; cāẏālisa, cālīsa = catvāriñśat » etc. (Cf. Jules Bloch, 'Langue Marathe,' pp. 216-217.) This sort of elision of double « tt » is entirely against the spirit of MIA. phonology, and the reasons for it are not known. Possibly a case like « rāī < rādī » is to be referred to an OIA. « * rā-ti », occurring side by

[1] In certain forms of Bengali, however, we have a further elision of these resultant single stops: *e.g.*, 'ṭhakkura, ṭhākura,' Standard Colloquial Bengali ঠাউর 'thāur' beside ঠাকুর 'ṭhākura'; ঠান 'ṭhān' for ঠাকুরানী 'ṭhākurāni,' *honoured lady*; 'vappa, bāpa' *father*, Chittagong Bengali = বায় 'bāy.'

side with « rā-tris, rā-trī » ; « cāri », for « *caẏāri », found in all NIA., may be from analogy of forms like « catur » > « caü » (cf. J. Bloch, *op. cit.*) ; but the early forms in most NIA. being « ciāri » (see p. 106 : see also later, under *Morphology* : the Numerals), we may have to postulate the influence of Middle Persian in Late MIA.—Pahlavī « cahār », Pāzand « cihār » (=New Persian « čĕhār, cār ») possibly having something to do in the use of « ciāri » for « cattāri » in Late MIA. and NIA. (cf. « sahassa » of Late MIA., ousted by the Persian « hazār ») ; « cāẏālisa » for « catvāriñśat » is an extension of this to the numerals for the 40-group ; and « saẏari » for « sattari » may well be on the analogy of « * cāẏāri, ciāri » for « cattāri » . The other words remain obscure—« āẏā, pāẏa, gōẏa » [1]. Can it be that « āẏā » is a blend of the *tadbhava* « attā » and a *semi-tatsama* « * ātamā > * ādamā > * āẏavā » ?

There seem to have been some cases of simplification of double consonants to a single one with compensatory lengthening, mainly of sibilants, in Transitional and Second MIA.

136. Phonological development of MIA. from OIA. is a subject apart, its study belonging properly to that of Pali and other Prakrits and the Apabhraṅśa. In the late MIA. period, some further modifications of the OIA. Sound-system became prominent. The Transitional and Second MIA. tendency to elide single intervocal stops of OIA. continued and manifested itself in specifically late MIA. formations as well; single « -m- » intervocally became « -w̃- » , which was reduced to a mere nasalisation of

[1] In Bengali, there are the words দা(ও) 'dā(o)' *chopper, bill* = 'dātra'; গা(ও) 'gā(o)' = 'gātra,' beside a regular *tadbhava* গাত 'gāta' < 'gatta' = 'gātra' in Middle Bengali, and an old *semi-tatsama* গতর 'gatara' from '*gattara' ; and পো 'pō,' Oṛiyā 'pua,' beside পুত 'puta' = 'pūta' < 'putta, putra.' The last form may have been influenced by 'pōta,' which would give 'pōa, pō' in NIA. গা, গাও, গায়, গাঅ 'gā, gāo, gāy, gāa' may be an analogical formation, after 'kāya' = 'kāa' ; দা 'dā' is explained by Grierson as being from a form '* drāta,' attested from Kaśmīrī : it is found in Hindī as 'dāw, dāū,' *bill, sickle*, and the occurrence in Skt. of the forms 'dāti' *sickle, scythe*, 'dāta' *mown, cut off*, 'dātṛ' *mowing, mower* shows that the source of the NIA. word is not 'dātra,' but rather some form like 'dātṛ' (although the Kōl word 'datrom' *sickle*, evidently an old Aryan borrowing, would show that 'dātra' was quite a popular OIA. vocable).

the vowel in most cases in NIA.; and this modification probably appeared sporadically quite early (cf. « yamunā=*yaẘuṇā » > Greek transcription « Iobarēs »). Intervocal sibilants single or double became « h » in some cases: a change also noticed in a few early instances (cf. « kārṣāpaṇa » = « kahāpaṇa » in Pali); its origin and scope in MIA. is not known.

MIA. kept in close touch with Sanskrit, and especially in later times, when it had the disadvantage of having a large number of homophones through phonetic decay. Thus, « ākāra, āgāra, ācāra » would all be reduced to « āāra », « suta, śuka » to « sua »; and it was necessary to introduce fresh blood, as it were, into the system of the speech, in the shape of new words and forms. *Tatsamas* were being brought into MIA. from the time of its differentiation as MIA. The phonetic changes which modified these newcomers were to some extent different from those which characterised original MIA. When in these *tatsamas* there was a nexus of a stop + liquid or nasal, MIA. no longer went in for assimilation, which characterised its phonetics in the formative period, but anaptyxis (viprakarṣa), which is a habit of pronunciation occasionally found in OIA. (in the « svara-bhakti » of the Vedic speech), came in: thus « dharma > dhamma > dhāma » is a *tadbhava*, « dharma > dharama » is a *semi-tatsama*; so « sarṣapa > *sassapa > sāsava: sarisapa, sarisava »; « varṣā > vassa > vāsa: varisā »; « kṛṣṇa > kaṇha: kasaṇa »; « ratna » ought to have a *tadbhava* « *ratta > *rāta » (cf. « sapatnī > savattī, NIA. saut »), but already in Pali we find the *semi-tatsama* « ratana » (Bengali রতন « rātan̐ » is not from this MIA. form, which would have given only « radana > raðaṇa > raaṇa > *raẘaṇa > *rāṇā > *রন *rān̐ »; it is a new *semi-tatsama*; but cf. « ādarśikā » > *semi-tatsama* in Early MIA. « *ādaraśikā » [instead of the proper *tadbhava* « *ādaśśikā » which would have become *আশী « *āśī » in Bengali]; « *ādaraśikā > *āaraśia > আরশি ārśi »). Sanskrit words in MIA. also had to conform to the phonetic habit of MIA. which would tolerate only double stops in the middle of a word, and not single ones, as single ones would be voiced and spirantised: thus « ēka > ēa », as in Assamese « ē-zân » = « ēka-jana », *tadbhava*; « ēka », reintroduced in MIA., became « ekka », whence a Common NIA. « ēk ».

137. The phonetic system of the native (i.e., of the old *tadbhava* and *dēśī*) element in Māgadhī Apabhraṅśa, the source of Bengali, was in all likelihood the following:

VOWELS.

	Back	Front
Close ...	u: u	i: i
Half-Close ...	o: o	e: e
Half-Open ...	ɒ	
Open ...	ɑ:	

Nasalised forms of the vowels also occurred.

CONSONANTS.

	Glottal	Velar	Retroflex	Palatal	Palato-alveolar	Inter-dental	Bilabial
Stops ...		k g	ṭ ḍ			t d	p b
Aspirates ...		kh gɦ	ṭh ḍɦ			th dɦ	ph bɦ
Affricates ...					c͡ʃ ɟ͡ʒ c͡ʃh ɟ͡ʒɦ		
Nasals ...		ŋ	ṇ		ɲ	n	m
Laterals ...			(?-ḷ-)		l		
Flapped ...			-ṛ-, -ṛɦ-		r		
Fricatives ...	ɦ	(?-ɣ-)			ʃ	(s ?) (?-ð-)	(-ʋ-) w̃
Semi-vowels				-j- (ĕ)			-w- (ŏ)

About the sounds of the above system as reconstructed, the following points are to be noted.

OIA. short « ă » [ɑ] seems to have been changed to the slightly higher sound of [ɒ], as in Southern English *hot*, which in Middle Bengali (of post-11th century times) became [ɔ], the normal sound of the New Bengali অ; in Māgadhī Apabhraṅśa and in Old Bengali it was sufficiently near [ɑ:] to be interchangeable with it. In other words, « ă » [ɒ] in Māgadhī Apabhraṅśa, Old Bengali and Early Middle Bengali was slightly lower in articulation than the New Bengali অ « ă » [ɔ]. The New Bengali sound is pronounced with the lips very slightly rounded, and this gives it its definite quality as a distinct vowel from আ « ā » [ɑ:, ɑ]; the Māgadhī Apabhraṅśa and Old and Early Middle Bengali equivalent was in all probability not rounded.

[ɣ, ð, ʋ] possibly occurred for « g d b » in intervocal positions under certain circumstances. [ɲ] occurred before [ʧ, ʤ], and 'doubly' in the middle of a word [ɲɲ = ɲ:]; and possibly it was also the modification of [m > w̃] before palatal vowels. [ɳ] seems to have existed in Māgadhī Apabhraṅśa, as can be seen from the evidence of Oṛiyā and of Old and dialectal Bengali, although it now no longer exists in Bengali-Assamese and in 'Bihārī.' It is not known for certain whether Māg. Ap. possessed [l], which is now found only in Oṛiyā, where it represents an OIA. or MIA. single intervocal « l »: in all likelihood it did exist intervocally.

Evidence of Bengali and Oṛiyā would show that [r] was present in the source-form of these speeches. Probably there was a restoration (or rather importation) of [r] in Eastern Māgadhī Apabhraṅśa through Sanskrit and Northern Indian influence. Genuine Māgadhī forms would be expected to show [l] for [r] of OIA.; and that is what we find in an Old Bengali word like লাচ্ছ « lāccha = lācha (= rathyā) », as in Sarvânanda's glossary, in Middle Bengali লাছ, নাছ « lāchâ, nāchâ », and in a Modern Bengali word like পাঁচীল « pā̃cīl্ » = « prācīra ». But [r]-words are plentiful, even in common roots like কর « kar », ধর « dhar » etc. The Central and Western Magadhan speeches in this matter are more uniform, having a tendency to reduce all laterals and ṛ-sounds to [r]. (See p. 96.)

Palatal « ś » = [ʃ] was the only *inherited* sibilant in Māgadhī Apabhraṅśa: but it is not unlikely that the dental [s] sound was also present, among the masses of non-Aryan (Kōl and Mōn-Khmēr) origin, and among Upper Indian settlers within the Magadhan area; but from the later history of the Magadhan speech in its eastern branch, it may be seen that there at least the proper Māgadhī sound resisted all [s] influence, and remained [ʃ].

The semi-vowels [j, w] were glides to prevent hiatus, and were the half-close vowels [e, o] used as consonants, which would be dropped or brought in according to option. In transliteration, these « śruti » sounds could be written « ẏ, ẇ ». The semi-vowels never occurred initially: OIA. [ĭ, ŭ] in initial positions had become [ʃʒ, b] in Māgadhī Apabhraṅśa, before its split into the Modern Magadhan speeches. OIA. [ĭ] after dental stops, in *tatsama* words, no longer palatalised the latter—« nitya » [nittĭa] became [nitt(č)ɒ], « vidyā » [ŭidĭa:] became [biddč̆a:], etc.

Old and Early Middle Bengali.

138. Some important changes ushered in the NIA. period. Excepting in the North-Western and Western (i.e., Eastern Panjābī, Lahndī and Sindhī) areas, double consonants of MIA. were simplified to a single consonant, and there was compensation for this loss of quantity in the consonant of the syllable (a 'double' consonant group means only a 'long' consonant) by lengthening the preceding vowel: *e.g.*, « patra = patta > pāta, putra = putta > pūta, camma = camma > cāma, anya = anna > āna » = [pa:a > pa:tɒ, pu:a > pu:tɒ, c͡ʃam:a > c͡ʃa:mɒ, an:a > a:nɒ]. Nasals preceding stops or aspirates were first 'shortened' and then 'dropped,' compensation coming in by lengthening and nasalising the preceding vowel: *e.g.*, « canda > cā̃la » [c͡ʃan:da > c͡ʃã:ndɒ, c͡ʃã:dɒ]. Final long vowels were weakened, and assimilated to preceding vowels, in most cases: « rādhikā > rāhia > rāhī ». Euphonic glides of « ẏ » and « ẇ » became more prominent between « udvṛtta » vowels, after the dropping of intervening stops: *e.g.*, « vāta > vāda, vāða > vāa > bāẇa, bāẏa [baŏɒ, baĕɒ] = বাঅ, বাঅ bāŏ, bāĕ ». In later times, these glides weakened and were dropped.

In Bengali, a shifting of the stress system to the initial syllable came in during the formative period: this led to the dropping of unstressed long vowels in the middle of a word, and to lengthening of « ă » to « ā » initially. The « ă, ā » sounds in their normal historical relation to each other in Old and Middle Bengali may be thus indicated:

Māgadhī Apabhraṁśa short « ă » [ɒ] > Old Bengali [ɒ] > Middle Bengali [ɒ, ɔ, ɔ:];

Māg. Ap. « aw̆a » [ɒw̆ɒ] > Old Bengali [ɒw̆ɒ, ɔ:] > Middle Bengali [ɔ:, ɔ, o];

Māg. Ap. « ă » [ɒ] before two consonants > Old Bengali [ɑ:, ɑ] > Middle Bengali [ɑ:, ɑ];

Māg. Ap. initial « ă- » [ɒ] > Old Bengali [ɒ, ʻɒ] > Middle Bengali [ɑ:, ɑ];

Māg. Ap. long [ɑ:] > Old Bengali [ɑ:, ɑ] > Middle Bengali [ɑ:, ɑ], through loss of stress [ɑ > ɒ = ɔ].

The open [ɒ] pronunciation of « ă » probably became the partially rounded [ɔ] by the end of the Early Middle Bengali Period: [ɔ] developed a long quality, and interchange with [ɑ:] was no longer in the nature of things in Middle Bengali and New Bengali. The MIA. vowel [e:] in initial syllables became open in Middle Bengali, [ɛ:], and possibly also in Old Bengali: cf. « dekkhaï > দেখই dēkhaï [de:khɒi] > দেখএ, দেখে [dɛkhɒĕ, dɛkhɛ] > দেখে, 'খাখে' [dækhe]; ekka > ēka [e:kɒ] > [ɛ:kɔ] > [æ:k]: and « yā » after a consonant, in *tatsamas*, became [ɛɑ:, ɛa:], later [æ] in New Bengali: « tyāga > » ত্যাগ [tɛa:gɒ, tɛĕa:gɒ] > [tæ:g]. Post-consonantal « -ā » in *tatsamas* similarly became [ɒ̆ɑ: > ɔɒ > ɔ:] (see later, under 'the Origin of the New Bengali Vowels: [ɔ]'). In connection with [i], in Early Middle Bengali, the back « ā » [ɑ:, ɑ] received a frontal articulation [a:, a], which later became [e] in the Standard Colloquial (see p. 133; also later, under 'Vowel Mutation,' and 'the Origin of New Bengali Vowels: [e]'). ĭ] after a vowel grew weak, and there was epenthesis. Nasalisation of the vowels was fully developed; also vowel-harmony came in quite early in the history of Bengali as a NIA. speech.

The consonants remained much the same, but the spirant pronunciation of intervocal voiced stops was no longer present, except in the case of « -p- » which still obtained as [ʊ] occasionally in Middle Bengali; and « -k- » intervocal was voiced sometimes in Middle Bengali; « ḷ » seems to have been merged in to « l » in Old Bengali; but « ṇ » probably continued, at least dialectally, in Early Middle Bengali. [ʃ] was once more reëstablished as the sole sibilant, although it was written « ś, ṣ, s ». Intervocal « -h- » [ɦ] grew weak, and was often dropped; and there was in Late Middle Bengali a tendency to drop aspiration of non-initial aspirate stops. The semi-vowels as glides occurred only as [ĕ, ŏ], and they were unknown initially.

139. Below are given specimens of Old and Early Middle Bengali, of the 11th-12th and 14th centuries, with the reconstructed pronunciation in phonetic transcription.

OLD BENGALI: CARYĀS 5, 33.

The text in Bengali characters, as in Mm. H.P. Śāstri's edition (see pp. 110 ff.) is given, followed by an emended reading in transcription. The length [ː] of the vowels is not always sure, MIA. quantity being all changed in Bengali from the period of the formation of the language. The metre is « Pādākulaka » or « Caupāī », of couplets of 16 *morae* each, rimed: and in Old Bengali, the pauses were after the 8th *mora*, dividing the line into two halves, with strong sentence stress at the beginning of each, marked ["], and a secondary stress in each, as can be judged from the Middle Bengali metre, 'Payār,' which seems to have developed out of the Pādākulaka. The verses were chanted, and the chant music or tune accommodated all questions of quantity in individual syllables.

(Caryā 5): ভবনই গহণ গম্ভীর বেগেঁ বাহী।

["bʰiṇ(ŏ)ɒ-ɲɲ(ŏ)i 'gɒʰiɲɲ gɒmI"bʰiiɾɒ-begẽ 'bɑːɦiː]

The river of being is deep, with great force it flows:

দুআন্তে চিখিল মাঝেঁ ন থাহী।

["du(ŏ)ãntõ 'ʧiːkhilɒ | "mãːʤʰiõ nɒ 'thɑːɦiː]

In (its) two ends (=sides) is mire, in the middle no bottom.

ধামার্থে চাটিল সাঙ্কম গটই।
["dʱāmarthõ 'ʧa:ṭilɒ | "ʃā:kɒwɔ̃ gɒṛ'ʱiɒ(ĕ)i:]
For the sake of Dharma, Cāṭila builds a bridge:
পারগামী লোঅ নিভর তরই॥
["parɒgamī 'lo:(ŏ)ɒ: | "ni:bʱiɒrɒ tɒr'ɒ(ĕ)i:]
Men going across (can) cross with full reliance.
ফাড়িঅ মোহতরু পটি জোড়িঅ।
["phaḍ:i(ĕ)ɒ ("pha:ṛiĕɒ) 'moʱiɒ-tɒru | "pa:ṭi: ʤoṛ'ɒ(ĕ)i:]
Having split (=cut down) the tree of Ignorance, he joins the boards:
আদঅ দিটি টাঙ্গী নিবাণে কোহিঅ॥
["a:dɒ(ĕ)ɒ 'diṛʱi ṭāŋgi | "ni:baṇõ ("nibaṇõ:) koʱi'ɒ(e)i]:
With the strong axe of Advaya (=monism) he strikes (?) at Nirvāṇa.
সাঙ্কমত চড়িলে দাহিণ বাম মা হোহী।
["ʃākɒwɔ̃ɒ-tɒ 'ʧɒṛile: | "da:ʱiɒɲ | bāmɒ mã: | 'ʱo:ʱi:]
After having mounted on the bridge, turn not to the right or the left.
নিঅড্ডী বোহি দূর ম জাহী॥
["ni(ĕ)ɒḍ:i ("niĕɒṛi:) 'bo:ʱi: | "du:rɒ mɒ 'ʤa:ʱi:]
Bōdhi (=Supreme Knowledge) is near, go not afar.
জই তুম্হে লোঅ হে হোইব পারগামী।
[ʤɒ(ĕ)i | "tumʱe: ("tum:e:) 'lo(ŏ)ɒ ʱe: | "ʱoĭbɒ parɒ'ga:mī:]
If, O (ye) men, ye will be goers across,
পুচ্ছতু চাটিল অনুত্তর সামী॥
["puccʰɒ tu 'ʧaṭilɒ (ĕ)ɒn|"ut:ɒrɒ 'ʃā:wī:]
Ask thou (=ye) Cāṭila, the peerless Master.
(Caryā 33): টালত মোর ঘর নাহি পড়বেষী।
["ṭa:lɒ-tɒ 'morɒ gʱɒrɒ | "nāʱi pɒṛi(ĕ)'e:ʃi:]
On the high place (?) is my home, there is no neighbour.
হাড়ীত ভাত নাহি নিতি আবেশী॥
["ʱā:ṛi-tɒ 'bʱiatɒ nāʱi | "ni:ti (ĕ)a(ŏ)'i:ʃi:]
In (my) pot there is no rice, (yet) daily I come in.
বেঙ্গ সংসার বড়হিল জাঅ।
["bɛ̃ŋ:gɒ ʃɒŋ'ʃa:rɒ | "bɒrɒ ʱili 'ʤa:(ĕ)i:]
This cripple (this frog), the world, too much wavering (hopping) it goes.

দুহিল দুধু কি বেণ্টে ষামায় ॥
["du:ɦiilɒ 'du:dɦiɒ ki | "bẽṇ:ṭe ("bã:ṭe ?) ʃam'ɑ:(ĕ)i:]
The milk that is milked off, does it go back into the teat?

বলদ বিআএল গবিআ বাঁঝে।
["bɒlɒdɒ bi(ĕ)'ɑ:(ĕ)ilɒ | "gɒ(ĕ)i(ĕ)ɑ: 'bã:ʄʱie:]
An ox has made a barren cow to bear:

পিটা দুহিএ এ তিনা সাঁঝে ॥
["pi:ṭɑ: 'dufii(ĕ)e: | "ti:nɑ: 'ʃã:ʄʱie:]
A pail(full) is milked of three evenings (=three times a day).

জো সো বুধী সো ধনি বুধী।
["ʄʱo: ʃo: ("ʄʱe: ʃe:) 'bu:dɦi: | "ʃo: (ʃe:) dɦɒni 'bu:dɦii:]
The unde standing which is that (understanding), indeed is a praiseworthy understanding.

জো ষো চোর সোই সাধী ॥
["ʄʱo: ʃo: ("ʄʱe: ʃe:) 'ɕʃo:rɑ: | "ʃo:(ĕ)i: ("ʃe:ĕi:) 'ʃɑ:dɦii:]
He that is the thief, he indeed is the honest man.

নিতে নিতে ষিআলা ষিহে ষম জুঝঅ।
["niti niti 'ʃi(ĕ)ɑ:lɑ | "ʃiɦẽ ʃɒw̃ɒ ʄʱu'ʄʱiɲ(ĕ)i:]
Day to day the jackal fights with the lion.

ঢেণ্ঢণ পাএর গীত বিরলে বুঝঅ ॥
["ɖʱeṇ:ɖʱiɲɒ 'pɑ:(e)erɒ | gitɒ | "birɒle: bu'ʄʱiɲ(e)i:]
(This) song of Dheṇḍhaṇa-pāda one understands all alone.

It would be seen that in the above extracts, verbal forms like « gaṛhaẏi, taraẏi, jāẏi, jūjhaẏi » (where in ordinary speech the final affix « aï » probably became a diphthong, « ai » to be changed into « -e » of later Middle Bengali) had the euphonic « ẏ » glide = [ĕ], which would come in when in verse the affix would be pronounced as two syllables; and for metric reasons, the final « -i » would be lengthened whenever required.

EARLY MIDDLE BENGALI: 'ŚRĪ-KṚṢṆA-KĪRTTANA' (SEE P. 128).

[ṇ] seems to have been pronounced in the West Bengali of this work. অ « ă » = [ɒ] was perhaps not yet [ɔ], but it is likely the higher back vowel was pronounced in groups like [ɒĭ = ɔĭ], and in other cases.

(Page 145) : দধির চুপড়ী যমুনার তীরে থুয়িআঁ।
["dɒdhiirɒ ʧupɒṛi ʃʒɒwũu|"narɒ tire 'thuĭã]
The basket of curds, by Yamunā's bank having put down,
ডাক পাড়ে গোআলিনী চারি পাস চাহিআঁ॥
["ḍakɒ paṛe 'go(ŏ)alini | "ʧari paʃɒ 'ʧaĭ(ĭ)ã]
The milkmaids raise a shout, having looked at four sides.
বিহাণ আইলাহোঁ এথাঁ বেলা আপার।
["bihaṇɒ (ŏ)aĭ'lahõ (ŏ)ethã | "bɛla: (ŏ)a'pa:rɒ]
At dawn we have come here, the period is long.
কত খনে যাইব আহ্মে মথুরার পার॥
["kɒtɒ khɒṇe 'ʃʒaĭbɒ ãmhẽ | "mɒthurarɒ 'parɒ]
In how long a time shall we go to Mathurā's strand?
ঘাটের ঘাটিআল কহি গেল সে।
["gʰaṭerɒ gʰaṭi(ŏ)a:lɒ | "kɒhi gɛlɒ 'ʃe:]
The ghaut-keeper of this ghaut—where is he gone?
দধির চুপড়ী মোর পার করি দে॥
["dɒdhiirɒ ʧupaṛi morɒ | "parɒ kɒri 'de:]
Do take to the other side my basket of curds."
নাএর আন্তরে গেলী চন্দ্রাবলী রাহী।
["na(ŏ)erɒ (ŏ)ãntɒre geli | "ʧɒndrabɒli (-ŏəli) 'raĥi]
For the sake of a boat went Candrávalī Rādhikā.
তার পাছে আর যত গোআলিনী সহী॥
["tarɒ paʧʰe 'arɒ ʃʒɒtɒ | "go(ŏ)alini 'ʃɒĥi]
Behind her, all the other milk-maid friends.
কথো দূর গিআঁ দেখিএ একখানী নাএ।
["kɒtho durɒ 'gĭã dekhi(ĭ)e | "ɛkɒ-khani 'na(ŏ)e]
After going some distance, a boat is seen.
সত্বর হয়িআঁ রাহী তার পাস যাএ॥
["ʃɒt:ŏərɒ hiɒ(ĭ)i(ĭ)ã raĥi | "tarɒ paʃɒ 'ʃʒa(ĭ)e]
Being quick, Rādhikā goes beside it.
তার থান গিআঁ বোলে রাধা গোআলিনী।
["tarɒ thaṇɒ 'gi(ĭ)ã bole | "radʰa go(ŏ)a'lini]
Going to its place (=near it), the Milkmaid Rādhā says:

কেহ্ন মনে পার হয়িব ছোট নাঅ খানী ॥
["kɛnfiɒ mɒne 'parɒ fiɒĭbɒ | "ʧhoṭɒ na(ŏ)ɒ 'ɦhani]
" In what manner shall we cross? the boat is small.

একেঁ একেঁ পার হআঁ যাইব মথুরা।
["ɛkẽ(ŏ)ɛkẽ 'parɒ fiɒĭã | "ʧa(ŏ)ibɒ mɒ'thura]
Crossing one by one, we shall go to Mathurā.

সক্কাই চড়িলেঁ নাঅ না সহিব ভরা ॥
["ʃɒmfia(ŏ)i ʧɒṛfiilẽ na(ŏ)ɒ | "na ʃɒfiibɒ 'bfiɒra]
If all were to get into the boat, the weight will not be borne.

শুন ঘাটিআল নাঅ চাপায়িআঁ ঘাটে।
["ʃunɒ gfiaṭi(ŏ)alɒ na(ŏ)ɒ | "ʧapa(ŏ)iã 'gfiaṭe]
Hear, O ghaut-keeper! having brought your boat to the ghaut,

সক্কা পার কর যাইউ মথুরার হাটে ॥
["ʃɒmfia parɒ 'kɒrɒ ʧaĭ(ŏ)u | "mɒthurarɒ 'fiaṭe]
Make us all cross over, let us go to Mathurā's mart."

রাধার বচন শুণী ঘাটিয়াল হাসে।
["radfiarɒ bɒʧɒnɒ ʃuṇi | "gfiaṭi(ŏ)alɒ 'fiaʧe]
Having heard Rādhā's words, the ghaut-keeper smiles.

বাসলী শিরে বন্দী গাইল চণ্ডীদাসে ॥
["ba:ʃɒli 'ʃire bɒndi | "gaĭlɒ ʧɒṇḍi'daʧe]
Adoring Bāśalī with his head, Caṇḍīdāsu sang.

(Page 294) : কে না বাঁশী বাএ বড়ায়ি কালিনী নই কুলে।
["ke nã bãʃi 'ba(ĕ)e bɒṛaĭ | "kalini nɒĭ 'kule]
Who is it, O Grandmother, that plays on the flute on the bank of the Kālindī river?

কে না বাঁশী বাএ বড়ায়ি এ গোঠ গে কুলে ॥
["ke nã bãʃi 'ba(ĕ)e bɒṛaĭ | "(ĕ)e goṭhɒ go'kule]
Who is it indeed, O Grandmother, that plays on the flute among these pastures and herds of kine?

আকুল শরীর মোর বেআকুল মন।
["akulɒ ʃɒ'rirɒ morɒ | "bɛ(ĕ)akulɒ 'mɒnɒ]
My body is all disordered, my mind is agitated.

বাঁশীর শবদেঁ মো আউলাইলোঁ রান্ধন ॥
["bãʃirɒ ʃɒbɒdẽ mo: | "aŭlaĭlõ ran'dfiɒnɒ]
At the sound of the flute I disarranged my cooking (=domestic affairs).

কে না বাঁশী বাএ বড়ায়ি সে না কোন জনা।
["ke nã bãʃi 'ba(ĕ)e bɒṛaĭ | "ʃe nã koṇɒ 'ʄʒɒṇa]
Who is it indeed, O Grandmother, that plays on the flute, what man indeed is he?
দাসী হঅাঁ তার পাএ নিশিবোঁ আপনা॥
["daʃi ɦɒĭã 'tarɒ pa(ĕ)e | "niʃibõ (ĕ)a'pɒṇa]
Being his slave, at his feet I shall cast myself.
কে না বাঁশী বাএ বড়ায়ি চিত্তের হরিষে।
["ke nã bãʃi 'ba(ĕ)e bɒṛaĭ | "ʧit:erɒ ɦɒ'riʃe]
Who is it indeed, O Grandmother, that plays on the flute in (his) heart's joy?
তার পাএ বড়ায়ি মোঁ কৈলোঁ কোণ দোষে॥
["tarɒ pa(ĕ)e 'bɒṛa(ĕ)i mõ | "kɒĭlõ koṇɒ 'doʃe]
At his feet, O Grandmother, what fault have I done?
আঝর ঝরএ মোর নয়নের পাণী।
["aʄʒɦɒrɒ ʄʒɦɒ'rɒ(ĕ)e morɒ | "nɒ(ĕ)ɒnerɒ 'paṇi]
Without stint drop tears from my eyes:
বাঁশীর শবদৈ বড়ায়ি হারাইলোঁ পরাণী॥
["bãʃirɒ ʃɒbɒdẽ bɒṛaĭ | "ɦaraĭlõ pɒ'raṇi]
At the sound of the flute, O Grandmother, I have lost my life.
আকুল করিতেঁ কিবা আহ্মার মন।
["akulɒ kɒritẽ kiba | 'am:ɦarɒ 'mɒṇɒ]
Is it only to make my mind agitated,
বাজাএ সুসর বাঁশী নান্দের নন্দন।
["baʄʒa(ĕ)e ʃu'ʃɔrɒ baʃi | "nãnderɒ nɒn'dɒnɒ]
The son of Nanda plays on (his) melodious flute.
পাখী নহোঁ তার ঠাই উড়ী পড়ি জাওঁ।
["pakhi nɒɦõ 'tarɒ ṭhã(ĕ)ī | "uṛi pɒṛi 'ʄʒa(ŏ)õ]
I am not a bird, that I might fly and fall near him.
মেদনী বিদার দেউ পসিআঁ লুকাওঁ॥
["medɒni bi'darɒ de(ŏ)u | "pɒ(ĭ)ʃiã lu'ka(ŏ)õ]
Let the earth open up, that having gone in I may hide.
বন পোড়ে আগ বড়ায়ি জগজনে জানী।
["bɒṇɒ poṛe 'agɒ bɒṛaĭ | "ʄʒɒgɒnʄʒɒṇe 'ʄʒaṇi]
The forest burns, O Grandmother, everybody knows it:

মোর মন পোড়ে যেহ্ন কুম্ভারের পণী ॥
["morɒ mɒɳɒ 'poṛe ʃʒɞnfiɒ | "kum(b)fiarerɒ 'pɔɳi]
But my heart burns, like the potter's kiln.
আন্তর সুখাএ মোর কাহ্ন আভিলাসে।
["ãntɒrɒ ʃu'kha(ĕ)e morɒ | "kanfiɒ abfii'laʃe]
For the desire of Kṛṣṇa, my heart is dried up.
বাসলী শিরে বন্দী গাইল চণ্ডীদাসে। (=last line of preceding extract).

LATE MIDDLE BENGALI AND NEW BENGALI.

140. In Middle Bengali of times post 14th century, certain other phonetic changes came in (*e.g.*, epenthesis), which have been touched upon before (see p. 133). The development of one modern dialect in particular can be taken up in discussing the history of Bengali: and the dialect *par excellence* for that purpose is that of West Central Bengal (the Standard Colloquial). The phonological history of this dialect through Middle and Old Bengali has been attempted in the chapters that follow, side by side with that of the literary speech; and a survey of the phonetics of Late Middle Bengali is hardly necessary here.

The sounds of New Bengali, in the Standard Dialect as spoken by the educated people of Calcutta and West Central Bengal, have been described in 'A Brief Sketch of Bengali Phonetics' (by S. K. Chatterji, London, 1921: originally in the BSOS., London, Vol. II, Part I; specimens of dialectal Bengali in the phonetic script have been given in the same journal, Vol. II, Part II. See also the LSI., V, I). Below are given in tabular form the sounds of the Standard Colloquial.

VOWELS.

	Back	Central	Front
Close ...	u ũ		i ĩ
Half-close ...	o õ		e ẽ
Half-open ...	ɔ ɔ̃	(ʌ)	æ æ̃
Open ...	ã	a	

CONSONANTS.

	Glottal.	Velar.	Retroflex.	Palatal.	Palato-Alveolar.	Alveolar.	Dental.	Denti-labial.	Bilabial.
Stop ...		k g	ṭ ḍ				t d		p b
Aspirate ...		kh gɦ	ṭh ḍɦ				th dɦ		ph bɦ
Affricate ...					ʧ ʤ ʧh ʤɦ				
Nasal ...		ŋ				n			m
Lateral ...						l			
Flapped ...			ṛ			r			
Fricative ...	h ɦ				ʃ	s z		f v	F ʋ
Semi-vowel				ĕ					ŏ

Of the above sounds, it may be noted that [ɔ] is the sound of English *awe*, occurring in Bengali both long and short, and [æ] is very nearly that of Southern English *a* in *hat*, being somewhat lower than the English sound; and [ʌ] is found only in foreign words not naturalised. There is a large number of diphthongs, some 25, although the script recognises only 2; and there are some triphthongs also.

The retroflex [ṭ ḍ] are no longer the cerebrals of OIA. (such as are still found in the Dravidian languages, and in Panjābī for instance among NIA. speeches), but they have advanced forward considerably towards the palato-alveolar region, so much so that to a Bengali there is no difference between the so-called cerebrals of his language and the *t d* of English, alveolar sounds. [n, l] when before the retroflex

sounds, have a retroflex colouring, and [n] is also slightly palatalised before the palatal affricates. [s] is practically a variant of the [ʃ] phoneme under certain conditions; and [z] occurs in foreign vocables, and, rarely, as a modification of the native [ʃʒ(ɦ)]. [f v, ɸ β] are commonly substituted for the aspirates [ph, bɦ] of careful speakers. [h] is the sound occurring in the unvoiced aspirates, and is found by itself, in a final position, in interjections. [ĕ, ŏ] occur only as intervocal glides.

Length in vowels is not of signific importance, but the length (or doubling) of consonants is important. The stress in predominantly initial, and word-stress yields to sentence-stress, or to the dominant stress in the sense-group.

The more important sounds of dialectal Bengali may be noted.

[ɛ]: half-open front vowel, intermediate between [e] and [æ] of Standard Bengali, is found in the East Bengali dialects, as well as in the Bengali of the extreme West (see p. 142).

[a]: low or open front vowel, like *a* in English *man* as pronounced in the North of England: found in most Bengali dialects, but it cannot be said to characterise the speech of Ca'cutta and the surrounding area, where it is occasionally heard as subsidiary form of [ɑ]: *e.g.*, Dialectal Bengali কাল=কা'ল [ka:l] *yesterday, to-morrow* (besides কৌল, কাইল [kaⁱ l, kail, kail], from Old Bengali কালি [kali]), and কাল [kɑ:l] *time, death*: but Calcutta Bengali, both the words=কাল [kɑ:l]; Dialectal Bengali আজ, আ'জ, ওজ, আইজ [a:ʃʒ, a:dz, a:z ; aⁱ dz, aidz, aiʃʒ ; ɑidz, ɑiʃʒ] *to-day* (from Old Bengali আজি [ɑʃʒi]), but Calcutta Bengali আজ [ɑ:ʃʒ].

[ts, dz]: dental affricates, which are the common East and North as well as North Central Bengali equivalents of the Standard Bengali [c͡ʃ, ʃʒ]. [z] is frequently found for [dz]; and [c͡ʃh] becomes [s] outside the West Bengal area.

[n̤] occurs in Bengali of the extreme West, but it is rather rare.

[ʔ] the glottal stop = the *Alif Hamzah* of Arabic, is found in some forms of East Bengali for [ɦ], in initial positions (see page 143).

A kind of bilabial [ɸ], in which the lips are much more widely separated from each other than in the case of the Standard Bengali

[ph > ɸ], with the acoustic effect of [fi] to the unaccustomed ear, is the East Vaŋga equivalent of a single [p, ph] of Standard Bengali.

[x]: the velar fricative, unvoiced, is found for [k, kh] in East Vaŋga, and in some forms of West Vaŋga as well.

[ɣ, ð, ʋ] also occur in most forms of Bengali owing to the under-articulation of intervocal stops, which is a common enough Bengali habit (see 'Brief Sketch of Bengali Phonetics,' § 31); and [~ʋ] or [w̃] is similarly found for intervocal [m].

Percentage of Frequency of New Bengali Sounds.

141. Standard Colloquial Bengali has thus the following sounds, viewed historically, with reference to the language as a whole:

Seven vowel sounds: [i, e, æ, a, ɔ, o, u]; and the rare foreign vowel [ʌ]. All these, except the last, are capable of nasalisation, [~].

Eight stop sounds: [k g, ṭ ḍ, t d, p b];

Two affricates: [c͡ʃ, ɟ͡ʒ];

Ten aspirates, stops and affricates: [kh gfi, c͡ʃh ɟ͡ʒfi, ṭh ḍfi, th dfi, ph bfi]; (besides, the aspirated [ṛfi] is found, as well as [nfi, mfi, lfi]);

Three nasals: [ŋ, n, m];

One lateral: [l];

Two flapped sounds: [ṛ, r];

Four fricatives: [h, fi, ʃ, s]; (the fricative sounds of [f v, ɸ ʋ] and [z] are not used by all speakers, and [ph, bfi] and [ɟ͡ʒ] respectively for these would be quite normal).

Two semi-vowels: [ĕ, ŏ].

Whitney in his Sanskrit Grammar (§ 75) has given an average of percentage of frequency of each sound in Sanskrit, which may be regarded as holding good for OIA. in general. I have tried to find out the comparative frequency of sounds for New Bengali, as in the colloquial speech in the educated Calcutta pronunciation. Taking 6 passages[1] from

[1] These 6 passages, presenting an aggregate of over 9,900 sounds, were from the following works: from Kālī-Prasanna Siṁha's 'Hutōm Pēm̆cār Naksā' (see p. 135), over 4,600 sounds; Baṅkim-Chandra Chatterji's 'Kapāla-kuṇḍalā,' some 1,200 sounds; Madhusūdan Datta's 'Mēghanāda-vadha Kāvya,' about 900 sounds; Girish Chandra Ghosh's 'Bilwa-

as many writers, I transcribed them phonetically, and counted up the total numbers of sounds, individually and collectively, and then worked out the percentage. The results are given below : and for comparison with Sanskrit (OIA.) , Whitney's figures are quoted side by side. The order is that of the Indian alphabet. The Bengali diphthongs have been split up and included under the simple vowels making them up. Long (or the so-called 'double') consonants have been computed as two consonants, following general usage.

Vowels.

Bengali.	Sanskrit.
অ [ɔ]—6·63 ;	« a » [ɑ, ʌ, ə]—19·78,
আ [ɑ]—11·32 ;	« ā » [ɑ:]—8·19 ;
ই, ঈ [i]—6·77 ;	« i » [i]—4·85, « ī » [i:]—1·19 ;
উ, ঊ [u]—3·08 ;	« u » [u]—2·61, « ū » [u:]—0·73 ;
এ [e]—8·96 ;	« ṛ » [ṛ]—0·74, « ṝ » [ṛ:]—0·01,
এ,'অ্যা' [æ]—0·98 ;	« ḷ » [ḷ]—0·01 ;
ও [o]—7·82 ;	« ē » [e:, ? ɛ:]—2·84 ; « ō » [o:, ? ɔ:]—1·88 ;
'অ্য' [ʌ]—0·03 ;	« āi » [ɑ:i, a:i]—0·51 ; « āu » [ɑ:u]—0·18 ;
ঁ [˜]—0·58.	« ṁ, ṁ » [˜]—0·63.

Consonants.

Bengali.		Sanskrit.	
ক [k]—4·15,	খ [kh]—0·88,	[k]—1·99,	[kh]—0·13,
গ [g]—1·59,	ঘ [gh]—0·17,	[g]—0·82,	[gh]—0·15,
ঙ, ং [ŋ]—0·59 ;		[ŋ]—0·22 ;	

mañgal,' a little less than 1,000 sounds ; from Mm. Hara-Prasād Śāstrī's Presidential Address to the Vañgīya Sāhitya Pariṣad, San 1321, about 1,000 sounds; and from among the recent poems of Rabīndra-nāth Tagore, some 1,200 sounds.

Bengali.		Sanskrit.	
চ [c͡ʃ]—1·37,	ছ [c͡ʃh]—0·79,	[c]—1·26,	[ch]—0·17,
জ, য [ɟ͡ʒ]—1·46,	ঝ [ɟ͡ʒɦ]—0·21;	[ɟ]—0·94,	[ɟɦ]—0·01,
ট [ʈ]—0·74,	ঠ [ʈh]—0·14,	[ɲ]—0·35;	[ʈ]—0·26,
ড [ɖ]—0·17,	ঢ [ɖɦ]—0·18,	[ʈh]—0·06,	[ɖ]—0·21,
ড় [ɽ]—0·64,	ঢ় [ɽɦ]—0·02;	[ɖɦ]—0·03,	[ɳ]—1·03;
ত [t]—3·83,	থ [th]—0·59,	[t]—6·65,	[th]—0·58,
দ [d]—2·51,	ধ [dɦ]—0·75,	[d]—2·85,	[dɦ]—0·83,
ঞ, ণ, ন [n]—4·97;		[n]—4·81;	
প [p]—2·14,	ফ [ph (f, ɸ)]—0·36,	[p]—2·46,	[ph]—0·03,
ব [b]—4·44,	ভ [bɦ (v, ʋ)]—0·47,	[b]—0·46,	[bɦ]—1·27,
ম [m]—2·78;		[m]—4·34;	
য় [ĕ]—1·06,	র [r]—7·01,	«y» [ĭ, j]—4·25,	[r]—5·05,
ল [l]—4·14,	ওয়, ও=ব [ŏ]—0·09;	[l]—0·69,	«v» [ŭ, w, ʋ, v]—4·99;
শ, ষ, স [ʃ]—3·64,	শ, স [s]—0·35,	«ś» [ɕ, ʃ]—1·57,	«ṣ» [ʂ]—1·45,
হ [ɦ]—1·40,	: [h]—2·02.	[s]—3·56,	[ɦ]—1·07,
		«ḥ» [h, x, ɸ]—1·31.	

In the above comparative tables, certain points are interesting, showing the result of transformation from OIA. to NIA.

OIA. «ă» became [ɔ] as well as [ɑ:, ɑ] in Bengali through compensatory lengthening in connection with the simplification of double consonants groups), as well as [o] in New Bengali times: hence the decrease in «ă» [ɔ] and the increase of আ [ɑ] and ও [o] sounds in Bengali. The large percentage of [e] in the Standard Bengali Colloquial in due to the habit of umlaut in that dialect, which has transformed many an [ɑ] and [i] into [e].

In literary Bengali, the [e] would present a smaller figure. On the whole, vowel sounds in New Bengali are slightly in excess of what the case was in OIA. as presented by Sanskrit (46·17% and 44·15% respectively).

The excess of [k] and [kh] in Bengali is due partly to the doubling of these sounds before « y, r, l, v » in *tatsama* words; and to some extent, the increase of [kh] is due to the modifications of Sanskrit « kṣ ». [ŋ] has developed from OIA. [ŋ, ŋg], as well as from *anusvāra*: hence the excess over Sanskrit.

The substantive verb-root « āch » is partly responsible for the percentage of frequency of the [c͡ʃ(h)] sound. The palatal affricates have been largely due to the assimilation of the dentals with « y ». [c͡ʃ(h)] and [ʃ] acoustically are the most prominent sounds of Bengali.

The excess in the cerebrals is noteworthy—and it is just what can be expected from a descendant of the Māgadhī form of MIA.

The dentals have kept close to the OIA. figures, but the decrease of [t] is to be noticed. [t] was a common OIA. sound; it has been dropped in intervocal positions in NIA. (as, *e.g.*, in the present verbal forms in « -ti », and the passive participle in « -ta »); and besides, it has been in many cases cerebralised or palatalised. The [n] sound in Bengali has been re-inforced by the cerebral and palatal nasals.

Bengali [ph] in many cases is due to the aspiration of [p] in connection with a sibilant, which took place in MIA. All initial « v- » s have become [b] in Bengali, in *tadbhavas*, and intervocally in *tatsamas* also: hence the increase in [b]. The weakening of [bɦ], one of the most characteristic sounds of OIA., to [ɦ], is partly the reason of the decrease of the sound in Bengali: we may note that « -bh- » figured in some common inflections of the noun in OIA., which have been lost. The loss of final « -m », so common in Sanskrit, and the transformation of intervocal « m » to a mere nasalisation, has led to the decrease of that sound in Bengali.

The semivowels of OIA., [ĭ=j] and [ŭ=w], have been changed respectively to [ʒ] and [b] when initial; and in the interior of a word, they have been either assimilated, or reduced to zero. Bengali started afresh with its own semi-vowel glides [ĕ, ŏ], which are optional intervocal

sounds only; and hence this low percentage in Modern Bengali with its large number of diphthongs not admitting a pronounced glide.

Some common suffixes of Modern Bengali—the plural and the genitive —have « r »: this certainly has helped the high frequency of this sound in the language. It will be seen that [r] is the most frequent consonant sound in Bengali, as [t] is in Sanskrit. ([r, ṛ, ṛ:], combined, however, come second in Sanskrit).

[l] was quite a popular sound in the dialects of the East; and the Bengali verb has its simple past form, as well as a conjunctive indeclinable, with an [l] affix. These are the reasons of the discrepancy between Sanskrit (representing OIA., of the West) and Bengali.

The sibilants have become curtailed to some extent, owing to their assimilation in groups like « śc, ṣṭ(h), ṣṇ, st(h), ṣp, ṣk, sp, sk » etc. In Bengali, [ʃ] takes the place of [s] of Sanskrit, the [s] sound being of rare occurrence; and [ʃ] is lost.

[ɦ] shows a slight excess. But the weakening of intervocal [kh gɦ, th dɦ, ph bɦ] to [ɦ] in MIA., would make us expect a bigger figure for this sound in Bengali. A great many intervocal [ɦ]s are dropped in New Bengali.

[h] was lost in MIA., and the sound is of independent development in Bengali where it occurs only finally in interjections.

The history of the development of the sounds of Modern Bengali from OIA., is now proceeded with from the next Chapter.

CHAPTER II

PHONOLOGY OF THE NATIVE ELEMENT: VOWELS. ACCENT SYSTEM AND ITS INFLUENCE ON VOWELS.

Stress Accent in Indo-Aryan.

142. The MIA. vowel system was transformed into that of NIA., but there were certain losses, and changes in quality and quantity in NIA., which are remarkable; thus, an OIA. (Sanskrit) word like « utpātayati, utpāṭayati » became in MIA. « uppāṭēti, uppāḍēdi, uppāḍēi, uppāḍaï », which was transformed into New Bengali উপাড়ে > উপড়ে, উপড়য় « upāṛē, > upāṛây, upāṛây »: here we see the loss of the long medial vowel « ā » of OIA. Similarly, in OIA. word « bhrātṛ-jāyā » = late MIA. « * bhāu-jāā, bhāujja » = Bengali ভাউজ > ভাজ « bhāujå > bhājå », we see the loss of final and medial vowels in NIA.; and in a case like Bengali উনুন « unun » *oven* = OIA. « * uṣnāpanikā », we see not only loss of final vowels, but also change of « ā » to « u ».

All these modifications were due in the first instance to the accent system obtaining in the Aryan speech, specially during the transitional stage between MIA. and NIA., and to the subsequent operation of special phonetic habits which were developed in the various NIA. speeches (*e. g.*, Vowel Harmony and Vowel Mutation or Umlaut in Bengali).

The kind of accent which was attended by the loss apparently of weak syllables, by concentrating on a particular syllable most of the effort required in pronouncing the whole word and thus neglecting the other ones, was undoubtedly an accent of force, a respiratory accent, or stress accent. This stress accent is often intimately connected with the raising or lowering of the tone of voice, or pitch (cf. Daniel Jones, ' An Outline of English Phonetics,' Leipzig, 1922, p. v) ; and in some cases, stress, or pitch, or both, means increase in the length of the syllable. Stress and pitch are both present in all languages, but each language has its

predilection one way or the other, either making stress the dominant speech attribute, subordinating pitch or musical tone to it (as for instance in English), or *vice versâ* (as in the Old Greek). This pitch is with reference to the syllable in individual words,—apart from intonation or modulation of voice in connected speech, which is present in all languages in a more or less pronounced way.

In the oldest form of IA., as preserved in the Rig and the other Vedas and in the 'Brāhmaṇas,' pitch or musical accent was the predominant one; and the ancient Indian grammarians in explaining accent in Vedic have only thought of pitch or raising and lowering of the voice in the different syllables (udātta, anudātta, svarita), and not stress. We have no indication as to how far the stress accent was present in OIA., or how strong it was. But it has been assumed by some scholars (preëminently H. Jacobi) that there developed in the Indo-Aryan speech a pronounced stress accent, in the closing centuries of the 1st millennium B.C. (i.e., in the First and Transitional MIA. stages), which was distinct from the earlier, predominantly musical, accent of OIA.; and this stress usually was on the first long syllable from the end of the word, and there was a secondary stress on the first syllable. This new stress accent roughly corresponded in place with that obtaining in classical Latin. (Cf. H. Jacobi, 'Ueber die Betonung im klassichen Sanskrit und in den Prakrit-Sprachen,' ZDMG., XLVII, pp. 574-582.) In the medieval and modern pronunciation of Sanskrit, when verses are simply read and not chanted to a set tune, it is this stress accent that obtained and still obtains now (cf. G. Bühler, 'Leitfaden für den Elementarcursus des Sanskrit,' Vienna, 1883; J. Wackernagel, 'Altindische Grammatik,' I, § 254; also the paper of H. Jacobi); and Grierson accepts this view of the presence of a 'Latin' stress in Early MIA., which formed the basis of the accent system of the NIA. speeches (G. A. Grierson, 'On the Stress Accent in the Modern Indo-Aryan Vernaculars,' JRAS., 1895, pp. 139 ff.). Against Jacobi's view is Pischel's, who differentiated between the various MIA. dialects in their accent systems, and thought that certain dialects (like Mahārāṣṭrī, Ardha-māgadhī, Jaina Māgadhī, poetic Apabhraṅśa, and poetic Jaina Śaurasēnī—in short,

dialects originating in the South-western IA. area, or employed, as in the case of Ardha-māgadhī and Jaina Śaurasēnī, by people of the South-west) preserved the Vedic (OIA.) accent, at least with regard to the place where it occurred in the word ; but other dialects of MIA. (like Śaurasēnī, Māgadhī, Ḍhakkī [=Ṭakkī, a North Panjāb speech ; see p. 88]) developed the new arrangement of stress which is preserved in classical Sanskrit. This theory of Pischel's, of two systems of accentuation prevailing in MIA., is supported and developed by R. L. Turner, who notes the difference between Gujarātī and Marāṭhī (the former having a definite stress which differs in acoustic effect considerably from the absence or weakness of any stress in Marāṭhī), and seeks to establish that the original Indo-European accent as preserved in OIA. (Vedic), did not change its place, although it became a stress from pitch, and was carried on in Marāṭhī, a descendant of Mahārāṣṭrī, but it was the new stress system of MIA. (Śaurasēnī etc.) that was continued into Gujarātī and the rest. (R. Pischel, 'Grammatik der Prakrit-Sprachen,' § 46; R. L. Turner, 'The Indo-Germanic Accent in Marāṭhī,' JRAS.,1916, pp. 250-251.) Jules Bloch is sceptical about the speculations as to the presence of a stress accent in MIA., and does not think that the NIA. speeches possess a stress either, and believes that the rhythm in NIA. is mainly quantitative; but he admits that accent is not a stable phenomenon in speech, and that in India the Aryan speech, in its development in the various parts of the country at different times, underwent different modifications with regard to the accent, through contact with different non-Aryan tongues which have given place to it (J. Bloch, 'Langue Marathe,' §§ 32, 36 ; 'l' Accent d' Intensité,' in the Bhāṇḍārkar Comm. Volume, pp. 359-364).

The question of accent (stress accent) in IA. is indeed a complicated one, and the absence of sure evidence in this matter for OIA. and MIA. leaves room only for a hypothesis about its existence in the earlier phases of IA. In NIA., a stress or expiratory accent does exist, at least in some forms of NIA., *e.g.*, Standard Bengali, Hindōstānī, Sinhalese; and my impression is that it is found in all forms of NIA., although it is frequently associated with length. This side of NIA. phonetics, however, has

not been fully enquired into. The loss of unstressed vowels, initial, medial and final, in a breath group of a single word or a group of words, as we can see from most languages, is generally the result of a strong expiratory stress.[1] Witness the development of the Romance languages from Latin, witness cases of contraction like English ['boŭsn̩] from « bāt+sveinn », ['hʌzif] from « hūs-wīf », Parisian French [tit'mɛ:ʀ] = « petite mère », Bengali দেরখো ['derk(h)o] *wooden lamp-stand* from « *dīẇa-rākh-ūā (= dīpa-rakṣa+ūka-) », Hindōstānī [dub'lɑ:] from « dubbala-, durbala- », ['pjɑ:r] from « piya-āra, priya-kāra »; witness also cases in Bengali like নেসগেযা ['neʃgeʃʃɑ] for নিয়া আসিস্ গিয়া যা « niyā āsis giyā jā » = *go and get, do* (lit. *having taken, come, having gone, go*).

In OIA., the loss of unstressed syllables is found, but is rather rare: *e.g.*, « ánu vartiṣyē > án-vartiṣyē »; « su-várṇa > svarṇa »; « jánu+bila > jám-bila »; « sn-nu-más > su-n-más »; « sŭnara > *sŭnra > *sundra> sundara » ; « *avís > vís » *bird*, cf. Latin « auis »; « tila-píñja > til-píñja »; Vedic « tmán > ātmán »: etc. (A. A. Macdonell, 'Vedic Grammar,' § 18; the article by Jacobi in the ZDMG., XLVII; J. Wackernagel, 'Altindische Grammatik,' I, § 53). Cases are on the increase in MIA., as in Pali and the Prakrits of the Second MIA. stage; as well as weakening of unaccented syllables: *e.g.*, Pali « jaggati <* jāgrati <* jāgarati < jāgarti », « dhītā <duhitā », « daka < udaka »; « kīnāti < krīṇāti », « kāhāpaṇa=kārṣā-paṇa »; « dānīṁ=idānīm »; Prakrit (Ardha-māgadhī) « lāu = alābu », « rahaṭṭa = araghaṭṭa », « sanakha-pada > * sanakhʎpada > saṇapphaẏa », « katta < kalʎtra < kalatra », « popphala < pūgʎphala = pūgaphala »; « utkhāta=ukkhăa »; « sāhāyya=sāhĭjja »; « surabhi>*surbhi>subbhi »; « ḍhilla < siḍhila=śithila »; sirĭsa < śirīṣa »; « pōsaha= upavasatha »; « haŭ <ahakaṁ, aham »; « ŏkkhala, ŭkkhala = *udkhala= udūkhala », cf. Bengali উখ্‌লি « ukhʎli » etc., etc. The presence of a strong stress accent in

[1] Cases of loss of a syllable as a result of low pitch are found, but are extremely limited: *e.g.*, London English [ŋkju, kju] for a conventional *thank you* ['θæŋkju], where the high pitch in which the second syllable is pronounced makes the preceding one almost inaudible, although normally it is the stressed syllable in this sense group. Here pitch is more powerful than stress.

MIA., a new development in the Aryan speech which was brought in after the decay of the old tone, at least in the Northern Indian plains, can thus be very well assumed.

Accent in Old Bengali.

143. The general lines of NIA. vowel phonology, as a phenomenon connected with stress, have been laid down by Grierson ('On the Stress Accent in the Modern Indo-Aryan Vernaculars,' JRAS., 1895; also cf. R. L. Turner, 'The Indo-Germanic Accent in Marāṭhī,' JRAS., 1916). The Northern IA. languages, Western Hindī, Eastern Hindī, Rājasthānī Gujarātī, Sindhī, Panjābī (Eastern and Western), Bhōjpuriyā, Maithilī, and Magahī, seem in the main to agree with the stress system which characterised all Aryan speech, except perhaps in the South-west (the Marāṭhī area). The stress system of Modern Bengali, however, presents a striking contrast with other NIA. speeches. All Bengali dialects, however, cannot be said to possess a uniform system of stressing: the accent habits of the various dialectal areas have not been studied, and only some general remarks can be made about the Standard Colloquial Speech. In this form of Bengali, the stress is dominantly initial; and word-stress surrenders itself entirely to sentence stress, the initial syllable of the first important word in a sense-group having the stress, and the other words losing their stress if they possess it when isolated. Learned Sanskrit words not fully naturalised, however, frequently retain a non-initial stress, which is generally on the first long syllable or closed syllable from the end. (S. K. Chatterji, 'Bengali Phonetics,' *op. cit.*, § 58.) The main point of difference between pan-IA. accent and the Bengali Standard Dialect accent therefore consists in this: Bengali accent is initial, and a Bengali phrase, or breath-group, or sense-group, has only one stress, an initial one. The history of Assamese and Oṛiyā, the sister-speeches of Bengali, in this matter is not known; but Oṛiyā in the 15th century seemed to possess a non-initial stress, on the ante-penultimate syllable (cf. p. 107); and in Modern Oṛiyā, the stress is not initial, unlike that of Standard Bengali. Early Assamese seems also to have possessed a non-initial stress like

Oṛiyā (see p. 94), but the actual conditions have not been studied; but it seems that in Modern Assamese, although we find plenty of initial stress, the general speech habit is not such as we meet with in Standard Bengali, in favouring a dominant initial stress, verbal and phrasal.

Non-initial stress is now found in some of the dialectal forms of Bengali, *e.g.*, in the dialects of the extreme West, and it seems also in the Western Vaṇga dialects. As it frequently happens, stress is confounded with length and with pitch. This matter, however, has not been investigated at all, and opinion cannot be safely given about any form of Bengali except the Standard Colloquial. But a strong initial phrase stress seems to be present in most forms of Bengali. This might be due to a recent influence of the West Central Dialect, the dialect *par excellence* for initial stress. But judging from the general trend of pan-Bengali phonology, it seems that a strong non-initial stress was prevalent all over Bengal, in the formative period of the language, and gave to Bengali as a whole some of its distinctive features in vowel phonetics. The rule of the short antepenultimate in Maithilī (Grierson, 'Maithilī Grammar [2],' ASB., pp. 16 ff.), or a similar shortening of long vowels through lack of stress in Western Hindī (cf. S. H. Kellogg, 'Hindī Grammar[2],' § 84; see also before, p. 160), turning a borrowed Persian word like « jān-war » *animal* to « jănăwar » in Hindōstānī, is a phonetic habit more or less common to most forms of NIA., which has been inherited by NIA. from MIA. But this has been discarded by Bengali entirely. The oldest Bengali, judging from forms actually preserved, was only in partial agreement with its sister and cousin speeches by not wholly doing away with the vowel and stress system inherited from MIA.

In fact, it seems that during the formative period of Bengali, there were two systems of accent which were both current in the language,—(1) the pan-Indian system, which by preference placed the stress on a long penultimate, and (2) the peculiarly Bengali system, which sought to bring all stress to the head of the word. Examples of the first system are furnished by the following forms of names from the inscriptions: « Hăḍī-gāṇga » = হাড়ী+গাঙ্গ « Hāḍī+gāṇga = Haḍḍika-gaṇgā » (see p. 183);

« Lăcchu-vaḍā (p. 185) = *Lăcha-vaḍā » for « * Lācha-vaḍā », which would give a New Bengali *নাছড়া « *Nāchaṛā » (cf. « ghāṭa = ghaṭṭa », with simplification of MIA. double stops, in the same inscription) ; « Jaugalla < *Jaü-galla » (p. 185) ; « Ambayillā » for « *Āmbayilla » (p. 186), compare « Khāṇḍayilla » in the same inscription ; « Nĭca-ḍahāra » for « *Nīca- » (p. 187) ; « Cĭtāḍī- » for « * Cīta- » (p. 187) ; « Aṭha- » in a compound form, for « āṭha- » (p. 188) : compare « Sāta-kōpā » at p. 183. One can compare also the form « kăṇā-mōṭika » for « *kăṇā-mōḍia » (p. 180): here « kăṇā » evidently is for a MIA. « kaṇṇa- = karṇaka » *edge* ; and the simplification of the double consonant, with compensatory lengthening weakened to short quantity, is remarkable for the early date of this inscription. In the Caryā-padas, there are a number of forms showing, from the arrangement of vowels, the normal NIA. stress : it is quite likely that from the fact of the MS. of the Caryās having been written in Nepal, the characteristic stress and quantity of Northern NIA. have insinuated themselves in these cases. Still, the following forms are noteworthy : « ăvaṇāgavaṇa (Caryā 7 : āgamanaka-gamana-, New Bengali আনাগোনা ānāgōnā) ; ăhāriu (19, 26 : = āhāritam) ; bhăṭāra (20 : *bhartāra = bhartṛ) ; kălā (21 : kāla-) ; ăpăṇē, ăpăṇā (22 : appaṇa- = ātman) ; ădhă-rāti (2, 22 : ardha > addha, ādha + rāti) ; băpā (32 : bāpa < vappa, vapra *father*) ; găviā (33 : gāvī-) ; maī ăhārila păṇiā (35 : mayā + ēna *āhārita + ila pānīya-) ; păṭăvāla *oar* (38 : patra > patta, pāta + pāla) ; hăthā (41 = hātha-, hasta-) ; ădasa (46 : *semi-tatsama*, = ādarśa) ; sămāya (40 : = sămāyāti *enters* : but cf. sāmāya, in 33)» ; etc., etc. From Sarvânanda's 'Ṭīkā-sarvasva' (see p. 109), we can note « păgāra » (prākāra) : in New Bengali, this word has preserved the short « ă » in the initial syllable—পগার « păgāṛā » *ditch* ; « ămbāḍa (āmrāta) ; săṇkrāma = sā(ṇ)kāma (saṇkrama) ; jhămpāṇa = jhāpāṇa *litter* (= yāpya-yāna, New Bengali ঝাঁপান « jhāpāṇā) ». With the above forms, showing in general a stress scheme ˘ ˊ or ˘ ˘ ˊ, ˘ ˊ ˘ or ˘ ˊ ˘ ˘, or ˘ ˘ ˊ ˘, we can compare the following, from Old Bengali as well : « Kāliyā (p. 181) ; Kāṇā-dvīpikā (p. 181) ; Kāṭā-bācha, Sāta-kōpā, Bhāṭa-paḍā (p. 183) ; Śānti-vaḍā (also Săṇti-vaḍā) (p. 184) ; Kānti-joṇṇa, Ghāsa-sambhōga Bhāṭṭa-(= Bhāṭa-)vaḍā (p. 186) ; Khāṇḍayilla, Vālla-hiṭṭā

p. 186); Bārayī-paḍā, Vīra-kāṭṭhī (p. 188); Sāṅkara-pāśā (p. 188); Bāgha-pokhirā (p. 188). In Sarvânanda we have also the following; « bāsa-hara » (=vāsa-gṛha) = Middle and New Bengali বাসর « bāsâṛ৵ » *chamber to which a wedded couple retire* (a non-initial stress would have given a New Bengali *বসর « *bâsâṛ৵ »); « kālaja, kālēja » (kālēya), cf. Western Hindī « kālējā » borrowed into Bengali as কলেজা, কলিজা « kâlējā, kâlijā »; « kāhara » (kārāgṛha, *kâṛ৵hara); « dāḍha-kāka » = New Bengali দাঁড়কাক « dāṛ৵-kāk৵ » *jackdaw*; and « cāmāṭhi » (carma-yaṣṭi). The Caryās give us « Kāmaru (Carya 2: Kāmarūpa), sāṅkama = sâkawa (5: saṅkrama) = New Bengali সাঁকো « sākō » *bridge*; « kācchi (8: kacchikā); cānda-kānti (31: candra-kānti); Jālandhari (36: cf. W. Hindī Jālandhari); pāṇḍiācāyē (36: paṇḍitâ-cārya); pāṇiā (43: pāṇīya-); bāsasi (15: vasasi); hāu (10, 18, 20, 25: *haũ, ahakaṁ = aham); kāma-caṇḍālī (18: karma-caṇḍālikā); āhārā (21: āhāra-); bālāga (26: bālâgra = kēśâgra) », etc., etc.

From the above instances, it might be inferred that there were two systems of stress in Old Bengali, and also in pre-Bengali, and neither of these could be said to have been finally triumphant, to the entire exclusion or suppression of the other, during the Old Bengali period. But the initial stress had the victory ultimately, and by the end of the Early Middle Bengali period, it is very likely that it was active in West Central Bengali and in most Bengali dialects, thus giving to Modern Bengali words their typical forms. The following examples will illustrate the case:

Old Bengali	Middle Bengali	New Bengali
« ămbāḍa, *ămbâḍā (āmrātaka):	ámbaṛā, āmaṛā:	আমড়া ámaṛā »
« paḍiẏēśī (prativēśin):	páṛiśi:	পড়শী páṛ'śī »
« *tāmbōlī, *tābôlī (tambulika):	támulī:	তাম্‌লী tám'lī »
« *akhâḍā (akṣa-vāṭaka):	ákhaṛā:	আখড়া ákhaṛā ».
« *kumhā(ă?)ḍā (kuṣmāṇḍa-):	kúmaṛā:	কুমড়া kúmaṛā ».
« *pakhâlaï (prakṣālayati):	pâkhāle, pākhālē:	পাখালে pákhālē ».
« Campā-hiṭṭī » (as in inscriptions, *a village name*):		চম্পটী « Cámpăṭī » *a surname.*

In Old Bengali, forms with initial stress seem also to have occurred side by side with those quoted above. In the Early Middle Bengali of

the 'Śrī-Kṛṣṇa-Kīrttana,' there are indications that initial stress obtained: *e.g.*, the initial অ « ă » [ɒ] occurs as « ā » [ɑ:, ɑ] in this work—a tendency, although controlled by *tatsama* forms, which has persisted even at the present day: *e.g.*, আবুধি « ābudhi » (abuddhi), আসুখ « āsukha » (a-), আনল « ānala », আনুমতী « ānumatī », আনুপাম « ānupāma » (anupama), আলক « ālaka », etc., etc.; also in *tadbhavas*—আইহণ « Āihaṇa » (Abhimanyu), আআর « āara » (apara); cf. also আইহ « āïhå » (avidhavā). Compare also বাখান « bākhāna » (vyākhyāna : W. Hindī bākhān); কাণ্ঠোআল « kāṇṭhōāla » (cf. Old Bengali « kāṇṭa-bhāla » [Sarvânanda], = New Bengali কাঁঠাল « kāṭhāl/ » *jack-fruit*; কাহ্নাঞি « Kānhāñi » (Kṛṣṇa: cf. W. Hindī Kānhāī, Kănhaiyā), New Bengali কানাই « Kānāi »; পালাএ « pālāē » (= pălāē : palāyatē); বাজাএ « bājāē » (vādya + -āpayati); বাঢ়াএ « bāṛhāē » (vardhāpayati); বাঁধাএ «bădhāē» (bandhāpayati : cf. Caryā 31, băndhāvaē); পাঠাএ « pāṭhāē » (prasthāpayati); সাম্বাএ « sām(b)āē » (samāyāti); etc., etc. Middle and Modern Bengali forms with long vowel in initial syllables demonstrate sufficiently that of the two systems of accentuation which can be noticed to exist side by side in Old Bengali (and possibly also in Māgadhī Apabhraṁśa as spoken in Bengal, during the closing centuries of the MIA. period), the system which may be called pan-Indian, preferring the accent on a long syllable from the end, had to yield to that which was peculiarly of Bengal.

It may be presumed that the agreement in matters of stress with the sister-speeches of Northern India was a point which characterised the Proto-Bengali speech (as well as Māgadhī Prakrit, as brought by settlers from Bihar and Upper India who introduced the Aryan speech into Bengal), and that the initial stress habit was the indigenous one which was imposed upon the language as it became the speech of the masses, who were originally of non-Aryan race and language. It may be that the two systems of accentuation at first characterised class dialects: Sarvânanda in his glossary makes a passing reference to « nīcôkti » or *vulgar speech*, apparently in contrast to a respectable dialect. The initial stress might originally have characterised the speech of the lower classes,—at least in certain districts. It is quite possible that even in the pre-Bengali period, the initial stress had already become established, but in writing the words of the language,

the earlier tradition came out in the spelling. But in any case, it can be legitimately assumed that the indigenous habit got the better of the Upper Indian one, originally belonging to the Aryan language, and shaped the forms of Bengali. These two cross influences, together with the fact of dialects, have helped to deprive Bengali of a regularity in its phonology. The languages which were replaced by the Māgadhī Apabhraṅśa in Bengal were Dravidian, Kōl and Mōn-Khmēr (Austro-Asiatic), and Tibeto-Burman. It has been presumed that in Primitive Dravidian, the accent was on the initial or root syllable (K. V. Subbayya, IAnt., 1909, p. 161); the Tibeto-Burman (Boḍo) is said to have a strong initial phrase stress (cf. J. D. Anderson, 'Accent and Prosody in Bengali,' JRAS., 1913, pp. 857 ff.); and as for Austro-Asiatic, nothing definite seems to have been established.

Accent and Versification in Bengali.
Origin of the Bengali Syllabic Metres.

144. Nothing is known about sentence stress in OIA. and MIA. The position of the pitch accent of OIA. with reference to the sentence, however, is partly known (A. A. Macdonell, 'Vedic Grammar,' §§ 109, 110, 111). The sentence accent of Old Bengali—the West Bengali dialect from which the modern Standard Colloquial is derived, at least—can possibly be guessed from the development of Bengali verse. Old Bengali (and also Eastern Magadhan) verse had a special course of its own, differentiating itself from that of Central and Western Māgadhī versification (and from that of other IA. speeches), by substituting a syllabic cadence for one on a moric basis. Late MIA. and Early NIA. possessed the *mātrā* or moric rhythm in verse, in which each half or quarter of a couplet consisted of a fixed number of instants distributed among long or short syllables of which the number was immaterial. The Upper Indian *mātrā* metres were apparently introduced into Bengali and into other Eastern Magadhan dialects during their formative period, as a literary imposition, but they were never naturalised in the East,—in Bengali, Assamese and Oṛiyā. In the 15th and 16th centuries, Hindī and Maithilī influences revived the Western (Apabhraṅśa) traditions in versification in Bengali,

Assamese and Oṛiyā, but these local speeches, which had by this time found themselves metrically, as it were, refused to take up the *mātrā-vṛtta* metres; and the *mātrā* metre had to use the artificial Braja-buli dialect, with its Maithilī basis, as its vehicle in the East. There seems to have been present a system of indigenous versification, based on Proto- and Pre-Bengali speech rhythm, and possibly non-Aryan in origin, in Bengal, of which we have no knowledge, but which apparently altered the general character of Eastern prosody. Bengali-Assamese and Oṛiyā developed some common metres, which may be an inheritance from the Eastern Magadhan Apabhraṅśa: *e.g.*, the 'Payār' metre (Bengali পয়ার « pāyāra », Assamese « pādā, pāyāra, pāẅāra », Oṛiyā « pāyārā »), which is entirely syllabic, in its purest form. This metre takes the place of the 'Dōhā' and the 'Caupāī' of Northern India in popularity. The 'Payār' is a rimed couplet of two lines, each consisting of 14 syllables; and there is a pause after the eighth syllable. The « ā ē ī ō ū » vowels of common IA., and vowels which were long by position (i. e., when they occurred before two consonants), did not have any prominence over the short « ă ĕ ĭ ŏ ŭ » in the line, and neither did the diphthongs. This sort of levelling in verse implies the loss of vowel quantity as a significant element in speech. We have also to consider that verses in Old and Middle Bengali, Assamese and Oṛiyā (and even at the present day in these languages), were chanted, and the tune made an adjustment of irregularities in the shape of absence of or excess over the requisite number of syllables. In the Payār as used by Bengali-Assamese and Oṛiyā during their oldest periods, we cannot tell for certain how far the stress accent played a part. In the Payār as read or chanted now in Bengali, there is a stress on the first syllable of each line, generally followed by a stress on the fifth syllable, and then comes the pause after the eighth syllable, the second part of the line commencing with the stressed ninth syllable, and the thirteenth also has a stress, which is quite strong, as it is frequently accompanied by length. Examples from the 'Śrī-Kṛṣṇa-Kīrttana' have been given at pp. 250-254. This stress system is a noteworthy thing in the Bengali Payār: and although in the Modern Bengali Payār, or in the Bengali blank verse based

on the Payār, the stress arrangement becomes much more varied, the basis commonly remains as follows :

″ ′ ″ ′

× × × × | × × × × ‖ × × × × | × × ‖

In Assamese and Oṛiyā, too, the arrangement of the Payār is exactly as in Bengali, the pause being after the eighth syllable, and the thirteenth is always a strong syllable, but the stresses on the other syllables—namely, on the first, fifth and ninth, are not so strong as in Bengali : but nevertheless, some sort of stress does exist on the first and the ninth, which can be easily distinguished when the Assamese and the Oṛiyā Payār are chanted : and the great point common to the Bengali Payār and those of Assamese and Oṛiyā lies in the division of the line into two parts of 8 + 6 syllables respectively, and in the thirteenth being a syllable which is stressed or made long, i.e., in some way or other made more prominent than the rest. Specimens of Oṛiyā and Assamese Payār are given below.

Oṛiya : « sādhu-jånå- | mānē śuṇå ‖ ēkå-månå | kåri ‖
bicitrå dē | uḷå tuḷā ‖ kåhibi bis | tāri ‖ . . . .
kåhå måhā- | muni mōtē ‖ sē åpūrbå | līḷā ‖
kē kēmåntē | Jågånnāthå- ‖ dēuḷå tu | ḷīlā ‖ »

Listen with one intent, ye good people :
I shall describe in detail the wondrous Raising of the Temple . . . .
Tell me, great sage, that marvellous gest :
Who raised the Temple of Jagannātha, and how. (From the ' Dēuḷå-tōḷā ' or ' Śrī-kṣētrå-māhātmya,' Contai edition, p. 3).

Assamese : « bihānē bå | jāïlå khēṛi ‖ khēlāibārå | tårē ‖
bhai gailå bi | yālå putā ‖ ēbhō nāilå | ghårē ‖
Jåmunārå | tīrē tīrē ‖ phirē Nåndå- | jāyā ‖
bhailā åcē | tånå såtī ‖ Kṛṣṇåkå | nå-pāyā ‖ »

He went out at dawn to play his games :
It has become afternoon, yet (my) son has not come home.
The wife of Nanda wanders along the banks of the Yamunā :
The good wife became senseless not having found Kṛṣṇa. (From the ' Cōra-dharā Nāṭ ' of Mādhava-dēva, edited by Bāṇī-kānta Kākatī, p. 8.)

It is quite possible that the Payār metre when it was formed did not have the stresses which characterise it now—it was only a question of quantity. But the total disregard of Common IA. quantity is surprising. In the 14th century Early Middle Bengali of the 'Śrī-Kṛṣṇa-Kīrttana,' in the 15th century remains of Assamese, and in the 16th century specimens of Oṛiyā, the Payār is in a perfectly developed form. We have evidence of literary culture and of song-craft and verse-making in Bengal in the 10th-12th centuries. The Payār can only be expected to be a 14th century development of a metre in use in vernacular poetry of the 10th-12th centuries. In the specimens of Old Bengali as in the Caryās, we have no Payār, but we find that a 16 moric metre is quite popular. In its pauses, it agrees with the Payār, and often in the number of its syllables too, 14. This we can see also from the songs of the 'Gīta-gōvinda.' This 16 moric metre is the 'Pādākulaka,' which evidently was introduced into Bengal during the late MIA. period. It has become the 'Caupāī' of Northern India, from the Panjab and Gujarat to Bihar. (Cf. 'Prākṛtā-Paiṅgala,' pp. 223-224; Kellogg's 'Hindī Grammar ²,' p. 578.) All sorts of arrangements for the 16 *morae* were possible; but the type which was preferred in Bengal was the one in which each line of the couplet was divided into four feet of 4 *morae* each, which could be arranged in one of the following ways—(i) ˘ ˘ ˘ ˘, (ii) - -, (iii) - ˘ ˘, (iv) ˘ - ˘, (v) ˘ ˘ -, the second scheme being preferred in the fourth foot. There was usually a pause after the second foot (i.e., after the 8th instant). The bulk of the Caryās are in this metre (see pp. 250-251). It may be that here there was the influence of a 15 moric metre, arranged into four *pādas* of 8 and 7 instants, in the fixing of the pause in the 16 moric one. In Old Bengali, however, the OIA. and MIA. quantity is lost, and vowels which historically ought to be long are pronounced short. A common type of Pādākulaka, which thus seems to have been specially liked in Bengal, and in the Eastern Magadhan area, is this:

˘ ˘ ˘ ˘ | ˘ ˘ ˘ ˘ ‖ ˘ ˘ ˘ ˘ | - - ‖

Jaya-dēva had a fine ear for music, and in writing his *padas* (whether in the vernacular, i.e., Old Bengali, or in Western Apabhraṅśa, or in

Sanskrit—see pp. 125-126), which were unquestionably meant in the first instance for a Bengali audience, he frequently arranges his 16 moric lines according to the above scheme: *e.g.*,

« viharati Haririha | sarasa-vasantē ‖ » (Song 3, refrain);
« rāsē Harimiha | vihita-vilāsam ‖
smarati manō mama | kṛta-parihāsam ‖
(= ? * sumaraï maṇa mama | kia-parihāsaṁ ‖)»(Song 5, refrain);
« sarasa-masṛṇamapi | malayaja-paṇkam ‖
paśyati viṣamiva | vapuṣi saśaṇkam ‖2‖
śvasita-pavanamanu | pama-pariṇāham |
madana-dahanamiva | vahati sadāham ‖3‖ » etc., etc. (Song 9);
« paśyati diśi diśi | rahasi bhavantam |
tadadhara-madhura-ma | dhūni pibantam ‖1‖...
« madhu-ripurahamiti | bhāvana-śīlā ‖4‖ » etc. (Song 12);
« dalita-kusuma-dara- | vilulita-kēśā ‖1‖...
mukharita-rasana-ja | ghana-gati-lōlā ‖4‖...
śrama-jala-kaṇa-bhara- | subhaga-śarīrā | 7 | » (Song 14);
« janayasi manasi ki | miti guru-khēdam ‖6‖ » (Song 18).

The arrangement, ⏑ ⏑ ⏑ ⏑ | ⏑ ⏑ ⏑ ⏑ ‖ ⏑ ⏑ ⏑ ⏑ | – – ‖, as in most of the lines quoted above, gives a perfect Payār of 14 syllables, with a strong thirteenth syllable. Couplets in the vernacular or Apabhraṅśa were known as « pada » in Old Bengali, as we can see from the Sanskrit commentary to the Caryās. The syllabic metre which arose out of the moric « padas » [1] came to be called « paẏāra » or « paṷāra » (= padâkāra) in Bengali-Assamese and Oṛiyā, and the old term also continued to be applied to this new form of couplet (cf. Assamese « pada »).

[1] The connection between the syllabic Payār and the moric metre of the 'Gīta-gōvinda' was suggested long ago by Rāma-gati Nyāya-ratna in his work on the Bengali Language and Literature (see page 187), p. 37. But this connection has been disputed by some (*e.g.*, Śaśāṅka Mōhan Sēn, in the 'Pravāsī' for Āṣāḍha, 1321, p. 267).

VERSIFICATION IN BENGALI : STRESSED METRE.

145. The tendency to divide the line into sense or breath groups of four instants (which became four syllables, normally, as in the Payār metre, as developed out of the 16 moric Pādākulaka), is a noteworthy one, and it savours of an initial sentence stress such as characterises New Bengali. There is another common Eastern Magadhan metre, the « tripadī » or « lācāṛī, lēcharī (< rathyā) », which is also on this basis of four instanced or four syllabled breath-groups. Specimens of it we find as early as the 12th century, in the 'Gīta-gōvinda,' *e.g.*,

« rati-sukha- | sārē || gatamabhi | sārē
madana-ma | nōhara- || vēśam » || (Song 11) ;
« samudita- | madanē || ramaṇī- | vadanē ||
cumbana- | valitâ || dharē || » (Song 15).

Also lines like « vadasi yadi | kiñcidapi | danta-ruci- | kāumudī ||
harati dara- | timiramati- | ghōram || » (Song 19),

would seem to be based on the principle of breath groups detached from each other by initial stress ; and such lines, the quantity apart, would be perfectly natural in Bengali. The speech habit of Bengali in dividing the sentence into a number of convenient sense or breath groups of about equal length, with a dominant initial stress ; is responsible for the development of the stressed metres of Bengali. The syllabic principle of a fixed number of *akṣaras* no doubt came into operation, but the general history of Bengali versification implies the presence of a strong initial phrase stress in the language. The theory of *akṣaras*, however, became rigid, and influenced all versification in formal literature in Late Middle Bengali times, and prevented the principle of stress in metre from being recognised for a long time. The habit of chanting verses also was responsible for this to some extent.

In Bengali, at the present day, three different systems of versification obtain.[1] These are : (1) the « mātrā-vṛtta », or the old moric metre : this

[1] The most systematic study of Bengali versification, hitherto published, is by Prabōdh-Chandra Sēn, in a recent series of articles to the 'Pravāsī' (Pauṣa, Māgha, Phālguna and

remains more as an exotic versification, the popularity of the Vaiṣṇava lyrics in Braja-buli having familiarised the people with it. In it, all diphthongs and closed syllables or syllables followed by two consonants, are long. (2) The « akṣara-vṛtta » , or syllabic metre, which started from a fixed number of *akṣaras* or syllables, but the elision of vowels in these *akṣaras* brings about a decrease of syllables, which is compensated by lengthening the syllable preceding the vowel elided, and by a rhythmic adjustment of the line ; and the fixed number of *akṣaras* can be increased by adding fresh *akṣaras* with quiescent vowels. It thus can be described as being in principle a moric metre ; but it differs from the proper moric metre in not necessarily increasing the quantity of a vowel or a syllable, because it is a diphthong or because it is followed by two consonants. Thus, in moric lines like the following—

ললাটে | জয়-টীকা || প্রসূন- | হার গলে || চলে রে | বীর চলে।
সে কারা | নহে কারা || যেখানে | ভৈরব || রুদ্র- | শিখা জ্বলে ॥

[lələṭe | jɟɔčɔ-ṭika || proʃuno- | ɦaːr gəle || cʃole re | biːr cʃole ||
ʃe kara | nɔɦe kara || jɟekhane | bɦoĭrɔbɔ || rudːrɔ | ʃikha jɟole ||]

Mark of victory on his brow, wreath of flowers on his neck, he goes, oh, the hero goes ;

That prison is not a prison where the terrible flame of Rudra flashes (from Kāzī Nazrul Islām),

each foot consists of 3 + 1 = 7 *morae* (« ā, ī, ū, ē, ō » of Sanskrit as a rule not having length, except in lines frankly on the Sanskrit, Prakrit or Brajabulī model), and the diphthong [oĭ] and the closed vowels in [ɦaːr, biːr, rudːrɔ = ruddrə] are equivalent to 2 *morae*. Or in lines like—

Caitra, 1329 San, and Vaiśākha, 1330 [= 1922-23]), which clearly distinguishes between the three types of metre in Bengali, and classifies them on a scientific basis. Some of the examples quoted above are from Mr. Sēn's articles. The most suggestive papers of Rabīndra-nāth Tagore (in the 'Sabuj Pattra' for Jyaiṣṭha and Śrāvaṇa, 1321, and Caitra 1324), and of the late Satyêndra-Nāth Datta (the article 'Chanda-Sarasvatī' in the 'Bhāratī' for Vaiśakha, 1325) are other important contributions in this line ; as also the articles by Śaśāṅka-Mōhan Sēn ('Bāṅgālā Chanda,' in the 'Pravāsī' for Āṣāḍha, 1321) and Bijay-Chandra Mazumdār ('Bāṅgāla Chanda,' 'Pravāsī' for Agrahāyaṇa, 1322).

লঙ্ঘি এ | সিন্ধুরে | প্রলয়ের | নৃত্যে
ওগো কার | তরী ধায় | নির্ভীক্ | চিত্তে ?
[lɔŋ:gʃii (ĕ)e | ʃin:dʃiure || prəlɔĕe:r | nrit:e ||
ogo ka:r | tori dʃia:ĕ || nir:bʃii:k | cit:e ? ||]

Setting at naught the Ocean, in its dance of destruction,
Whose boat it is, oh, that speeds on, fearless in mind ? (from Kāzī Nazrul Islām),

each foot except the last has four *morae*, the diphthongs and the closed syllables being long. A certain amount of stressing is inevitable, as New Bengali has strong stresses, but that is not absolutely necessary. But in « akṣara-vṛtta » lines like—

ধীরে ধীরে সিন্ধু-মুখে, | তিতি অশ্রু-নীরে,
চলে সবে, পূরি দেশ | বিষাদ-নিনাদে।
[dʃiire dʃiire ʃindʃiu-mukhe | titi os:ru-nire ||
ʧʃole ʃɔbe, puri de:ʃ (<deʃɔ) | biʃa:d (<biʃadə)-ninade ||]

Slowly, towards the Sea, wetted with tears,
They march, filling the land with the sound of lamentations (from the 'Mēghanāda-vadha' of Madhusūdan Datta),

there is no question of quantity as the basis of versification, but of a rhythm which holds itself within the limits of 14 syllables or instants ; and in counting these instants, [ʃindʃiu] and [os:ru] are as much two instants as [dʃiire] and [titi], and the rhythm requires the lengthening of [de:ʃ] and [biʃa:d] to make up for the loss of final [ɔ] which counted as a syllable. And, similarly, lines like

দুর্দান্ত পাণ্ডিত্য-পূর্ণ | দুঃসাধ্য সিদ্ধান্ত।
[durdantə pandit:ə-purnə || duʃ:ad:ʃiə ʃid:ʃiantə]

A most difficult doctrine, filled with terrible scholarship (an example given by Rabīndra-nāth),

and

কাননে কুসুম-কলি | সকলি ফুটিল।
[kanɔne kuʃu:m (kuʃumə) koli || ʃɔkɔli phuṭilə]

In the woods, the flower-buds all have burst open (Madan-Mōhan Tarkālaṅkāra)

are equally regarded as good Payār lines, of the same value.

(3) The third type of metre is the stressed one, «svara-vṛtta», as it has been happily named. The pivot of this metre is stress: a line divides itself into a number of feet, in which the quantity or the number of individual syllables is of secondary importance, although the whole foot takes up a certain length, and each foot has one stress, mostly initially, and only one. The preponderance of closed syllables in the colloquial, i.e., in the actual, living Bengali, which alone is suitable for this metre, gives it a force and a swing which is totally absent in the other metres which are based on the tamer movement of Early Middle Bengali (which did not, from the fact of final and medial vowels being not as yet dropped, have closed syllables, except in Sanskrit *tatsamas*). Thus, for example,—

সাম্‌নেকে তুই | ভয় ক'রেছিস্‌! ॥ পেছন তোরে | ঘির্‌বে, ॥
এম্‌নি কি তুই | ভাগ্য-হারা ? ॥ ছিঁড়্‌বে বাঁধন | ছিঁড়্‌বে! ॥

['ʃamneke tuĭ | 'bʃiɔĕ koreʧhiʃ! ||'peʧhon tore | 'gʃiirbe, ||
'emni ki tuĭ | 'bʃiag:o-ʃiara ? || 'ʧhĩrbe bãdʃion | 'ʧhĩṛbe ||]

Thou art afraid of the front! and the rear will surround thee!
Art thou so luckless? (Thy) bonds will break, (sure) they will break
(Rabīndra-nāth),

where we have this arrangement:

′ ′ ′ ′
× × × × | × × × × ‖ × × × × | × × ‖.

This is on the basis of the Payār, only the verse has abandoned itself to the stress as the dominant principle, and the division of the line into breath groups forming the feet is essential; whereas in the syllabic Payār, the first eight syllables may be arranged without bringing in a break after the 4th; the stress on the 5th can be done away with; and the number of syllables (or instants) for the whole line must not exceed 14. In the common syllabic Payār, the whole line can be looked upon as one unit. But not so in the stressed metre. The foot is more or less a self-sufficient item there, as it confines the sense: *e.g.*,

মুক্ত বেণীর | গঙ্গা যেথায় | মুক্তি বিতরে | রঙ্গে, ॥

['mukto-benir | 'gɔŋga ʤethaĕ || 'mukti bitɔre | 'rɔŋge, ||

আমরা বাঙালী | বাস করি সেই | বরদ তীর্থে | বঙ্গে ||.....
বাঘের সঙ্গে | যুদ্ধ করিয়া | আমরা বাঁচিয়া | আছি ||.....
এক হাতে মোরা | মগেরে রুখেছি, | মোগলেরে আর | হাতে, ||
চাঁদ-প্রতাপের | হুকুমে হঠিতে | হয়েছে দিল্লী- | নাথে ||

'amra baŋgali | 'baʃ kori ʃeĭ || 'bərədə tirthe | 'bəŋge. ||
'bagfier ʃəŋge | 'ʃʒud:fiə koria || '(ĕ)amra bãeʃia | '(ĕ)aeʃhi. ||
'ek fiate mora | 'məgere rukheeʃhi, || 'mogəlere (ĕ)ar | 'fiate, ||
'eʃãd-protaper | 'fiukume fiothite || 'fioĕeʃhe dil:i- | 'nathe. ||]

Where the Ganges of the freed plaits (i.e., *with its numerous branches, which is the freeing of the tributaries received in Upper India*) *spreads salvation in merry glee,*
We Bengalis live in that boon-giving, holy land of Bengal...
Waging war with the tiger we remain alive.....
With one hand we have checked the Magh (*Aracanese*), *with the other the Moghal;*
The Lord of Delhi had to fall back at the command of Cānd and Pratāp.
(From Satyêndra-Nāth Datta).

In the above extract, where there are more than four syllables in the foot, they are pronounced very quick, some of them being almost slurred. The remark of the 'Prākṛta-Paiṅgala,' that two or three syllables when quickly uttered are to be taken as one (Bib. Ind. edition, p. 11), is to be recalled.

On the whole, however, the stressed metre prefers feet of four syllables. New Bengali has recognised this metre, and its possibilities are immense, as has been seen from experiment. It certainly originated in early Bengali speech rhythm: in all probability, in the Old Bengali period. But the practice of chanting verses, and the theory of *akṣaras*, as has been said before, prevented it from coming to its own. Old Bengali of the Caryās preferred feet of four instants, as we have seen before: and to read these feet with initial stress, as in the lines quoted at pp. 261-263, will not be to go counter to the rhythm. We have also seen that initial stress was asserting itself in words in Old Bengali. Lines from Middle Bengali,

like the following, seem to be equally of the « akṣara-vṛtta » when chanted and of the « svara-vṛtta » when read like normal prose:

কোণ সুখেঁ | কংশ তোর ‖ মুখে উঠে | হাস |
নাহি জাণ | এবেঁ তোঁ ‖ আপণার | নাশ ‖

['koṇɒ ʃukhẽ | 'kɒŋʃɒ torɒ ‖ 'mukhe (ĕ)uṭhe | 'hiaʃɒ ? ‖
'naĥi ʤaṇɒ | '(ĕ)ebẽ tõ: ‖ '(ĕ)apɒṇarɒ | 'naʃɒ ‖]

Through what joy, O Kaṁsa, there rises a smile on thy face?
Thou dost not know now of thine own destruction. (ŚKK., p. 3);

গঙ্গা-তীরে | দাঁড়াইয়া ‖ চতুর্দ্দিগে | চায় |
রাত্রি-কাল | হইল ওঝা ‖ শুতিল ত | থায় ‖.....
মালী-জাতি | ছিল পূর্ব্বে ‖ মালঞ্চ এ | খানা | ... ..

['gɒŋga-tire | 'dãṛa(ĕ)i(ĕ)a ‖ 'ʧɔturdige | 'ca(ĕ)e ('ʧaĥe) ‖
'rat:rikal(ɔ) | 'hoĭlɔ (ŏ)oʤĥa ‖ 'ʃutilɔ tɔ | 'tha(ĕ)e ‖
'mali ʤati | 'ʧhilɔ purbe ‖ 'malɔnʧɔ (ĕ)e | 'khana ‖]

Standing on the bank of the Ganges, he looked at the four sides.
It became night time; the Ojhā (scholar, 'clerk') slept there...
Formerly, people of the gardener's caste used to live, and here (was) a flower-garden. (From Kṛttivāsa, 15th century: VSP., I, p. 889).

In the above cases, of course, too many open syllables make the cadence tame and weak beside that of the New Bengali lines quoted immediately before. Instances like the above are extremely frequent in Middle Bengali, which undoubtedly possessed the stressed metre. The loss of final, and frequently of intervocal vowels, in bringing about which the initial stress system had some hand, gave to the Bengali language a greater number of strong or closed syllables, and the stressed metre obtained a greater scope. (This loss is treated in the next section.) It continued to be freely employed in a mass of popular literature, in proverbs, in riddles, in charms, in ritualistic and other verse current among the women, in poetic contests in which the conversational style was supreme,—in fact, everywhere in Bengali—except in formal poems on classic or religious themes, which used the « akṣara-vṛtta », and in the Vaiṣṇava poems in Braja-buli, which preferred the « mātrā-vṛtta ».

From all that has been said above, in §§ 144 and 145, the conclusion may be drawn that initial phrase stress, to which the stress in individual words was subordinated, characterised one form of Old Bengali, or East Magadhan Apabhraṅśa, as much as did initial stress in individual words. Breath groups of four syllables were preferred in it. The moric metre of Northern India had to yield to a metre based on this grouping or dissection of a line into bits or breath-groups of fixed length, bearing a dominant head-stress. The Modern Standard Colloquial, and the Middle Bengali literary language, which are both based on West Central Bengali, show these characteristics. And it is quite likely that the source form of the Payār metre (and the stressed metre) was in this Pre-Bengali or Old Bengali dialect of West Bengal, and thence it spread into Orissa and Assam. In these last two tracts, initial stress was not the rule, and the development of a stressed metre (the presence of which can be postulated in Old Bengali from Early Middle Bengali examples) consequently did not take place there.

Metrical and other Evidence for the Dropping of Final and Medial Vowels in Middle Bengali.

146. In later Bengali, the Payār continued as a 14-syllabled metre, when it was regular. But from the 15th century onwards, we notice irregularities—Payār lines showing occasionally less than 14, and frequently more syllables, or *akṣaras*—15, 16, 17 or 18. When the number was less than 14 (as it is at times in the ŚKK.: see pp. 264, 265 etc.), there would be dwelling upon a suitable syllable for a sufficiently long period to make up for the wanting syllable; and when there were more syllables than 14, as in post-14th century Bengali, the extra ones were dropped by the elision of final and medial vowels. This elision was certainly present already in the spoken language of the 15th century: and it was undoubtedly the result of a strong stress on the initial syllable.

In the 14th century Bengali of the ŚKK., we find Payār couplets with more than 14 *akṣaras*, but these extra *akṣaras* consist entirely of the vowels « i, u » forming only the weak finals of diphthongs. A case like the following, however, is exceptional in the ŚKK.:

p. 2—তাহার হাথে হৈবে কংশাসুরের বিনাশে।
« tāhārā hāthē | hâibē kâṅśâ|surērā bi|nāśē || »
From his hands there will be the destruction of the demon Kaṁsa,

would appear irregular—to the eye; but really it is not so—the word তাহার « tāhārā » unquestionably being pronounced in reading and chanting as « tārā »—« tārā hāthē | hâibē kâṅśā surērā bi|nāśē || ».

Final syllables were not as yet dropped in the 14th century. Rimes like the following are conclusive that the final « -ă » was pronounced in the 14th century in nouns and adjectives as in verbs: *e.g.*,

p. 24—ভাল « bhālâ », always ending in « -â » = [ɔ] : গোআল « gōālâ »;
p. 42—লেখা কর « lēkhā kârâ » (<kârâhâ) : বাসলী বর « bā-âlī bârâ »;
p. 50—কাহ্ন « kānhâ, kānâ » *Kṛṣṇa* : দান « dānâ »;
p. 51—চাপ « cāpâ » (< cāpâhâ) *press!* : সন্তাপ « sântāpâ »;
p. 84—গদাধর « gâdādhârâ » : পরিহর « pârihârâ » (>-hârâhâ) *abandon!*;
p. 90—শুন « śuṇâ » (< śuṇâhâ) *hear!* : আলিঙ্গন « ālingânâ »;
p. 95—লাজ বাস « lājâ bāsâ » *think it a shame* : দুধবাস « dudhâ-bāsâ » *smell of milk*;
p. 254—ধর « dhârâ » *hold!* : ভিতর « bhitârâ » *within.*

The final « -ă » was thus retained in the pronunciation in the 14th century as much as the long « â » [ɔ:] derived from earlier « -ăwă, -ăhă » (see p. 260). But finally and medially, the epenthetic as well as the original « i » (as well as « u ») had become weak, and formed a diphthong with a preceding « ă, ā », so that the two *akṣaras*, « ăï, āï, ăyi, āyi » would form a diphthong « ăĭ, āĭ ». The *akṣara* principle was thus modified in this way in 14th century Bengali: *e.g.*, in the ŚKK.,

ভাগে পুনে আজি তোর পাইলোঁ দরশন।
« bhāgē punē āji tōrâ | pāĭlõ dârâśânâ » (p. 16),
Through luck and through merit today I have obtained thy sight:

we have 15 *akṣaras*, but « pāĭlõ » = « pāĭ-lõ » is a word of two syllables.

আয়র মানায়িবোঁ করী আশেষ জুগতি॥
« āyârâ mānāyibõ (= mānāĭbõ) kârī | āśēṣâ jugâti » (p. 13),
And I shall make (her) consent, using no end of device.

আকারণে আল রাধা নিন্দসি কৃষ্ণ কালা।
« ākārāṇē, ālā rādhā, | nindâsi (= nindâïs) kṛṣṇâ kālā » (p. 93),
For no reason, O Rādhā, dost blame dark Kṛṣṇa.

হের ভাল মতে চাহি নেহ কাহ্নাঞি বাঁশী ॥
« hērā, bhālā mātē cāhi | nēhā, kānhāñi (= -âĩ), bāśī » (p. 331),
Look, Kānhāi, ask for (thy) flute in good grace.

See also page 265, last line of Bengali text, and p. 266, line 17.

Barring the above cases of apparent irregularity, 14th century Payār is quite regular, as the final and medial vowels remain. But from the next century, we find remarkable breaches of the rule of the 14 *akṣaras*. For instance, in Kṛttivāsa's 'Rāmâyaṇa, Uttara-kāṇḍa' (in the VSPd. edition based on a MS. of 1580), we have lines like the following:

Uttara Kāṇḍa, p. 31b:

ভাইএর বলে ভাইএর ধনে নাহি ভাই বাঁটা। (18 *akṣaras*)
« bhāïērā bâlē bhāïērā dhânē nāhi bhāï bāṭā »
There is no sharing, O brother, in a brother's forces and a brother's wealth.

This was evidently pronounced as

['bʃia(ĕ)er ('bʃiaĕrə ?) bəle | 'bʃia(ĕ)er ('bʃiaĕrə ?) dʃəne ‖ 'naʃi bʃia(ĕ)i | 'bāṭa ‖].

Ibid., p. 30b:

যথির তরে তোমার বাপে করিল কন্যাদান ॥ (17 *akṣaras*)
[ʃʃothir ('ʃʃothirə ?) təre | 'tomar ('tomarə ?) bape ‖'koĭrlə kən:ɛa|'da:n ‖]
For whose sake your father made a gift of his daughter.

Ibid, p. 30b:

দূরে থাকিঞা প্রহস্ত কুবেরে নোঙায় মাথা। (16 *akṣaras*)
['dure thaĭkɛ̃ā | 'prəʃiəstə ‖'kubere nw̃aĕ | 'matha ‖]
Remaining afar, Prahasta bowed his head to Kubēra.

Ibid., p. 43a:

রাবণ রাজার সানা টোপর বাণের তেজে কাটে। (18 *akṣaras*)
['rabən-raʃʃar | 'ʃana ṭopər ‖'baner teʃʃe | 'kaṭe ‖]
He cut the corslet and the helmet of king Rāvaṇa with the force of (his) arrows.

From other Middle Bengali works:

Vijaya-gupta's 'Padmā-purāṇa,' (end of the 15th century : VSP., I, p. 191):

হিন্দুয়ানী হল রাজ্য তোমার কিসের কাজ। (16 *akṣaras*)
পেয়াদা পাইক যত আছে শীঘ্র করি সাজ॥ (16 *akṣaras*)
['ɦinduani | 'ɦoĭlo raĭɟɟo ||'tomar kiʃer | 'ka:ɟɟ ('kaɟɟo) ||
'pɛada pa(ĕ)ik | 'ɟɟoto aʧɦe || 'ʃig:firo kəri | 'ʃa:ɟɟ ('ʃaɟɟo) ||]
It has become the regime of Hinduism, what business have you now ?
All the footmen and soldiers that be, get ready quick.

Śrī-Karaṇa-Nandī's 'Mahābhārata': beginning of the 16th century (VSPd. edition, based on MS. of 1663)—

p. 72a—কৃষ্ণের নন্দন বীর রুষিল। যেহেন প্রচণ্ড॥ (17 *akṣaras*)
['kriʃṭĕr nəndən | 'bir ruʃilə || 'ɟɟeɦenə prə|'ʧɦəndə ||]
The hero, the son of Kṛṣṇa, angered, so fierce.

p. 83a—না পারিব কদাচিত বাণে মারিতে তাহাক। (16 *akṣaras*)
['na paribə | 'kədaʧita || 'bane maĭrte | 'takə ||]
Shall never be able to kill him with an arrow.

'Mayanāmatīr Gān,' 17th century (Dacca SPd. edition):

p. 9—অদুনাএ বোলে বইন গ পদুনা সোন্দর। (16 *akṣaras*)
সাত কাইতের বুদ্ধি আমার ধরের ভিতর॥ (17 *akṣaras*)
['ədŭnaĕ bole | 'bəĭn gə: || 'pəduna ʃun|'dər(ə) ||
'ʃat ka(ĕ)iter | 'bud:fii (ĕ)amar || 'dfiərɛ:r bfii'tər(ə)||]
Adunā says, 'O sister, beautiful Padunā, the wife of seven clerks (Kāyasthas) is within my body.'

Examples like the above can be culled by the hundred from Middle Bengali literature. They show that the earlier MB. poets were guided not by the eye, but by the ear. If in a *tatsama* word, a vowel with two consonants after it did not make any difference, for metrical purposes, then it was recognised in the 15th century, after the medial and final vowels had dropped off from pronunciation, the same thing could happen in *tadbhava* words: কৃষ্ণ « kṛṣṇâ » and নন্দ « nândâ » were two *akṣaras* of equal value in metre, and so could be কৃষ্ণের « kṛṣṇêr ɨ » and নন্দন « nândân ɨ », with quiescent « -ă ». But with the later poets, during the 16th-18th and 19th centuries, the magic word *akṣaras* seemed to have exerted an influ-

ence, and the system of writing was brought to bear upon the versification: *akṣara* was taken in its wrong sense of a *written character*, the syllabic value of which might be zero, and not of a *syllable*. As a result, the tendency grew not to allow too many *akṣaras* with mute « -ă = -∅ », and to avoid the diphthongal use of the vowel ই « -i », which became in late Middle Bengali orthography the ɟ = « -y » subscript: হইল « hâïlå » *was* = হল্য « hâlyå = hâĭ-lå »; পাইল « pāïlå » *obtained* = পাল্য « pālyå = pāĭ-lå »; করিয়া « kâriyā » *having done* = কর্য্যা « kâryā = kâĭ-rā »; জানাইব jānāïbå » *I shall make known* = জানাব্য « jānābyå = jā-nāĭ-bå » etc., which made a line to appear to the eye as one of 14 *akṣaras* or letters, and 14 only. This cannot be said to have been detrimental to the Payār, this attempt to make it rigid and to avoid too many diphthongs and closed syllables in the line. But the undue influence of the graphic system disguised the true nature of Bengali versification, and prevented an early recognition of the stress principle in orthodox literature.

From a study of Middle Bengali versification, therefore, it can be seen that the dropping of the final « -ă », and of the medial vowels (under certain circumstances) was well established from the 15th century.

147. Another evidence for the dropping of the final « -ă », and occasionally of the medial « -ă- », is the early Roman transcription of Bengal names in European works and maps dating from the middle of the 16th century. Thus, for instance, Joaõ de Barros (middle of the 16th century) in his 'Da Asia' has given some Bengal names, and we find the following in the Lisbon edition of 1777 ff.: in the map of Bengal in that work, IV, 9, p. 451, we have « Fatiabas = Fateḥ-ābāð, -ābāz; Betor = বেতড় Bētâṛ∅; Bernagar = বর্নগর Bâṛ∅-nagaṛ∅ (= Varāha-nagara ?); Mandaram = মান্দারণ Māndārâṇ∅; Noldii = নলদী Nâl∅-dī (< Nala-dvīpa); Nazirpur = Nāẓir-pur »,—place names showing loss of final « -ă » in the 16th century: at p. 454, we have « Caor », which is কাঙর « Kāw̃ur∅ (<kāw̃arū<kāma-rūpa) » (cf. Map 2 in 'Delle Navigatione e Viaggi raccolte da M. Gio. Battista Ramusio, etc.,' Vol. I, Venice, 1606). Compare these with « Gouro = গৌড় Gauṛâ », a word showing retention of final « -ă » in pronunciation, in De Barros' map. Forms like « Comotah = কামতা Kāmâtā »; « Cospetir,

Gaspatii = গজপতি gâjâ-pâti » ; « Noropatii = নরপতি Nârâpati » ; « Pipili-patam = পিপলী Pip(i)li- », in De Barros, show that internal unstressed vowels were not yet dropped in all cases in 16th century Bengali: cf. in Ralph Fitch (1583-91 : 'Purchas,' X, pp. 181 ff.) : « Couche = কোচ Kōcꞔ ; Suckel Counse = শুকল (শুক্ল) কোঁচ Śukâlꞔ Kōcꞔ ; Satagam = সাতগাঁ Sātꞔ-gā̃ ; Serre-pore = শ্রীপুর Śrī-pur ; Bacola বাকলা « Bākâlā », which indicate similar conditions.

The loss of medial vowels can only have been due to strong initial stress in Middle Bengali. In this respect, Bengali was in advance of its sister IA. speeches: Western Hindī, for instance, kept its final vowels (« -ŭ, -ă, -ĭ ») as late as the 17th century, and Oṛiyā does it even now, preserving a 'Middle NIA.' stage, whereas Bengali shed off the final « -ă », which formed by far the most common final vowel, by the middle of the 15th century.

The initial stress of Bengali in individual words has given us contracted forms of common *tadbhava* words which are rather removed from those of Hindōstānī, which may be said to preserve the NIA. norm: *e.g.*, Bengali বোনাই, বুনোই, বুনুই « bōnâi, bunōi, bunui » = Hindōstānī « bahꞔnōī » (bhaginī-pati); dialectal Bengali নায়ের « nâyērꞔ » *father's family* (*of a married woman*) = Hindōstānī « naiharꞔ » (jñāti-gṛha); কষটী « kâṣꞔṭī » *touchstone* = Hind. « kasauṭī » (karṣa-paṭṭikā); রাখাল « rākhâlꞔ » *herdsman* = Hind. « răkhꞔwālꞔ » (rakṣā-pāla); পরে « pârē » *puts on* = Hind. « pahirai » (paridhīyatē); চকা « câkā » = Hind. « cakꞔwā » (cakravāka); পয়লা « pâyꞔlā » *first* = Hind. « pahilā » (pratha + illa-); etc., etc.

The changes of OIA. vowels to MIA. in the formation of Bengali are discussed in the following chapter.

CHAPTER III

PHONOLOGY OF THE NATIVE ELEMENT: VOWELS

[A] OIA. AND MIA. VOWELS IN BENGALI

[I] FINAL VOWELS

148. Final vowels of OIA. were continued down to Late MIA. and Early NIA. times. The long final vowels « -ā, -ī, -ū », however, were shortened to « -ă, -ĭ, -ŭ » , and « -ē, -ō » were weakened and shortened to « -ĭ, -ŭ » in late MIA. (Apabhraṅśa), and these shortened vowels « -ă, -ĭ, -ŭ » fell together with original short « -ă, -ĭ, -ŭ » . All NIA. inherited these short vowels, but in later times in Bengali, during the Middle Bengali period, they were all dropped, or assimilated: except « -ĭ, -ŭ » where they were preceded by vowels of a different quality.

The *anusvāra* which followed a final vowel in Late MIA. was possibly a very weak nasalisation, which did not in any way affect it in its development into NIA.

(1) OIA., > MIA. « -ă, -ā » .

[a] OIA. « -ă » .

149. OIA. « -ă »> MIA. « -ă »>OB., eMB. « -ă=-å- »>NB.« -∅ », or zero, Examples: আট « āṭ∅ », MB. আঠ « āṭhå » (aṭṭha, aṣṭa-); ‡ আব « ābh∅<ābhå » *cloud* (abhra), cf. Standard Coll. আবছা « āb∅-chā » *hazy*; আম, আঁব « ām∅, ãb∅ » (amba, āmra); এক « ēk∅ » (MIA. *sts.* ĕkka < ēka); কাঁকণ « kãkāṇ∅ » (kaṇkaṇa); কাম « kām∅ » (karma); কুঠ « kuṭh∅ » (kuṣṭha); ‡ কুড় « kuṛ∅ » (kōḍha, < *kōṭha < *kŏṭṭha = kuṣṭha); গাছ « gāch∅ » *tree* (gaccha); ঘাম « ghām∅ » *sunshine, sweat* (gharma); চাঁদ « cãd∅ » (candra); চিন « cin∅ » (cihna); ছাঁদ « chãd∅ » (chanda); জাড় « jāṛ∅ » *cold* (jāḍya); OB. জাম « jām∅ » (jamma, janma); তাত « tāt∅ » (tapta); তেল « tēl∅ » (tĕlla, tāila); MB. থান « thān∅ » (sthāna); দাঁত « dãt∅ » (danta); পাত « pāt∅ » (patra); বউল, বোল « baūlå, bōl∅ »

(baŭla, mukula); বীস « bīsą » (eMIA. [Pali] vīsaṁ, OIA. *viṁśat = viṁśati : cf. triṁśat, etc.); মাঝ « mājhą » (madhya); হঅন, হওন « hảẁảną, hảŏną » *being* (bhavana); হাত « hātą » , MB. হাথ « hāthå » (hasta); etc., etc.

Examples are quite common.

Loss of final « -ă » by assimilation with a preceding vowel (see also *post*, § 172, ' Vowels in Contact ') :

(i) MIA. « -ăă » : normally, this becomes a single « -å » in Bengali, pronounced [ɔ] or [o]. Unelided final অ « -å » in *tadbhava* words and forms, commonly pronounced [o], comes from a MB. « -å̀ » [ɔ:] derived from an earlier group like « -åå = åẁå, åhå » : the phonetic change here is really that of contraction, the nature of which is not seen at once. শ' « śå » (śaa, śata); জ' « jå « *measure of length* (jaa, yava); চল « cålå » *you walk* < MB. চলহ « cålåhå » (= OIA. calatha); তের « tērå » < OB. « *tēraha » (tēraha, trayōdaśa); দান, দানো « dānå, dānō » *ghost, spirit* <OB. « *dāṇaẁa » (OIA. dānava); ভাল, ভালো « bhālå, bhālō » < MB. bhālå (bhallaẁa, bhallăă = bhadraka); etc.

(ii) MIA. « -ăă » becomes « -ā ». Late MIA. « -ăă » , from OIA. « -ākă » etc. (i.e., « ā + consonant + ă »), gave OB. « -ā » , NB. « -ā » , as a common affix : also « -āha > -ăă » in lMB., through loss of « h » : *e.g.*, ওঝা « ōjhā » (uvajjhāa, upādhyāya); কড়া « kårā » (kaṭāha); ঘা « ghā » *blow, wound, sore* (ghāa, ghāta); ছা « chā » (śāba); -জা « -jā » (jāta); তা « tā » (tāpa); না « nā » (nāva = nāu); পলা « pålā » (*palāẁa, prabāla); পা « pā » (pāda), also *পাও « pāŏ < MB. pāẁa » ; বা « bā » , also বায়, বাও « bāĕ, bāŏ <*bāẏa, *bāẁa » (vāta); বিয়া, MB. *sts.* বিভা « biyā, bibhā » (vivāha); এক « ēką » (ĕkka, ēka), but একা « ēkā » *alone* (*ĕkkāka = OIA. *ēkāka, cf. ēkākin); কাল, কালো « kālå, kālō » *black* (kālaa, kālaka), but কালা « kālā » *the black one* (* = kālāă, *kālāka); OB. « tā » *his* (tāha, tasya); etc.

(iii) MIA. « -iă, -iă » became « -ī » in OB. = « -i, -ī » in NB. : MB. আগি, NB. ‡ আগ « āgi, āg » (« *aggiă = *agnikā » ; the feminine gender for this word in Hindī etc. is a proof that it is not from MIA. « aggī » = OIA. nominative « agniḥ ») ; আরতি « ārāti » (ārātrika); OB., MB. করী, করি « kårī, kåri » (MIA. karia, OIA. *-karya = -kṛ-t-ya = kṛtvā); MB. কাতী « kātī », cf. Assamese « kāti » (kārttika), the name of the month, now ousted by the

ts. form; ঘী, ঘি, « ghī, ghi » (ghia, ghṛta); MB. মুতি « muti » = NB. মতি for মোতি « mōti » through Hindōstānī influence (mŏttiă, mauktika); eMB. *sts.* আবসী « āvasī » (*avaśiya, *avaśia = avaśya); etc., etc.

The OIA. passive participle in « -ita », = MIA. « -ia », similarly became « -ī > -i » in Bengali: see under *Morphology*: ' the Past Base.' The common NIA. adjectival affix indicating connection, « -ī », is derived in this way from OIA. « -īya, -ika »: cf. the non-feminine forms পাঁচই, সাতই, আটই « pā̃cāï, sātāï, āṭāï » etc., from «*pañcamika, *saptamika, *aṣṭamika » (and not from the feminine « pañcamī, saptamī, aṣṭamī » etc.).

(iv) MIA. « -uă, -ūă » became « -ū » in OB. = « -u » in NB., in some cases turned into an epenthetic vowel: also MB. « -uhă > -ună »: *e.g.*, OB. কামরূ « kāmarū, kāw̃arū », MB. কাঙুর « kāṇurą = kāw̃ur » (Kāma-rūpa); গোরু « gōru » *cattle* (gō-rūpa); MB. ছামু « chāmu » (*chammuha, sanmukha); নেবু « nēbu » (nimbuka); মু « mu » (muha, mukha); etc.

(v) MIA. « -ēă » > OB. « -ē(ẇ/ẏ)a » > NB. « -ē »; also MB. « -ēhă > -ēă »: দে « dē » *a surname* (dēva); MB. দে « dē » (dēha).

The affix for the instrumental, এঁ, এ « -ẽ, -ē », can be considered here; only the loss of « -ă » took place in MIA. of the Third Period: *e.g.*, OIA. « hastēna » > Māgadhī MIA. « hatthēṇa », Apabhraṁśa « hatthēṁ, hatthẽ » >OB. « hāthẽ, hāthē » >NB. হাতে « hātē ». In মুই তুই « mui, tui » *I, thou*, from OB. and MB. « mōñē, mōỹē, moẽ, *mōĩ, maĩ, muñi; tōñē, tōyẽ, tōē, *tōĩ, taĩ, tuñi » etc. (= *may'ēna, tvay'ēna, i.e., mayā, tvayā+ēna), the influence of the « -y- » in the OIA. and the MIA. compounded form helped to alter the vocalism of these words to « -i ».

(vi) MIA. « -ōă » > OB. « -ōẇa » NB. « -ō »: যো « jō » (jōă, yōga); cf. রোঁ « rõ » (rōw̃ă, rōma).

Final অ « -ă » in *Tatsamas.*

Tatsama and *Sami-tatsama* words as a rule drop the final অ « -ă »: *e.g.*, দরশন, দর্শন « dar(å)śąn ą »; রতন « ratąn ą »; নয়ন « nayąn ą »; ফটিক, « phaṭik ą » (sphaṭika); অধীর « adhīr ą »; পরস « parąs ą » (sparśa); গরাস « garąs ą » (grāsa); etc., etc.

But in the case of *tss.* and *stss.*, there are certain exceptions, when the final « -ă » is retained in pronunciation, and these may be noted :

(i) Bengali Phonetics does not allow two consonants to end a word : there must be, in the absence of an anaptyctic vowel, a final vowel, to prop up the consonants, as it were : *e.g.*, পূর্ব্ব « pūrbå » (pūrva), or পূরব « pūrâbă » ; চন্দ্র « cåndrå » or চন্দর « cåndâră » ; বীরত্ব « bīråtwå » [birɔt:ɔ] (vīratva) ; সত্য « såtyå » [ʃɔt:o, E. Beng. ʃoit:ɔ] ; ন্যায্য « nyāyyå » [næjʃʃɔ] ; সূর্য্য « sūryå » [ʃurʃʃɔ] ; বিজ্ঞ « bijñå » [big:ɔ] ; হংস « håṁsă » [fiɔŋʃɔ] ; দুঃখ « duḥkhă » ; প্রশ্ন « prâśnă » ; ধর্ম্ম « dhârmă » ; etc., etc.

(ii) « -ă » after « -h- », in a final syllable, is retained : স্নেহ « snēhă » (beside *tbh.* নেই « nēi ») ; দেহ « dēhă » (cf. MB. *tbh.* « dē ») ; বিবাহ « bibāhă » (*tbh.* « biyā ») ; অনুগ্রহ « ånugrâhă » ; বিদ্রোহ « bidrōha » ; etc., etc.

(iii) Adjectives :

(a) the *ts.* « -ta, -ita » affix retains the « -ă » : পুলকিত, গীত, গত, নত, অনূদিত, ব্যাখ্যাত « pulåkitå, gītå, gåtå, nåtå, ånūditå, byākhyātå », etc., etc. The « -tă » forms, when used as nouns, drop the « -ă » : গীত, মত, বিহিত, নিশ্চিত « gīt*ă*, mât*ă*, bihit*ă*, niścit*ă* », etc., etc. ; and a few adjectives which are commonly used also drop « -ă » optionally : *e.g.*, চলিত, গর্হিত, বর্জিত « cålit*ă*, gârhit*ă*, bârjit*ă* » etc. ; cf. পালিত « pālitå », adjective, but « pālit*ă* », *a surname*.

(b) the *ts.* affix « -yă » retains the vowel : শ্রেয়, পেয়, দেয়, বিধেয় « śrēyå (= śrēyas), pēyå, dēyå, bidhēyå » , etc.

(c) the *ts.* affixes তর তম « -tårå, -tåmå ».

(d) the *ts.* forms in ঢ় « -ṛha = -ḍha ».

(iv) *Ts.* words, which are not naturalised, as a rule can be pronounced with final « -ă » ; the tendency would be to drop the « -ă », but usage differs. The following cases are noteworthy. Words of two syllables with « ṛ, āi, āu » in the first syllable, keep the « -ă » as *ts.* forms : বৃষ, কৃশ, তৃণ, মৃগ, তৈল, শৈল, মৌন, গৌণ « bṛṣå, kṛśå, tṛṇå, mṛgå, tâilă, śâilă, mâună, gâuṇă » ; (but note the *semi-tatsama* forms—more heard in pronunciation than seen in writing—শইল, তইল, মউন, গউন « śă-ilă, tă-ilă, mă-ună, gă-ună »). Words ending in « -ṇă » optionally retain the « -ă » : দ্রোণ, ব্রণ, গণ, রণ « drōṇå, brâṇå, gâṇå, râṇå » .

The retention of the final « -ă », or otherwise, depends upon the extent to which the *ts.* word has become naturalised; *e.g.*, নগ « nâgâ » *hill*, নব « nâbâ » *nine, new*, সম « sâmâ », শম « śâmâ », যুব « yubâ » *youth*, মম « mâmâ » *my* etc. retain the vowel. *Ts.* words occurring in a compound as its first part as a rule do not drop the vowel: *e.g.*, রণ-মুখো « râṇâ-mukhō < mukhâ » *facing, going to the fight*; পদসেবা « pâdâ-sēbā »; জনতন্ত্র « jânâ-tântrâ »; দানবীর « dânâ-bīrâ »; চিকুরভার « cikurâ-bhārâ »; ভারবাহী « bhārâ-bāhī »; etc.: the dropping or retention of the « -ă » is, however, determined by the rhythmic consideration of the whole line.

The rules (i) and (ii) for *ts.* words also obtain in foreign words: *e.g.*, Persian « mard » *man* > মরদ « mâràd » or মর্দ্দ, মদ্দ « mârdâ, mâddâ »; « šāh » *king* > শা « śā » or শাহ « śāhâ »; English *box* > বাক্স « bāksâ », *inch* > ইঞ্চি « iñci », etc.

[b] OIA. « -ā ».

150. OIA. « -ā » > MIA. « -ā » (« -ă » in nominative, « -ă » in oblique), lMIA. « -ă » > OB., eMB. « -ă » > NB. « -Ø », i.e., zero. Examples: আশ « āśâ » (āśā); ‡ উক « ūkâ » (ulkā); ‡ ওস « ōsâ » *dew* (avaśyā); কল « kâlâ » *machine* (kalā); কাঁথ « kãthâ » *wall* (kanthā); খাট « khāṭâ » (khaṭvā); খেল « khēlâ » (khēlā); গাঙ্গ, গাঙ, গাং « gāṇ(g)â » *river* (gaṇgā); MB. গিম, গীম « gīmă = gīwă » (grīvā); ঘিন « ghinâ » (ghṛṇā); জাং « jāṇâ » (jaṇghā); জিব, জীভ « jibâ, jībhâ » (jibbhā, jihvā); তিয়াস « tiyāsâ » (tṛṣā, tṛṣṇā + pipāsā); ধার « dhārâ » *edge* (dhārā); নথ « nâthâ » *nose ring* (nastā), possibly an old borrowing, ultimately from a Panjab dialect, in post NIA. times in Bengali; ননদ « nânâdâ » (nanandā); নিন্দ, নীঁদ, নিদ্ « nindâ, nīdâ » (nindă, niddā, nidrā); পরখ « pârâkhâ » (parīkṣā); পাছ « pāchâ » (pacchă, paścā, paścāt); পিয়াস « piyāsâ » (pipāṣā); পান « pānâ » as in আমাপানে « āmā-pānē » *towards me, looking at me, recognising me* (paṇṇă, prajñā [?]); ফণ « phâṇâ » (phanā); বাত « bātâ » (vattă, vārtā); বান « bānâ » (vanyā); বাঁঝ « bājhâ » (vandhyā);[1] MB. ভাষ « bhāṣâ » (bhāṣā); ভিখ, ভীখ « bhīkhâ » (bhikṣā); ভুখ « bhukhâ,

[1] Cf. যে আছে বাঁঝ। সে দেয় সাঁঝ॥ 'jē āchō bāñjh, sē dēy sāñjh'—*Let her who is childless (in the family) light the evening lamp.*

bhūkhꝺ » (bubhukṣā); মাজ « mājꝺ » as in মাজ কাঠ « mājꝺ-kāṭhꝺ » *heart of timber* (majjā); মাল « mālꝺ », mainly in compounds (mālā); মিছ « michꝺ », cf. মিছকউনে « michꝺ-kâunē » = মিছ-কহনিয়া « michꝺ-kâhâniyā » *liar* (mithyā); MB. মুদড়ী « mudā-ṛī » *ring* (mudrā); মেল « mēlꝺ » (mēlā); রাঁড় « rāṛꝺ » (raṇḍā); লা « lā » *lac* (lāhă, lākṣā); MB. লাছ, নাছ « lāchā, nāchꝺ » (rathyā); লাজ « lājꝺ » (lajjā); লাল, নাল « lālꝺ, nālꝺ » (lālā); লালস « lālâsꝺ » (lālasā); শাল « śālꝺ » in compounds, *e.g.*, হাতীশাল « hātī-śālꝺ » *elephant-stable*: cf. গোহাল « gō-hālꝺ » *cow-pen* (śālā); শিল « śilꝺ » (śilā); শেজ « śējꝺ » (śayyā); সাজ « sājꝺ » (sajjā); সাঁঝ « sẫjhꝺ » (sandhyā); সাধ, *শাধ « sādhꝺ = śā- » (śraddhā): see p. 190; সান « sānꝺ » *gesture*, as in হাতসান « hātꝺ-sānꝺ » *gesture with the hand*, also হাত-ছান « hātꝺ-chānꝺ » (saṇṇa, saṅjñā); হলুদ « hâludꝺ » (haridrā); etc.

The plural affix of OIA. « -ă, -ā » nouns, « -āḥ », in eMIA. « -ā », was similarly reduced to « -ă » in Apabhraṅśa, and lost its force in OB.: *e.g.*, « dēśāḥ > dēśā > dēśă; vārtāḥ > vattā > vattă > bātă ». New plural forms had to be built up for the nominative with the help of the genitive and instrumental plural, as well as by adding nouns of multitude, as a result.

In the OIA. affixes « -ānām, -ēṣām », which became « -āṇă(ṁ), -ēsăṁ, *-ēśăṁ, -chăṁ » in the MIA. period, there was pre-Apabhraṅśa weakening of « -ā- » to « -ă- »; « *tānām », occurring beside « tēṣām », gave early MIA. « tānăṁ, tānă » and « tēsăṁ, *tēśăṁ », Late MIA. « tāṇā, tāṇă, tēhā », whence the NIA. forms—Bengali ‡ তান « tānꝺ » *his* (honorific, < *their*), তাঁ- « tã- » = oblique of honorific singular 3rd personal pronoun, তেঁই, তিঁহ « tēhā, tihā » *he* (honorific, < *they*); Assamese « tōo » *he* (honorific); Oṛiyā « tā(hā)n- » = oblique of 3rd pers., plural > honorific singular; Maithilī « tan-i-k » *his* (honorific), Magahī and Bhōjpuriyā « tinh » = oblique of 3rd personal pronoun plural; Awadhī « ten(h)- », 3rd person plural obl.; Hindōstānī « tin- », 3rd pers. pl. obl.; etc., etc.

Tatsama words do not drop the OIA. « -ā » vowel, and in many cases, the *ts.* forms occur side by side with the *tbhs.*, like খেল, খেলা; শিল, শিলা etc., quoted above. A *sts.* like রেখ « rēkhꝺ » (rekhā), or সীম « sīmꝺ » (sīmā), drops its « -ā ».

Cases of loss of OIA. final « -ā » by assimilation (see later also, under 'Vowels in Contact'):

(i) OIA. « -ā, -ă+cons.+-ā » > Late MIA. « -āā -aā, -āa, -aa, -ā » > OB. « -āa, -āẘă, -ā, -aẘa » > NB. « -ā, -å »: এও « ēō », from « āïâ » = MB. আইহ « aihå » (avidhavā); মা « mā », ‡ মাও « māŏ » < OB. « māẘa » (māă, mātā); শলা « śålā » (śalākā); in NB. ভাজ « bhājå », MB. ভাউজ « bhāujå », the loss of the final « -ā » had taken place before the Apabhraṅśa stage (bhrāṭṛ-jāyā > bhāu-jāā, *bhāujjā > *bhāujjă > OB. « -bhāujă); so শালাজ « śālājå » (śyālaka-jāyā); etc.

(ii) OIA. « -ikā » > MIA. « iā, -iă » > OB. « -ī » > NB. «-ī, -i ». Examples: আজি, আয়ি, আই « āji, āẏi, āi » *grandmother* (āryikā); কাহিনী « kāhinī » (*kathinikā); NB. ঘী « ghī » OB. (Sarvānanda) « ghiẘī », *brains* (*ghṛtikā); চুরি « curi » (*cōriă, caurya+ikā); ছুরি « churi » (kṣurikā); ‡ ছেলি « chēlī » *goat* (*chaẏaliă, *chagalikā); জুড়ী « juṛī » *pair* (*yōktrikā); বাড়ী « bāṛī » (vāṭikā); বালী « bālī » *sand* (*bālikā=bālukā); মই « mâï, mâi » *ladder* (madikā); মাটী « māṭī » (mṛttikā); রুটী « ruṭī » (rōṭikā); লুড়ী, নুড়ী « luṛī, nuṛī » (*lōḍhia < *lōṭhiā = *lŏṭṭhikā, *loṣṭikā); OB. « sēji = śējī » (*śayyikā); etc. Examples illustrating this dropping of OIA. « -ā » in feminine forms in « -ikā » are very numerous, and this « -ikā » > « -iă » > « -ī » gave the most common feminine and diminutive affix of all NIA., taking the place of the OIA. feminine affixes « -ā » and « -ī ». The vowel was originally long, « -iă » = [iə] becoming [i:]; it remains long in most NIA., *e.g.*, Hindōstānī, but in Bengali, absence of stress made it short, even from the OB. period.

(iii) OIA. « -ukā, -upā » etc. > NIA. « -ū, -u »: see below, § 172, under 'Vowels in Contact.'

(2) OIA. « -ĭ, -ī ».

151. (i) OIA. « -ĭ, -ī » > Late MIA. « -ĭ » > OB. « ĭ » > (MB. epenthetic « i ») >NB. zero, in the Standard Dialect, when occurring after a consonant.

Examples: আঁখ « ākh » (*aṇkhi, akkhi, akṣi); আঁচ « āc » *flame* (*añci, acci, arciṣ); আজি, অ জ, আজ « āji, āij, āⁱj, āj » (MIA. *ajjiṁ = adya); so

কালি, কোল, কাল « kāli, kāil, kāi l, kāl » (MIA. kallim = kalya); গাঁট, গাঁঠ « gāṭ, gāṭh » , ‡ গাইট, গাঁটি « gāiṭ, gāi ṭ » (gaṇṭhi, granthi); গাবিন, গাভিন « gāb(h)in » *big with young* (garbhiṇī); চারি, চার, চার « cārī, cāir, cāi r, cār » (ciāri = cattārī, catvāri); ছুঁচ « chũc » (*chuñci, *śuñci, sūcī): also সূচ « sūc » ; জুৎ « jūt » *convenience, advisability* (yukti); ডাইন, ডান, ডান « ḍāin, ḍāi n, ḍān » (ḍākinī); তাল « tāl » (tālī); তাঁত « tāt » (tantrī); তিন for তীন « tīn » (tiṇṇi, trīṇi); তেঁতুল « tẽtul », OB. (Caryā 2) « tentalī » (*tintalī = tintiḍī); পাঁত « pāt », MB. « pāti » (panti, paṅkti); পারুল « pārul », OB « pāralī » (see p. 186) (pāṭalī); বেয়ান, বেহাইন্ « bēyān, bēhāin » (*vāĭvāhinī); বোন, ‡বুন, ‡বইন, ‡বুইন « bōn, bun, bāin, buin », cf. Oṛiyā « bhāũṇī » (bhaginī); ভিত « bhit » (bhitti); মুঠ « mūṭh » (muṣṭi); রাত, রাইত « rāt, rāit », OB., « rāti » (rātri); রাস « rāś » (i) *zodiacal sign* ; *heap, mass*, (ii) *bridle* (in this sense probably influenced by the Perso-Arabic « rās ») (rāśi; *raśśi = raśmi); লহর « lāhār » *wave* (laharī); ষাট, ষাইট « ṣāṭ, ṣāiṭ » (ṣaṣṭhi); সৎ « sāt » as in সৎমা « sāt-mā » *step-mother* (savattĭ, sapatnī); সত্তর « sāttār » (saptati); সিঁধ « sīdh » *breaking through a wall* (*sindhi, sandhi); etc., etc. The OIA. feminine forms in « -inī » , as in the instances given above, would become « -in » in NIA., with the dropping of final « -ī » , but in Bengali there was from MB. times an influence of the full *ts.* form.

In a number of *sts.* words as well, the final « -ĭ, -ī » is lost; *e.g.*, আদ, ‡ আইদ « ād, āid » (ādi) ; জাত, ‡ জাইত « jāt, jāit » (jāti) ; জুৎ « jut » as in চোখের জুৎ « cōkhēr jut » *sight of the eye* (*juti, jyōtiṣ) ; ‡ যুগিৎ « jugit » *device* < OB. *sts.* « *jugiti » (yukti) ; পিরীত « pirīt » , MB. পিরীতি « pirīti » (prīti) ; মুরত « mūrāt » (mūrti); রীত « rīt(i) ; etc. ; but cf. দিঠি = দীঠি « dīṭhi » (dṛṣṭi), with « -i » preserved, which remains an archaic, poetic (MB.) word. But *ts.* words keep the final « -i, ī ».

(ii) OIA. « -ĭ, -ī » > MIA. « -ĭ, -ī » > OB. « -i » , retained, when it occurred after a vowel in OB. and MB.; *e.g.*, কই « kāi, kâi » *a fish* (kavayī); ছই « chāĭ, châi » *thatch, thatched cabin of a boat* (chadis) ; জামাই « jāmāi, jāw̃āi » (*jāmāti = OIA. jāmātṛ); নই « nāĭ, nâi » (i) *ninety* (also = নব্বই « nābbaĭ »), (ii) ‡ *river*, (iii) *new or young heifer* : (navati ; nadī; navī, navikā); দই « dāĭ, dâi » , MB. দহি « dâ(h)i » (dadhi); বাড়ই « bāṛâĭ » (vardhakin); ভাই « bhāi » (*bhāti = OIA. bhrātṛ); সই « sāĭ, sâi », MB.

« sâ(h)i » (sakhi); also in the word « -pati > -paï, -vaï » in compounds, *e.g.*, দলই, দলুই « dâlâï, dâlui » *a surname* (dalapati), নন্দাই « nândâï » (nanandṛ-pati), বোনাই « bōnâi » (bhagini-pati : see p. 300); OB. and eMB. বোলই, করই, চলই « bōlaï, karaï, calaï » etc., verbs of 3rd person singular, where the final « -i » remained,—to be assimilated with the « -ă- » preceding to « -ē ». OIA. instrumental plural « -bhis », MIA. « -hi », and the locative « *-dhi > -hi », reduced to « -i » in Proto-Bengali, also underwent assimilation, but in some cases it is found in MA. : *e.g.*, আমি, তুমি « âmi, tumi », OB. « âmhē, tumhē », Oṛiyâ « âmbhē, tumbhē » (=*amhahi, *tumhahi [or -ēhi] : asmābhis, yusmābhis). This « -(h)i » affix seems to have attached itself to the genitive plural form, in forming the new nominative (honorific) of pronouns, etc. : see under ' Declension of the Noun,' and under ' Pronouns.' In আশী « âsī » (aśīti), there is assimilation of « -i » with preceding « -ī- » in the MIA. form « asī ».

In MB. সুন্ধি « sundhi » = « sugandhi », the « -i » is probably for « -ika », with assimilation of final « -a » as under § 149, p. 302 : সুন্ধি=সুন্ধী « sundhī » < « *sondhī » < « *suwandhī, *suandhī » < « *sugandhika » : cf. NB. সোঁধা « sõdhā » = « sõdh-+-ā » *foetid* (= sugandha-); ননী « nânī » is from « navanīta » rather than « navanī ». In the eMB. of the ŚKK., we have *ts.* and *sts.*, as well as *tbh.* words, like « ânumâtī, âkhī (= akṣi), âtī (ati), ârâtī (â-rati), âbudhī, gâtī, girī, tutī (stuti), thitī (sthiti), dâdhī (dadhi), dhunī (dhvani), nidhī, pâtī, pãtī (paṇkti), bihī (vidhi), buddhī (buddhi), bhâkâtī (bhakti), mâṇī, mâtī, munī, yugâtī (yukti), yutī=jutī (jyōtiṣ), râtī, sâṇgâtī, sândhī, sidhī (siddhi), hârī », with long « ī » : this lengthening is possibly a reminiscence in orthography of a stage in OB., when original « -ĭ » from OIA. « -ĭ, ī » was tending to be lost, and the presence of a large number of words in « -ī », from « -ikă, -ikā » etc., served to make the long « -ī » the more common form of the « i » sound in a final position.

Words and forms in OB. with original « -i » (i.e., final « -i » derived from Māgadhī Apabhraṅśa) in many cases fell together with the « -ă » words. The nominative form in « -i », which seems to have characterised Māgadhī Apabhraṅśa, has entirely dropped out of Bengali, as well as the

locative affix in « -i » < OIA. « -ē », occasionally found in OB. : *e.g.*, Caryā 36 : « pākhi » = « pakṣē ». See § 153.

(3) OIA. « -ŭ, -ū »

152. (i) OIA. « -ŭ, -ū » > MIA. « -ŭ, -ū », Late MIA. « -u » > OB. « -ŭ » > MB. epenthetic « -ŭ, -ĭ » > NB. zero, when occurring after a consonant. Cases also occur, where « u » has become « -ă ». Examples : আখ, আউখ « ākh, āukh » (*akkhu<*akṣu=ikṣu) ; আঁশ, আঁইশ্ « ā̃ś, ā̃iś » *fibre* (aṅśu) ; খোস « khōs » < খউস « khâus », OB. (Sarvânanda) « khasu » *itch* (*khachu, kacchu) ; চোঁচ « cō̃c » < চঁউচ « cāuc » (cañcu) ; জাম « jām » (jambu) ; তাঁত « tā̃t » (tantu) ; দাদ « dād » <দাউদ « dâud » (daddu, dadru) ; পাঁশ « pā̃ś » *ashes* (pāṅśu) ; ফাগ « phāg » (phalgu) ; OB., MB. বাহ « bāhă » (bāhu) ; মোছ « mōch » (mhacchu, śmaśru) ; শাশ, সাস « śāś, sās » in compounds (śvaśrū) ; সা, সাহ « sā, sāhâ » *merchant* (sādhu) ; হিঙ « hiṅ » (hiṅgu) ; etc., etc. In *sts.* words also, « -u » is frequently dropped : ধাত, ‡ ধীত, ধাউত « dhāt, dhāit, dhâut » (dhātu) ; দয়াল « dâyāl » (dayālu) ; etc.

Ts. words preserve the final « -ŭ, -ū ».

(ii) OB. « -u » is retained in NB., when in OB. and MB., the « -u » was immediately preceded by a vowel : *e.g.* ‡ আউ, also আই « āu, āi » (āu, āyuṣ) ; জউ « jâü, jâu » *luc* (jatu) ; যাউ, জাউ « jāu » (yavāgū) ; ঝাউ « jhāu » (jhābu ; also jhābu-ka) ; বউ, বৌ « bâu, bâu », MB. « bâ(h)u », OB. « bahū » (vadhū) ; ‡ বাউ « bāu » (vāyu) ; মউ, মৌ « mâü, mâu », MB. « mâ(h)u » (madhu) ; লাউ « lāu » (alābu) ; etc. The affix « -u » for the imperative 3rd person, = « -tu » of OIA., remained in OB. and MB. ; but in MB. it was lengthened by a « -k♯ », and became medial, and was dropped after a vowel : *e.g.*, MB. দেউ, জাউ, হোউ, করু, চলু, « *dēu, jāu, hōu, kâru, câlu » beside « dēu-k♯, jāu-k♯, hōu-k♯, kâru-k♯, câlu-k♯ »=NB. দিউক or দিক্, যাউক or যাক্, হোউক (হৌক্) or হোক্ « diuk♯, dik♯ ; jāuk♯, jāk♯ ; hōuk♯, hōk♯ » and করুক, চলুক « kâruk♯, câluk♯ ».

Some exceptional cases : ‡ কাউ « kāu » (kāka) is through vocalisation of a MB. « kāwa < kāa » ; পরশু « pâr♯śu » = OB. « parasū » = OIA. « para-śvaḥ » : « -śu » represents a Māgadhī « * śuvē », (cf. Pali « suvē »), in Māg. Ap. « * śuvi », which ought to give an OB. « * śui », which is

not found isolated in NIA.; « śu » in « pārśśu is » probably due to the reduction of the expected final « -i » to « -ă », giving a Māg. Ap. form « *śuva », which was normally simplified to « śū, śu ». MB. পহুঁ, পহু « pāhu, pāhũ » (prabhu) is not found in NB., where it would occur as « * pāu, pāu »: the nasalised form is noteworthy; বঁধু « bādhu » *friend, lover* (bandhu-ka); খাড়ু « khāṛu » *bracelet*, গাড়ু « gāṛu » *pitcher*, ছাতু « chātu », টাকু « ṭāku », লাড়ু « lāṛu », আঁঠু, হাঁঠু, হাঁটু « (h)ăṭ(h)u » = OB. « aṇḍu » (?) *knee*, seem to show assimilation of « -ă », coming respectively from MIA. « khaḍḍuă, gaḍḍuă, śattuă = śaktu-ka, ṭakkuă = takru-ka, laḍḍuă, *aṇḍu-ă ? (but cf. aṣṭhī-vant- *knee*) »: cf. §149, (iv).

Words like the following—*tbhs.* দুধু « dudhu » (dugdha), মিতু « mitu » *friend* in affectionate address (mitra), উর্, উভু « ub(h)u » (ūrdhva); *stss.* like ধুত্তু « dhuttu » (dhūrta); *tss.* like দুষ্টু « duṣṭu » (duṣṭa), have an « -u » affix, derived ultimately from « -u-ka ». (See under *Morphology*: 'Formative Affixes.') The literary influence of the Western Apabhraṅśa brought in a number of « -u » forms into Bengali; and in the 16th century MB., the « -u » affix also sought to enter into Bengali through Braja-buli and through Braj-bhākhā (see p. 103); *e.g.*, forms like OB. (Caryās) « kiu, ahāriu, tasu » etc. (p. 115), MB. যহু, তহু « jāchu, tāchu », মঝু « mājhu » *to me, of me*, অঝরু « ājhāru » *tears*, লাগু « lāgu » *fixed*, etc. But this Western « -u » < MIA. (Śaurasēnī, Mahārāṣṭrī) « -ō » did not take root in Bengali.

(4) OIA., MIA. « -ē »

153. OIA. « -aḥ, -am, -ē » > MIA. (Māgadhī) « -ē » > Māgadhī Ap. « *-i » > OB. (?) « -i », but mostly reduced to « -ă » > eMB. « -å » > NB. « -ঁ » or zero.

The Māgadhī affix for the nom. sing. and for the loc. sing. of « -ă » nouns would come under this: « dēvaḥ > dēvē > *dēvi > OB. *dēẁi »; « dēvē > dēvē > *dēvi > OB. *dēẁi »; but in OB., the « -i » for the locative is occasionally found, but that for the nominative is almost entirely lost, relics possibly only being found in a few forms (which are discussed under *Morphology*: 'The Noun: Inflections, Nominative'). The representative of « *dēvi » in OB. is « *dēẁa » = MB. দে « dē ». For the locative, the « -ē̃,-ē »

affix ousted the old « -i » : this new « -ẽ, -ē » of OB. being from « -ahī, -ahi ; aĩ, aï » of Late MIA. (See under *Morphology* : 'Inflections : Locative.') The following cases, among others, show loss of OIA. « -ē » > Early NIA. « -i » in the locative : আস-পাস « ās-pās » *around* (*āsi-pāsi : asrē pārśvē : cf. Jules Bloch, 'Langue Marathe,' p. 57) ; পার « pār » *on the other side* (*pāri, pārē) ; পর « pâr » *after* (*pari, parē) ; ঘর-ঘর « ghâr-ghâr » *in every home* (*ghari ghari, gṛhē gṛhē) ; etc., etc.

OIA., MIA. « -ō » was extremely rare in Māgadhī, and we have no sure case in Bengali. The Oṛiyā ablative affix « -u » probably represents the MIA. « -tō » = OIA. ablative « -tas ». « -ō » does not occur in the base form of any OIA. word, any more than « -ē ».

154. The above in general show the apocope of final vowels in Bengali. In many cases, however, *ts.* forms with the final vowels have been reintroduced, or made to influence the *tbh.* ones, by restoring the final vowels—the unmodified *tbhs.* being found as archaic words in poetry : *e.g.*, আশা « āśā », beside আশ « āś্ » ; মালা « mālā », beside মাল « māl্ » ; মিছা « michā » for « mīch্ », influenced by « mithyā » ; so মায়া « māyā », but cf. OB. « māa » = « māẁa » ; ছায়া « chāyā », frequently pronounced as ছাওয়া « chāẁā », shows imperfect influence of the learned form « chāyā » on a *tbh.* without the final « -ā » and with the euphonic « ẁ »—OB. « chāă, chāẁă », NB. « chāẁā, chāŏā » ; বাঝা « bāj্hā », see, p. 305 (vandhyā) : here however, there may be the NIA. « -ā » affix, cf. সাঁচা « sãcā » from « sãc » (satya) ; কাঁথা « kãthā » (kanthā) ; etc. The cases of restitution for « -i, -u », *e.g.* মুঠি « muṭhi » for মুঠ « muṭh », are in the nature of reversion to archaic forms, and MB. epenthesis of « -i, -u » prevents it to a great extent : and the language here prefers the full *ts.* forms, rather than palpably false forms.

[II] Vowels in Initial Syllables.

155. These have generally been preserved in Bengali. So long as the stress was on non-initial syllables, in Apabhraṅśa and in Old Bengali, there remained the likelihood of an original initial long syllable being shortened, or of a short syllable being dropped. Instances of such weakening of original long syllables in Bengali have been given in § 143 :

and dropping of initial vowels through absence of stress is not unknown to MIA. (see pp. 241, 278). Bengali has inherited a few words which underwent this aphæresis in the MIA. period : *e.g.*,

(i) « ă- » : তিসি « tisi » *linseed* (*atisi, atasī), « a- » dropped in the OIA. or eMIA. period ; so MB. পিন্ধ « pindhạ » (api-nah, api-naddha) ; হিলান, হেলান « hilānạ, hēlānạ » *to lean* (? abhilagna), aphæresis in the lMIA. period ; রীঠা « rīṭhā » *soap-nut* (ariṣṭa-) ; ভিজ « bhij » *to moisten* (abhyañj) ; ভিজায় > ভেজায় « bhijāy, bhējāy » *closes the door* (? abhyajyatē) ; ভিতর « bhitârạ » (abhyantara) ; OB. হাঁউ for হউঁ « hãu<haũ » (hakaṁ, ahakaṁ = aham), aphæresis in Early MIA. ; হিলে, হেলে « hilē, hēlē » *leans* (abhilagati ? abhilīyatē ?), a Late MIA. case ; লাউ « lāu » (alābu) ; and সওয়ার « sâwārạ » *horseman*, an eMIA. borrowing from Old Persian « asa-bāri » = Skt. « aśva + bhṛ », later strengthened by the New Persian « suwār ».

« ā- » : inherited forms with loss of initial of « ā- » not found.

(ii) Loss of initial « i- » is not seen in any word in Bengali : in the word ঢিল, ঢিলা « ḍhilạ, ḍhilā », generally connected with « *śiṭhila = śithila < *śṛth-ila », however, there seems to be loss of an initial syllable with « -i- ».

(iii) Aphæresis of « u- » : ডুমুর « ḍumurạ » (udumbara) ; বইসে, বৈসে, বসে « baïsē, bâisē, bâsē » (uvaïśaï, upaviśati), a Late MIA. case ; ‡পানই « pānâî » (upānah-), aphæresis in eMIA.

(iv) « ē-, ō- » : no case in Bengali, except রেড়ী « rēṛī » (ēraṇḍikā).

A few cases of Bengali aphæresis are also found : OB. « antarē », eMB. আন্তরে « āntarē » : NB. তরে « târē » *for the sake of* (dative post-position) ; NB. « jābālạ » (ajā-pāla) ; NB. ছিল « chilâ » *was*, beside আছিল « āchilâ » ; MB. ছিতে « chitē » *to be* for আছিতে « āchitē » (accha, āch) ; MB. সিয়া, সিঞা « siā, siã » for আসিয়া, -ঞা « āsiyã, -iñā » *having come* (ā-viś) ; NB. ধার « dhārạ » *loan* < MB. উধার « udhārâ » (uddhāra) ; NB. *sts.* পর « pârạ » *upon* (upari) ; NB. হেন « hēnâ », MB. এহেন « ēhēnâ » *such, so like* (through analogy of কেন<কেহেন « kēnâ, kēhēnâ », যেন<যেহেন « jēnâ, jēhēnâ »).

(1) Initial « ă- », and « -ă- » in Initial Syllables.

156. (i) Initial « ă- ».

OIA. and MIA. « ă- » followed by a single consonant, seems to have become « ā- » in eMB., through initial stress : *e.g.*, আজল, আজুলী « ājåḷ, ājulī » *a foolish boy and girl* (*aju-<ṛju-) ; আশী « āśī », cf. Oṛiyā « åśī » (aśīti) ; আর « ārḍ » < eMB. আঅর « åårå » (avara, apara) ; আলতা « ālḍtā » (alakta-) ; এও « ēō » < MB. আইহ « āihå » (avidhavā) ; আয়ান « Āyānḍ » < MB. আইহন « Āïhåṇå » (Abhimanyu) ; আসুর « āsurå » (asura) ; আলস « ālåsḍ » (alasa) ; MB. আমিআঁ « āmiā̃ » (amṛta-) ; etc. In the Early MB. of the ŚKK., *ts.* words almost invariably show « ā- » for « ă- » : আনুমতী « ānumatī », আতি « āti », আপার « āpārå », আপমান « āpåmānå », আধিপতী « ādhipåtī », আবতার « ābåtārå », আলপ « ālåpå » (*sts.*), আধীন « ādhīnå », আপরাধ « āpårādhå », আভিসার « ābhisārå », etc., etc. The privative affix « ă- » became « ā- » in MB. in *tbhs.*, *stss.*, and *tss.* : *e.g. sts.* আভাগী, NB. আবাগী « ābhāgī, ābāgī » (abhāgya+ikā) ; আবুধী, আবুদ্ধিয়া « ābudhī, ābuddhiyā » *fool* ; আসুখ « āsukhå » ; আশুভ « āśubhå » ; আভয় « ābhåyå » ; আমুল « āmulå » *tbh.* (amūlya); NB. আলুনি « ālunī » for « ālōnī » (alavanika); আসমান « āsåmānå » *uneven.* The MB. intensive prefix « ă- » equally became « ā- » : আঘোর « āghōrå » (=ghōra), আব্রেথা « ābrēthā » (vṛthā), আকুমারী « ākumārī » (kumārī), আরঙ্গা « ārå̃gā » *coloured* (raṇga-), আছিদর āchidårå » *vicious* (chidra ?), etc., etc. In eMB., through an increasing influence of Sanskrit forms, this « ā- » fell into disfavour, and « ă- » became supreme in *ts.* words ; and some *tbhs.* also took up « ă- ». But here and there we have the « ā- » forms lingering in NB., commonly in pronunciation, and at times in orthography as well : *e.g.*, in addition to the *tbh.* words given before, we find আবস্থা « ābåsthā » *plight, distress* (avasthā), ‡আষ্ট « āṣṭå » *eight*, ‡আবাগী « ābāgī » (abhāgya+-ī), আরন্ধ(ন) « āråndhå(nḍ) » *'no cooking'* (a feast-day when people eat things prepared on the previous day) (arandhana), আচম্বা, আচম্বিত, আচম্‌কা « ācåmbā, ācåmbitḍ, ācåmḍkā » *suddenly* (?: cf. Hindōstānī acambhā); আস্পদ্দা « āspåddā » (*åspåddhā = spardhā), আস্তেব্যস্তে « āstē-byåstē » (asta-vyasta), etc.

The initial « ă- » of Persian loan-words similarly became « ā- » : *e.g.*, « ăzān (ăðān) > আজান ājān » *call to prayer* ; « ămīr > আমীর āmīr » *prince, dignitary* ; « ănār > আনার ānār » *pomegranate* ; « ăwāz > আওয়াজ, আবাজ āwāj, ābāj » *sound* ; etc., etc.

157. (ii) Consonant + « ă » + consonant.

The « -ă- » in this case remains « ă = å » in Bengali : *e.g.*,

কইলা « kåilā » as in কইলা গোরু « kåilā gōru » (kapila-) ; কড় « kåṛ » (*iron*) *bracelet* (kaṭa) ; কড়ুয়া « kåṛuā » (kaṭuka-) ; কনুই « kånui » (kaphōṇi-) ; করে « kårē » (karaï, karōti) ; কহে « kåhē » (kathayati) ; খন্‌তা « khånṯā » (khanitra-) ; গড়ুর « gåṛuṛ » (garuḍa) ; গলাশী « gålāśī » (gala-pāśika) ; ঘর « ghåṛ » (ghara, gṛha) ; চলে « cålē » (calati) ; জউ, জৌ « jåu, jåu » (jatu) ; জন « jån » (jana) ; জল « jål » (jala) ; ঝড় « jhåṛ » (cf. jhaṭikā) ; টলে « ṭålē » (ṭalati) ; ডর « ḍåṛ » *fear* (dara) ; MB. তড় « tåṛ » (taṭa) ; থল « thål- » (sthala) ; দই, দৈ « dåi, dåi » (dadhi) ; দল « dål » (dala) ; ধড় « dhåṛ » *body, torso* (*dhaṭa, dhṛta) ; নই, নৈ « nåï, nåi », as in নই বাছুর « nåï bāchuṛ » *heifer calf* (navikā) ; ননদ « nånåd » (nanandṛ) ; পইতা « påïtā » (pavitra-) ; MB. পড়িছা « påṛichā » (praṭīkṣaka-) ; পড়ে « påṛē » (patati) ; পঢ়ে = পঢ়ে « påṛ(h)ē » (paṭhati) ; পয়লা « påylā » *first* (pratha + ila) ; পয়ার « påyāṛ » (padākāra) ; পরশু « påraśu » (paraśvaḥ) ; পলা « pålā » (*pălāva, pravāla-) ; ফল « phål » (phala) ; ফলার « phålāṛ » (phalāhāra) ; বউ, বৌ « båu, båu » (vadhū) ; বন « bån » (vana) ; বহিন « båhin » (bhaginī) ; ভড় « bhåṛ » *a surname* (bhaṭa, bhṛta) ; মউ, মৌ « måu, måu » (madhu) ; মরে « mårē » (*marati, mriyatē) ; ময়াল « måyāl » *a large snake* (mahākāla) ; মশান « måsān » (śmaśāna) ; মড়া « måṛā » (*maṭa-, mṛta) ; রস « råsa » (rasa) ; রসান « rasān » *ingredients in working metals* (rasāyana) ; শরা « śårā » (śarāva) ; MB. শশা « śåśā » (śaśa-) ; সহে « såhē » (sahatē) ; হলুদ « hâluḍ » (haridrā) ; etc., etc.

The following cases, and a few others, at first sight look irregular, but they seem to be from « ā » forms : *e.g.* হালকা « hālkā » (lăghu : lāghava, *lāhaa, *hālaa + kka) ; শাঁই « śāi » (śāmī : *śāmika) ; and বানিয়া « bāniyā » (văṇij : vāṇija-), probably extra-Māgadhī in IMIA.

Perso-Arabic words also retain the « -ă- » : কম « kåm » *little* (kam) ; খবর « khåbår » *news* (xabar) ; গজল « gåjål » *a poem, a kind of composition in verse* (ġazal) ; জবান « jåbān » *speech, word* (zabān) ; নমাজ « nåmāj » *prayers* (namāz) ; রফা « råphā » *settlement* (rafʿa), etc. Hindōstānī pronunciation of « ă » as [ʌ], however, frequently influences the « -ă- » > « -å- » in becoming the frank « ā » in Bengali, especially in recent admissions from the Persian.

158. (iii) OIA. and MIA. « ă » in initial syllables, followed by two consonants.

In words which were originally of two syllables, or three or more syllables with a weak or short penultimate or second syllable, « -ă- » is lengthened to « -ā- » and one of the consonants is dropped; and if it is a case of nasal + consonant, the nasal is reduced to a mere nasalisation of the lengthened « -ā- », and the following consonant too is often reduced to its corresponding nasal. *E.g.*, আঁক « ākʌ » (aṅka); আখর « ākhārʌ » (akṣara); আঁখ, আঁখি « ākh(i) » (*aṅkhi, akkhi, akṣi); ‡আগি « āgi » (āgī, aggiă, agni-); আঁচ « āc » (*añci, arcis); আছে « āchē » (acchaï, OIA. *acchati); আজ « āj » (ajjiṁ, adya); আট « āṭʌ » (aṣṭa); আঁঠি « āṭhi » *stone of fruit* (asthi-); আঁত « ātʌ » (antra); কাঁকণ « kākāṇʌ » (kaṅkaṇa); কাছ « kāchʌ » (kakṣa); কাঁদন « kādānʌ » (krandana); কাঁধ « kādhʌ » (skandha); কান « kānʌ » (karṇa); কাম « kāmʌ » (karma); ‡খাজুর « khājurʌ » (kharjura); খাট « khāṭʌ » (khaṭvā); খাড় « khāṛʌ » (khaṇḍa); খাজা « khājā » *a sweetmeat* (khādya-); গাধা « gādhā » (gaddaha-, gardabha-); MB. গাজে « gāje » (garjati); গালি « gāli » *abuse* (garha-); ঘাম « ghāmʌ » *sweat* (gharma); চাউল « cāulʌ », MB. তাউল, তাঁড়ুল « tāulā, tāṛulā » (taṇḍula); চাক « cākʌ » (cakra); চাতর, চাতাল « cātārʌ, cātālʌ » (catvara); চাঁদ « cādʌ » (candra); চাঁপা « cāpā » (campaka-); ছাত « chātʌ » *roof* (chatra); ছাঁদ « chādʌ » *style, fashion* (chanda); জাঁতা « jātā » (yantra-); জাম « jām » (jambu); MB. তাজে « tājē » (tarjati); তাকে « tākē » (tarkayati); তাত « tātʌ » *heat* (tapta); তাঁত « tātʌ » (tanta, tantra); থাম « thāmʌ » (stambha); দাপ « dāpʌ » (darpa); দাম « dāmʌ » *price* (dramya, Greek drakhmē); নাচে « nācē » (naccaï, nṛtyati); পাখ « pākhʌ » *wing, side* (pakṣa); পালং, পালঙ্ক « pālāṇ, pālāṇkā » (pallaṅka, paryaṅka); বাজ « bājʌ » (vajra); বাড়ই, বাড়ুই « bāraï, bāṛuï » (vardhakin); ভাল « bhālā » (bhadra-); মাকড় « mākārʌ » (markaṭa); শাঁখ « śākhʌ » (śaṅkha); শাঁশ « śāśʌ » *substance, fleshy part of fruit* (*śaṁśa, *śaśśa = sasya) etc., etc.

In words of more than two syllables, the « -ă- » in initial syllables, although followed by two consonants in MIA. (one of which is dropped in NIA.), remains as « -ă- » without being lengthened to « -ā- », when a following syllable, the penultimate or the ante-penultimate generally, was a strong one (i.e., long, or stressed, or both). This seems to have been

due to the Māgadhī Apabhraṁśa habit of stressing, before initial stress asserted itself in Bengali: and OB. forms like « ăndhāra (andha-kāra), băṇgāla (Caryā 49: vaṇgâla), bhăṭāra (Caryā 20: bhartṛ, *bhaṭṭāra), kăpāsa (Caryā 50: kappāsa, karpāsa), kăṇṭhabhāla (Sarvânanda, =*kaṇṭha-hāla, *kaṇṭa-āla), băndhāvaï (Caryā 22: *baṇdhāpayati), săntāra (Caryā 37: santāra), băkhāṇa- (Caryā 37: bakkhāṇa=vyākhyāna), săṇkrāma (Sarvânanda: saṇkrama), ămbāḍa (Sarvânanda: āmrāta), Aṭha-pāga (grant of Viśvarūpa-sēna, see p. 188: aṣṭa-) » etc., show « ă » for an expected « ā » through something like the law of the weak ante-penultimate obtaining in some form of Bengali in the OB. period. (See *ante*, pp. 280-82.) MB. also shows, in words like পখালে, পাখালে « pâkhālē: pākhālē » (praskhālayati), পলায়, পালায় « pâlāy, pālāy » (palāyati), a hesitancy between the « ā » and the « -ă- ». In NB., the initial stress has made the « -ă- » before a simplified double consonant group an « -ā- » as a regular thing, no matter if a succeeding syllable was strong: *e.g.*, আঁধার « ădhāra », « OB. ăndhāra » (andha-kāra); কাটারী « kāṭārī » (kartarikā), cf. Hind. « kăṭārī »; কাঁকাল, -লী « kākāl(ī) » *waist, spine* (kaṇkālikā); ভাতার « bhātāra » (bhartṛ-), cf. Hind. « bhătār »; কাঁটাল « kāṭāla » *jack fruit* (kaṇṭāla), cf. Hind. « kăṭār »; পাঠায় « pāṭhāy » (paṭṭhāvēi, prasthāpayati); সাজায় « sājāy », MB. সজাএ « sâjāē » (*sajjāpayati); কাছারী « kāchārī » *office* (kacca-haria, kṛtya-gṛha-) cf. Hind. « kac-harī »; খামার « khāmāra » *barn* (khambhāra, skambhâgāra); সাভার « sābhāra » *a place-name* (sabhyâgāra); গাবরাট, beside গবরাট « gābhrāṭa, gâb- » *lintel-wood* (garbhâgâra-kāṣṭha); বাখান « bākhāna » (vyākhyāna); etc., etc. OB. also shows this sort of lengthening: this has been discussed before. In certain cases, however, in NB., we find no lengthening: possibly these are relics from the age when dialectally in West Bengal the non-initial stress *cum* absence of lengthening obtained: *e.g.* যখন « jâkhâna » *when* (jakkhaṇa, yat-kṣaṇa): so তখন « tâkhâna » *then* (tat-kṣaṇa), কখন « kâkhâna » *when?* (kakkhaṇa, *kat-kṣaṇa); জঞ্জাল « jâñjāla » (jañjāla); *sts.* দখিন « dâkhina » *south* (dakkhiṇa, dakṣiṇa), but cf. the *tbh.* ডাহিন « ḍāhina »; the numerals পনের, পনর « pânērā, pânārā » (paṇṇaraha, pañcadaśa), সতের, সতর « sâtērā, sâtārā » (sattaraha, saptadaśa), but cf. আঠার « āṭhārā » (aṭṭhāraha, aṣṭādaśa); পঁচিশ « pāciśa (*pañcawīśa,

pañca-viṅśati) », but cf. সাতাশ « sātāś্ » (sattāwīsa, sapta-viṅśati), Oṛiyā « sâtāiśa », etc.

Words with the « -ā, -ī (<ikā) » affix at the end, serving to modify the original form in a special manner (or even when employed pleonastically), seem to have been stressed on the « ā » in Māgadhī Apabhraṅśa, as can be surmised from the evidence of Oṛiyā and other Magadhan (see *ante*, pp. 94, 96, 280). OB. also shows words without lengthening of « ă » before a simplified consonant group of MIA., through this stress on the final syllable : *e.g.*, « hăthā (Caryā 41 : hattha-), băpā (Caryā 32 : bappa-), căkā (Caryā 14 : cakka-), păkhā (Caryā 4 : pakkha-) », etc. : cf. Oriyā « răjā, căkā, găcha », etc. In MB., these forms with short « -ă- » were reduced to those with the normal « -ā- », though here and there the « -ă- » forms have survived : *e.g.*, চকলা, চকল « câkaḷā, câkaḷ্ » *slice*, beside চাকলা « cākaḷā » *district* (cakra-) ; খপরা « khâpaḍ্rā », beside « khāpaḍ্rā » *sherd, tile* (kharpara-) ; বধনা « bâdhaḍ্nā » *pitcher with spout* (vardhana-) ; কষি « kâṣi » *line, under-lining* (karṣikā) ; etc.

Absence of compensatory lengthening of « ă » to « ā », after the loss of one of two following consonants, is a phonological puzzle, which is found in a number of words (apart from the cases noted above, where we have the question of stress) in Bengali, as well as in other NIA. languages like the other Māgadhan speeches, and Eastern Hindī, Western Hindī, Rājasthānī and Gujarātī, and Marāṭhī. All these languages normally drop one consonant in a MIA. double consonant group, and lengthen the preceding vowel ; or nasalise and lengthen the vowel, and in this way assimilate the nasal in a MIA. group of nasal + consonant. Thus, the normal development is along this line : « garva : গাব gābaḍ্ », cf. NB. গাবান « gābānâ » *vaunt* ; « adya : আজি, আজ âj(i) » ; « sarpa : সাপ sâpaḍ্ » ; etc. But cases like কচু « kâcu » (kacvī) ; খল « khâlaḍ্ » *apothecary's mortar* (khalla) ; থক্ « thâk » *be at stand-still*, beside থাক « thāk » (stabh-ka) ; ছক « châkaḍ্ » *chess-board* (ṣaṭ-ka) ; নথ « nâthaḍ্ » *nose-ring* (nastā) ; MB. নঠ « nâṭhâ » beside NB. নাট<নাঠ « nāṭ(h)aḍ্ » (naṣṭa) ; বট « √bâṭ » *remain* (cf. Bhōjpuriyā « bāṛ », from « vaṭṭ, vart = vṛt ») ; লখ « √lakh » *notice, see* (lakṣ) ; রতি « râti » *a minute weight with the red* guñjā *berry* (raktikā) ; সব « sâbaḍ্ » (sarva) ; etc., appear irregular. Some of the

above instances can be explained as being due to the literary influence of 'Prakrit' in the Early NIA. period (*e.g.* থক «√thâk» influenced by «thăkka», নঠ «nâṭhâ» by «năṭṭha»), or as being forms borrowed from other NIA. (*e.g.*, রতি «râtī» > Hind. «rattī», নথ «nâthâ» <Hind. «nath»,—the Hind. forms themselves being based on, or influenced by, Panjābi ones, Panjābī being a NIA. speech not showing simplification of double consonants with accompanying vowel length) ; or again, as in the case of the word সব «sâbâ»=«sabba, sarva», there is in all likelihood the influence of the stress. Thus, «sabba» would mostly come in composition in MIA., in forms like «sabba-jaṇa, sabba-kāḷa, sabba-dēsa, sabba-lō(k)a, sabba-manussa, sabba-mahārāja», etc., etc. ; and in such compounds, the initial syllable would lack the stress in Common MIA., so that the word «sabba» could be shortened to «săbă-» in compound forms like these even before the NIA. stage, and passed on to NIA. as «săbă»,—a wide employ of the word as the head-word of plural-indicating compounds preventing a normal «*sāba < sabba» from developing in NIA. The form «săbă» is found in all Aryan India, from the Afghan frontier to Assam, and «*sābă» is unknown : and the frequent use of «săbhă», also occurring as «săṃbă, săṃă», side by side with «sābâ» all over the NIA. area, indicates the influence of the *ts.* «sabhā» *assembly, mass,* in making «sabba > săba» preserve the «să-» and not change it to «sā-» in Early NIA. But still, a number of forms with «ă» do present a difficulty ; *e.g.* «vartatē > vaṭṭati > baṭṭaï > বটে bâṭē» for «*bāṭē» (বট «bât» *remain* is a defective verb in Bengali : cf. বাটে «bāṭē» *pounds, crushes* (*as spices for cooking*) = «vartayati, vaṭṭēti, baṭṭei» : can it be due to a sort of sense of relationship between the causative বাটে «bāṭē» with «ā» and the neuter form, on the analogy of চালে «cālē» *causes to move* : চলে «câlē» *walks,* পাড়ে «pāṛē» *fells* : পড়ে «pâṛē» *falls* etc. [for which see *Morphology* : 'the Verb, Roots']—that the «ă» vowel was brought into বটে «bâṭē» for «*bāṭē» ?) ; লখে «lâkhē» (lakṣatē), etc. (Cf. J. Bloch, 'Langue Marathe,' p. 65).

«ă» after MIA. «p-, b-, m-», labial sounds, is found as «ō» in Bengali, in পোহা'ল «pōhālâ», cf. OB. «pōhāïli» (pahāa-illa-, prabhāta-) ; MB. পোআর «pōārâ, powārâ» (pavāla, prabāla) ; MB. পোণ «pōṇâ»

(paṇa); বোয়াল « bōāl∉ » (bawāla, vadāla); MB. মোঞ etc. « mōñå » for OB. « maĩ » (may'ēna); মোড়ল « mōṛāl∉ » *head-man* (maṇḍala; or muha-ḍa-la = mukha-?); and a few others.

Monosyllabic words in NB. (Standard Colloquial) frequently prefer [o] for « -â- »: this tendency may have been very old in Bengali: *e.g.*, বন « bänɄ » [bo:n] (vana); মন « mânɄ » [mo:n] (manas); জন « jânɄ » [ʤo:n] (jana); ধন « dhânɄ » [dho:n] (dhana). Generally these words are closed with a nasal, but we have রণ « râṇɄ » [ro:n], not [ro:n] (raṇa); cf. বল « bâlɄ » [bo:l] (bala), মত « mâtɄ » [mo:t] (mata), etc.

(2) Initial « ā- », and « -ā- » in Initial Syllables.

159. (i) OIA. « ā » before a single consonant in an initial syllable has normally remained « ā » in Bengali: *e.g.*, আইল « āilå » (āyāta + ila); আইসে « āisē » (āviśati); আউল, আলু « āulɄ, ālu », cf. আলুথালু « ālu-thālu » *dishevelled* (ākula); আউশ, আশু « āuśɄ, āśu » *rainy-season rice-crop* (generally connected with *ts.* « āśu » *quick*, but seemingly from « ā-√vṛṣ- »); আওজা « √āŏjā » *close* (āvṛj-); আওটা « √āŏṭā » *stir* (ā-vartt-); কাই « kāi » (kvātha); *sts.* কাগ, *tbh.* ‡ কাউআ « kāgɄ, kāuā » (kāka); কাঁচ, কাচ « kắcɄ, kācɄ » (kāca); কায়েত « kāyētɄ » (kāyastha); কালো « kālō » *black* (kāla-); খাই « khāi » (khāta-); খায় « khāĕ » (khādati); গাঁ « gā̃ » (grāma); ঘা « ghā » *sore, blow* (ghāta); ঘানী « ghānī » *oil-mill* (cf. « ghrānaka », Siyadoni Inscription, Lalitpur, U. P., Ep. Ind. I, p. 169 ff.); ছার « chārɄ » *ashes* (kṣāra); জাগে « jāgē » (*jaggaï, jāgartti); ঝাড় « jhāṛɄ » (*dēśī*, jhāṭa); ঠাঁই « ṭhāi » (sthāman); তা « tā » (tāpa); তাল « tāl » (tālī); দাড়িম « dāṛimɄ » (dāḍimba); দানো « dānō » (dānava); ধায় « dhāĕ » (dhāvati); না « nā » *expletive* (nāma); না « nā » *boat* (nāva = nāu); পা « pā » (pāda); পাড়ে « pāṛē » (pātayati); পানী « pānī » (pānīya); পারে « pārē » *is able* (pārayati); বা « bā » (vāta); বাইগণ > বাগুন, বেগুন « bāigaṇå > bāgunɄ, bēgunɄ » (vātiṇgaṇa); MB. বাএ « bāē » (vādayati); ভাই « bhāi » (bhrātṛ); ভায় « bhāĕ » (bhāvayati); মা, ‡মাই « mā, māï » (mātā, mātṛ); *sts.* মাপে « māpē » (māpayati: or *tbh.* < « mappati < māpyatē » *is measured* > *measures* [?]); রা « rā » *shout* (rāva); রাই, রাহী « rā(h)i » (rādhikā); রাই « rāi » (rājikā); রায় « rāy » (rājan); রাউৎ « rāut » (? rāja-putra; ? *sts.* < rāja-dūta); MB. রাউল

« rāulå » (rāja-kula) ; সাঁই « sãi » (svāmin); সাড়ী « sāṛī » (sāṭikā) ; শালা « śālā » (śyāla-) ; শাওন « śāẅànɟ » (śrāvaṇa) ; সাওল « sāẅàlɟ » (śyāmāla) ; MB. শাঁও, সাঁও « śãŏ » (śāpa) ; সায়র « sāyårɟ » (sāgara) ; নাহে, নায় « nāhē, nāŏ » (nhāï, snāti) ; হানে « hānē » *strikes* (hānayati) ; etc., etc.

In Late MIA., « ā » of OIA. before one consonant became weakened to « ă » through absence of stress : cases are found in OB., MB., and NB. : *e.g.*, *sts.* « ăkāsa » (Caryā 50 : ākāśa), « *bătāsa », cf. Oriyā « bâtâsâ » (vāta-) ; ‡বয়ার « bâyārɟ » (vāta-) ; *sts.* পগার « pâgārɟ » (prākāra) ; বনারসী « bânārâsī » (vārāṇasīya) ; থইলী > থলী « thâïlī > thâlī » *bag* (sthālikā) ; ঝরখা > ঝরকা « jhårɟk(h)ā » *lattice* (jālakkha-, jālâkṣa-, ? jāla-gavākṣa), cf. Hindī « jhărōkhā » ; MB. রজপুত « râjâ-putâ » (rāja-putra), NB. রাজপুত « rājɟ-putɟ » ; জামাই « jāmāi » (jāmātṛ) might have been « *jămāi » in Old Bengali, dialectally. Evidence of OB. and NB. forms, however, shows that the « ā » in long words also remained as « ā » (or was restored back from « ă » to « ā ») through initial stress, primary or secondary : *e.g.*, বাসর « bāsårɟ » < OB. « bāsa-hara » (vāsa-gṛha) ; ‡ নায়ের « nāyērɟ » (jñāti-gṛha) ; OB. « kāhara » (kārā-gṛha), etc. (see pp. 281, 282).

160. (ii) OIA. « ā » before two consonants.

The change was to « ă » in MIA., and this « ă » followed the fortunes of OIA « ă » > MIA. « ă » before double consonants in Bengali. *E.g.*, আদা « ādā » (ārdra-ka-) ; আম, আঁব « āmɟ, ãbɟ » (ămba, āmra) ; কাজ « kājɟ » (kăjja, kārya) : MB. কাঁতি « kãti » (kăuti, kānti) ; কাঁসা « kã-ā » (kaṅsa-, kāṅsya-) ; জাড় « jāṛɟ » *cold* (jăḍḍa, jāḍya) ; তামা, তাঁবা « tāmā, tãbā » (tămba-, tāmra-) ; বাঘ « bāghɟ » (băggha, vyāghra) ; বাজে « bājē » (bajjaï, vādyatē) ; ‡বাত « bātɟ » (vārtā) ; পাশ « pāśɟ » (*păśśa, pārśva) ; বামুন « bāmun » (bămhaṇa, brāhmaṇa) ; ভাঁড় « bhãṛɟ » (bhăṇḍa, bhāṇḍa) ; মাঙ্গে « māṇgē » *asks* (măggēi, *măṇgēi = mārgayati) ; মাস, মাঁস « māsɟ, mãsɟ » (măṅsa, māṅsa) ; লাস « lāsɟ » (*lăśśa, lāsya) ; সাথ « sāthɟ » *with, in company* (săttha, sārtha) ; হাস « hāsɟ » (hăśśa, hāsya) ; etc.

Occurrence of OIA. « ā » < MIA. « ă » as « ă », after loss of a consonant, is also found in OB. : *e.g.*, « kăpāsa (Carya 50 : kārpāsa), băkhāṇa- (Caryā 37 : vyākhyāna) ; ambāḍa (Sarvânanda : āmrâta) », etc. In NB. we have « ā » : কাপাস « kāpāsɟ » , বাখান « bākhānɟ », আমড়া « āmɟṛā ».

161. In connection with a nasal, Bengali « ã » in initial syllables, when followed by « ā » in the next syllable, has a tendency to be advanced from its ordinary back value of [ã] to a frontal [ã], which becomes a frank [æ̃] or [ɛ̃], in both standard and dialectal Bengali. The colloquial of Calcutta is specially noticeable for this. *E.g.*, কাঁকাল [kākal, kæ̃kal] *spinal cord, waist* (kaṇkāla); কাঁটাল [kāṭal, kæ̃ṭal] *jack fruit* (kaṇṭâla); কাঁসারী [kāʃari, kæ̃ʃari] (kāṅsya-kārika); টাকা for *টাঁকা « ṭākā < ṭaṅkā » [ṭaka, ṭæ̃ka] *rupee* (ṭaṇka-) : cf. South-eastern Bengali টেঁয়া « ṭẽyā » for [ṭæ̃ka] ; পাঁকাল [pākal, pæ̃kal] *a fish* (paṇkâla) ; বাঁকা [bāka, bæ̃ka] (baṇka, vakra) ; ভাঁটা [bʰāṭa, bʰæ̃ṭa] *a ball* (*bhaṇṭa-) ; শাঁখা [ʃākʰa, ʃæ̃kʰa] *conch-bracelet* (śaṇkha-) ; সাঙ্গাৎ [ʃaṇgat, ʃæ̃ŋgat] *friend* (saṇga-) ; etc., etc. This change of [a] to [æ] is frequently indicated in spelling by ে « -ē- » or ্যা « -yā » (বেঁকা, ব্যাকা « bēkā, byākā »).

162. The difference in quality between « ă » and « ā », which was existent from Late OIA. (as [ʌ, ɒ] and [ɑ:]), and became further prominent in MB., when « ă » = [ʌ, ɒ] became [ɔ], has been instrumental in keeping « ă » and « ā » distinct from each other in Bengali; and this distinction of « ă » from « ā » by quality enables us to form some idea of the « ă, ā » in relation to each other in OB. But in the case of the « i » and « u » vowels, there has never been any difference—at any rate, any remarkable difference—between the qualities of their long and short forms. Length of vowels early became immaterial in Bengali, so that a historically long or short syllable no longer could retain its proper spelling when scribes were careless in their writing. In addition to these root causes, there was the influence of Sanskrit orthography in unsettling the proper indication of length in writing. Bengali spelling thus from OB. times has been most unsatisfactory in the matter of length for « i » and « u », and is not at all a sure guide to the early pronunciation. For the expected *দীঠি « dīṭhi » (diṭṭhi, dṛṣṭi), *চীন « cīnā » (cihna), *নীঠুর « nīṭhurā » (niṣṭhura), *তীন « tīn » (tiṇṇi, tri-), *জুঝে « jūjhē » (yudhyati), *উতরে « ūtārē » (uttarati), *দূখ « dūkhā » (dukkha, duḥkha) etc., we find দিঠি « dīṭhi », চিন্ « cīn », নিঠুর « nīṭhurā », তিন « tīn », যুঝে « jūjhē », ‡ উতরে « ūtārē ». Words like « ista » > ইট, ইঁট « īṭ, Iṭ », « bhitti » > ভিত « bhit », « śuṣka- » > শুখা

« śukhā », etc., are not written with the long vowel—unlike the case of original « ă » under similar circumstances, for which we have normally « ā » in Bengali—because quantity does not matter at all in Bengali speech, and because the Sanskrit prototypes on which the spelling is mainly modelled have short vowels ; cf. দীঘি « dighi » = (dīrghikā), সূতা « sūtā » (sūtra-), where the long vowels are on the model of the Sanskrit prototypes. Maithilī, Awadhī, Hindōstānī and Gujarātī, etc. are much more careful, and this carefulness is due to the very nature of their phonetic character in which length of vowels is an important thing.

Old spellings in MSS., and modern spelling and pronunciation both may ignore vowel length for « i » and « u », but it may be surmised that in OB., and in Māg. Ap., the line of development of « i » « u » (as well as of « e, o ») was similar, as in the case of « ă, ā » : i.e., long « I, ū » occurred in the oldest Bengali before a simplified consonant group, although there was weakening of « I, ū » to « Ĭ, ŭ » through absence of stress.

In MB. and NB., the rules of Vowel Harmony modified [i, u] sounds to [e, o] : this is discussed later. There is a certain amount of interchange of [i, u] in root (i.e., initial) syllables in some *dēśī* and *tbh.* forms, for which see below, under ' Origin of the NB. Vowels : [i], [u].'

(3) Initial « ĭ-, ī- », and « -ĭ-, -I- » in Initial Syllables.

163. (i) OIA. and MIA. « ĭ, I » in initial syllables, followed by one consonant, retained its quality in Bengali. Following the Bengali habit of length, monosyllables have the vowel long, and polysyllables short. The quantity is ignored in writing.

কি, কী « ki, kI » (kiṁ, kim) ; কিনে « kinē » (kīṇaï, krīṇāti) ; কিল « kilą » *fisticuff* (kila) ; ‡কীড়া « kīṛā » (kīṭa-) ; খীন « khīną » (kṣīṇa) ; খীর « khīrą » (kṣīra) ; MB. গিম « gimā, giw̃ā » (grīvā) ; গিলে « gilē » (gilati); ঘি, ঘী « ghī » (ghia, ghṛta) ; ঘিন্ « ghiną » (ghiṇā, ghṛṇā) ; চীনা « cīnā » *Chinese* (cīna-) ; OB. চিরায়িত « cirāyită » (Sarvânanda), NB. চিরাতা, চিরেতা « cirātā, cirētā » (kirāta-tikta-) ; জী « jī » (jīva) ; ঝী « jhī » (dhītā, duhitā) ; MB. তিঅড়ী, ‡তিউড়ী « tiāṛi > tiuṛī » *oven* (*with three lumps for the pot*) (trivṛt-ikā) ; ‡তিয়াস « tiyāsą » (tṛṣā + pipāsā) ; থির « thirą » (sthira) ;

তিরছা, তেরছা « tirâchā, tērꞌchā » (*tiracch-, tiryac-) ; *দিঅটী, দেউটী « *diâṭī, dēuṭī » (dīpa-varttikā) ; দিয়াশলাই > দেয়াশলাই, দেশলাই « diyāśâlāi, dēyāś(â)lāi, dēśꞌlāi » (dīpa-śalākā-, *-śalākikā) ; দেরখো « *dia-rākhuā > dērꞌkhō » (dīpa-rakṣa-) ; দিয়ালী, দেয়ালী « diyālī, dēālī » (dīpâvalī-) ; দিল « dilâ » (OIA. dita-) ; MB. নিয়ড় « niyârꞌ » (nikaṭa) ; নিরালা « nirālā » (nirālaya-); নিশী « niśī » (*niśīha, niśītha) ; নিষুতি « niṣuṭi » (niṣupta-); *নিহাঈ, নেহাই « *nihāī, nēhāi » *anvil* (*nidhāpikā) ; নিহারে, নেহারে « *nihārē, nēhārē » (nibhālayati) ; MB. পিয়া « piyā » (priya-) ; পিয়াল « piyālꞌ » (priyāla) ; পিয়ারী, পেয়ারী, প্যারী « piyārī, pēyārī, pyārī » (priya-kārikā) ; *পিঅলী, পিউলি « *piâlī, piuli » (pīta-la-) ; ‡ পিয়ে « piyē » (pibati) ; *পিউশী, পিশি « *pīuśī, piśi » (pitṛ-ṣvasrikā) ; পিষে « piṣē » (*piṣati, pinaṣṭi) ; পিন্ধে, পিঁধে « pindhē, pīdhē » (apinaddha-) ; MB. বিহি « bihi » (vidhi) ; বীড়া « bīrā » *packet, coil* (vīṭa-) ; ‡ শির « śirꞌ » (śiras) ; শিথান « śithānꞌ » from *শিরথান « *śirꞌ-thānă » *head of the bed* (śiras-sthāna) ; *শিহর, শিঅর, শিয়র « *śihârâ, śi(y)ârꞌ » (śikhara) ; শিল « śilꞌ » (śilā) ; শিয়াল « śiyālꞌ » (śiāla, śṛgāla) ; ‡সীয়ে « sīyē » (sīvati) : সীঁতি « sīti » (sīmantikā) ; হিলে, হিলান « hilē, hilān » (abhi-√lī, abhi-√lag ?), see p. 313 ; হিয়া « hiyā » (hiaa-, hṛdaya-) ; etc.

(ii) « ĭ » of MIA. followed by two consonants < « ĭ, ī, ṛ » in OIA. ইঁট, ইট « ĭṭꞌ, īṭꞌ » (*iṇṭa-, *iṇṭha-, iṭṭ(h)a-=iṣṭa-ka) ; MB. ইছিল « ichilâ » (icchita-ila) ; ইঁদুর « ĭdurꞌ » (indura) ; ইঁদারা, ইঁদেরা « ĭdārā, ĭdērā » *masonry well* (indrâgāra-) ; * কিঞুআ, কেঁচো « *kiñcuā, kẽcō » *earth-worm* (cf. kiñcu-la-ka) ; চিকন « cikânꞌ » *fine, thin* (cikvaṇa) ; চিন « cinꞌ » (cihna) ; চিল « cilꞌ » (cilla) ; *চিঁচান, চেঁচান « *cĩcānâ, cẽcānâ » (*cicca-, *ciñca, cf. cīt-kāra) ; ছিট « chiṭꞌ » *chintz* (kṣipta + citra) ; ছিঁড়ে « chĩṛē » *tears* (chiṇḍati) ; জিভ « jibhꞌ » (jibbhā, jihvā) ; ঠীঠ, ঠীট « ḍhīṭ(h)ꞌ » (*ḍhiṭṭha, dhṛṣṭa) ; তিন « tin » (tiṇṇi, triṇi) ; MB. তীখ, তীক্ষি, তীক্‌খি « tīkhꞌ, tikkhi » (tīkṣṇa-) ; তিস « tisꞌ » in ছত্তিস « châttisꞌ » etc. (triṅśat), restricted by the *sts.* তিরিশ « tiriśꞌ » ; MB. দিঠি « diṭhi » (diṭṭhi, dṛṣṭi) ; MB. দীঘল « dīghâlꞌ » (dīrgha-la) ; নিকাস « nikāsꞌ » (niṣkāśa) ; নিঠুর « niṭhurꞌ » (niṣṭhura) ; MB. নিবড় « nibâr- » *finish* (nir-vṛt) ; নিবায় « nibāy » (nirvāpayati) ; নিম « nimꞌ » (nimba) : MB. নিছনী « nichânī » (nirmañchanikā) ; নিদয় « nidâyꞌ » (nirdaya) ; MB. নিশাস « niśāsꞌ » (niḥśvāsa) ; MB. নিসান « nisānâ » *music* (niḥsvāna) ; পিঁজে « pījē » (piñjati) ; পিছল « pichâlꞌ » (picchala) ; MB. পিঙল « piṅgâlꞌ »

(piṇgala) ; *পিপল, পিপুল « *pipâlą, pipulą » (pippalī) ; পিঠ « piṭhą » (piṭṭha, pṛṣṭha) ; পিঠা « piṭhā » *cake* (piṣṭaka) ; পিতল « pitâlą » (pittala) ; বিভল « bibhâlą » (bibbhala, vihvala) ; বিছা « bichā » (vṛścâ-, cf. vṛścika) ; বিছানা « bichānā » *bed* (vicchādana-) ; বিটলা « biṭąlā » *ugly, vicious* (*dēśī* viṭṭhāla- *polluting*) ; বিনতি « binâti » (viṇṇattia, vijñaptikā) ; ভিখ « bhikhą » (bhikṣā) ; ভিন « bhiną » (bhinna) ; ভিল « bhilą » (bhilla-) ; ভীমরুল « bhīmą-rūlą » for *ভিংরুল « bhiṇ-rulą » *hornet* (bhṛṇga-rōla) ; মিশে « miśe » (miśrīyatē) ; মিশায় « miśāĕ » (miśrāpayati) ; রীষে, রিষে « rīśē » (rīṣyati) ; *লিঙ্গট, লেঙ্গট « *liṇgâṭą, lēṇgâṭą » (liṇga-paṭṭa) ; শিকা « śikā » (śikyā-) ; শিঠা, শিটা « śiṭ(h)ā » *lees, dregs* (śiṣṭa-) ; সিঁদূর « sīdūrą » (sindura) ; সিধা « sidhā » (siddha-) ; হিং « hiṇ » (hiṇgu) ; হিঁতাল, হেঁতাল « hītālą, hētālą » (hintāla) ; etc., etc.

(4) « ŭ, ū » Initial, and in Initial Syllables.

164. (i) « ŭ, ū » followed by one consonant remain « u » in NB., except where altered to « ō » by Vowel Harmony. The NB. « u » is long in monosyllables. উপাস « upāsą » *sts.* (upavāsa) ; MB. উয়ে, উএ « uē » (udēti) ; উনিস « uniśą » (una-viṅśa) ; OB., MB. উআরী « uārī » *adorned palace or pavilion*, as in বার-উয়ারী, বারোয়ারী « bārą-uārī, bārwārī » *festivity in a pavilion erected by public subscription* : cf. উয়ারী or ওয়ারী, *place-name in Dacca district* (upakāra, -ika) ; উরুত, উরত « urutą, uratą » (*uru-vant- = ūru : cf. ūrv-asthī-vant- *thigh and knee* ; or ? ūru-asthi *thigh-bone*) ; কুঁচিয়া, কুঁচে « kũciyā, kũcē » *a fish, like the eel* (kucika) ; কুল « kulą » (kula) ; MB. কুঙার, কোঙর, কোঁয়ার « kuw̃ārą, kōw̃ârą, kōw̃ārą » (kumāra) ; কূয়া « kūā » (kūpa-) ; ক্ষুর, খুর « khurą » (kṣura) ; গু « gu (= gū) » (gūtha) ; গুয়া « guā » (guvāka) ; চুষে, চোষে « cuṣē » cuṣē, cōṣē » (cuṣati) : ছুঁচ « chũc » (sūcī) ; ছুঁএ, ছোঁয় « chũē, chõy » (MIA. chuvaï = spṛśati) ; জুয়া « juā » (dyūta-) ; জুঁই, যুঁই « jũi » (yūthikā) ; তূলা « tūlā » *cotton* (tūla-) ; তূষ, তুঁষ « tūṣą, tũṣą » (tūṣa) ; তুরিত « turitą » (*turanta : *tvar-ant-) ; ধুআ « dhūā » (dhrūva-) ; ধুনে « dhūnē » (dhūṇaï, dhūnōti) ; পুঁই « pũi » (pūtikā) ; পুড়ে « puṛē » *burns* (puṭati) ; পুরানা « purānā » (purātana-) ; পূরে « pūrē » (pūrayati) ; ফুড়ে « phuṛē » (sphuṭati) ; ভুখ bhukhą » (bubhukṣā) ;

ভুঁই « bhũi » (bhūmi); ভোমা « bhōmā » < *bhuma » (as in Early Assamese) *eyelash* (*bhuva, *bhruva, bhrū); ভুজালি, ভোজালি « bhujāli, bhōjāli » (bhujapāla-); মু « mu » (mukha); মূলা « mūlā » (mūla-); শুঁয়া « śũā » *tendril* (śūka-); শুনে « śunē » (śuṇaï, śṛṇōti); শূয়র śūarṛ (śūkara, sū-); etc., etc.

(ii) OIA. « u, ū » before two consonants = MIA. « ŭ » > Bengali « u, ū »: ‡উক « ukṛ » (ulkā); উখড়ে « ukhaṛē » (ukkhāḍēï, utkhātayati); উগরে « ugarē » (udgārayati); উঁচা « ũcā » (*uñca, ucca-); উজায় « ujāy » (ud-yāti); উজাড় « ujāṛṛ » *treeless, waste* (?ud-jhāṭa); উঠে « uṭhē » (ut-sthā-); উড়ে « uṛē » (uḍḍēï, uḍḍayatē=uḍḍīyatē); ‡উদ « udṛ » (udra); উথল « uthalṛ » *overflow* (utsthala); ‡উন « ūnṛ » (urṇā); উনানী, উনান « unān(ī) » *oven* (*uṣnāpanikā); উমড় « umarṛ » (unmarda); উভা « ubhā » (ubbha-, ūrdhva-); উমায় « umāy » *shimmers* (uṣmāyatē); উলসে « ulasē » (ullasati); কুঁকুড়া « kũk(u)ṛā » (kukkuṭa-); কুমার « kumārṛ » (kumbha-kāra); কুমীর « kumīrṛ » (kumbhīra); কুঁচি « kũci » *bristle, hard broom* (kurcikā); কুঁচ্‌কি « kũcki » *groin* (kuñc-); কুমড়া « kumṛā » (kuṣmāṇḍa); কুঁদ « kũdṛ » *a flower* (kunda); কুঁদে « kũdē » *jumps* (kurdati); কুঁজা « kũjā » (kubja-); খুড়া « khuṛā » (khulla=kṣudra+tāta); খুদ « khud » *broken rice* (kṣudra); গুছান « guchānā » *arranged* (guccha-); গুজরাট « gujṛrāṭṛ » (gurjara-trā, Beng. -ṭ- < rāṣṭra); চুমে « cumē » (cumbati); চুক « cukṛ » *mistake, fall* (cukka, cyut-kṛ): চূণ « cūṇṛ » (cūrṇa); ঝুনা « jhunā » *old, dried-up coco-nut* (? jūrṇa-); ছুতার « chutārṛ » (*sūtra-kāra=sūtra-dhāra); OB. ছুধ (Caryā 9) > ছুত « chudha > chutṛ » *impurity, the touch of which is pollution* (? kṣubdha : infl. of √chu- *touch*); যুঝে, জুঝে « jujhē » (yudhyatē); টুটে « ṭuṭē » (truṭyati); ডুমুর « ḍumurṛ » (udumbara); ডুবে « ḍubē » *sinks* (*dēśī* buḍḍaï); ঢুঁড়ে « ḍhũṛē » *seeks* (*dēśī* ḍhuṇḍhaï); তুমি « tumi » (MIA. tumhē); তুঁতিয়া, তুঁতে « tũtiyā, tũtē » (tūttha-); দুঁদিয়া, দুঁদে « dũdiyā, dũdē » *quarrelsome* (*dunda-, dvandva-); দুধ « dudhṛ » (dugdha); ধুথুরা « dhūt(h)urā » (dhūstura-); পুঁড় « pũṛṛ » (puṇḍra); পুখুরী, পুখুর, OB. পোখিরী « pukhur(i), pōkhiri » (puṣkariṇī, puṣkiriṇī in the 'Divyâvadāna'); পুছে « puchē » (pucchaï, pṛcchati); পুত « putṛ » (putra); MB. পুনিম « pūṇima » (pūrṇimā); পূব « pūbṛ » (pūrva); ফুটে « phuṭē » *bursts* (sphuṭyatē); বুঝে « bujhē » (budhyati); বুড়া « buṛā » (buḍḍha-, vṛddha); বুঁদ « būdṛ » (*bundu, bindu); মুগ « mugṛ » (mudga); MB. মুদড়ী « mudaṛī » *ring* (mudrā); মুথা « muthā » (musta-); MB. রুঠা

« ruṭhā » (ruṣṭa-); শুখা « śukhā » (suṣka-); শুঁড় « śũṛ » (śuṇḍa); শুঁঠ « śũṭh » (suṇṭhī); MB. শূন « śūn » (śūnya); etc., etc.

OIA. « i, ī, u, ū » occurred as « ĕ, ŏ » in MIA., before two consonants: the reason for this lowering of the high vowels of OIA. is not clear (see Pischel, 'Gramm. der Prakrit-sprachen, §§ 119, 122, 125). NIA. retains the « ē, ō » vowels in some words inherited from MIA. In Bengali, instances are বেল « bēl » (bĕlla, bilva); হেথা « hēthā » (ĕttha, itthā); OB. বেণ্ট « beṇṭa » (Caryā 33 : = bāṭa ?) (vĕṇṭa, for *viṇṭa = vṛnta); কোঁখ « kõkh » (*koṇkha: cf. kukṣi); গোছা « gōchā » (gŏccha, for guccha = *gṛp-sa); ছেঁদা « chẽdā » (*chĕnda-, chidra); তেঁতুল « tẽtul » (tĕntalī, tintiḍī *dēśī*); মোড় « mōṛ » *head of street*, (?) মোড়ল « mōṛal » *head-man, chief* (see p. 320) (mŏṇḍa, muṇḍa); MB. পোথা « pōthā » *big book* (pŏtthaa, pustaka); OB. পোখিরি « pōkhiri » (*pŏkkhira-, puṣkara-); MB. মোল « mōla » (mŏlla, mūlya); cf. also MB. খেড় « khēṛ » (khĕḍḍă = *khĭḍḍa, kiḍḍa = kṛīḍá); OB. তাঁবোলা « tãbōlā » (tambŏlla : tāmbulá).

(5) MIA. « ĕ, ē; ŏ, ō ».

165. MIA. « ĕ, ē » and « ŏ, ō » < OIA. « ē, āi, ay » and « ō, āu, av », remain in Bengali, except where they are modified in post-Bengali times by Umlaut or Vowel-Harmony. From Early Middle Bengali times, it would seem that « ē » in initial syllables, with a low position, became the open « è » = [ɛ]; this occurs in New Bengali as [ɛ] or as [æ]. It is possible that « ō » similarly tended to become the open « ò » = [ɔ], but in New Bengali this is not a noticeable feature, although in the Bengali of the extreme West this broad pronunciation is at times heard.

(i) OIA. « ē » before one consonant > MIA. « ē » > Bengali « ē » [e, ɛ, æ]: *e.g.*, এ « ē » *this* (ēa, ētad); এগার « ēgārà » (Late MIA. « ēgāraha », for « ēāraha » = OIA. « ēkādaśa »: « ēga » a Late MIA. *sts.* from « ēka ») ‡ এজ্বরি « ēj(w)årī » (ēka-jvara-); কেয়ারী « kēyārī » *flower bed* (kēdārikā); কেউ, কেহো « kēu < kēhō » (*kēvō, *kēvi, *kē'pi = kaḥ api); খেয়া « khēyā » *ferry* (kṣēpa-); খেই « khēi » *thread wound round* (kṣēpa); খেল « khēl » (khēlā); চেলা « cēlā » [ʧælɑ] (cēlāka); চেড়ী « cēṛī » (cēṭikā); ছে « chē » (chēda); ছেঁচে, সেঁচে « chẽcē, sẽce » (*señcayati, sēcayati); MB. দে « dē »

(dēha, dēva); দেওর « dēor » [dæor] (dēvara); MB. দেয়া « dēyā » *sky, cloud* (dēva-); দেঅলিয়া > দেউলে « dēẘaliyā > dēulē » *pauper* (dēva-kulika-); MB. দেহরা « dēhårā » (dēva-gṛha-); দেয় « dēy » (*dēti = dāti, dadāti); *দেঅড়ী > দেউড়ী « *dēẘårī > dēuṛī » (cf. Skt. dēhalī); MB. দেয়াসিনী « dēyāsinī » *priestess* (dēva-vāsinī); নেহ > নেই « nēha > nēi » (snēha); নেউছা « nēuchā < *nēẘåchā » (nēpathya-); পেঁচা « pẽcā » (pēcaka); পেঁড়া « pẽṛā » (pēṭaka); ভেড়া « bhēṛā » (*mheḍa-, *mēha-ḍa-, mēṣa-); ভেলা « bhēlā » (bhēlaka); MB. রেহ « rēhå » (rēkhā); হেঁয়ালী « hẽyālī » *riddle* (hēmâlikā); সেঁওতী « sẽõti » *a flower* (sēvanti); etc., etc.

(ii) OIA. « ē » before two consonants > MIA. « ĕ » before two consonants > Old Bengali « ē » before single consonant = NB. « ē »; [e, ɛ, æ]. Also MIA. formations, *sts.* or *dēśī*, or otherwise, with « ĕ » before two consonants.

Examples: এক « ēkꝺ » (MIA. *sts.* ĕkka); এত « ētå » (MIA. ĕttia-); এবে « ēbē » (MIA. ĕmba-); এথা, হেথা « (h)ēthā » (MIA. ĕttha-); খেত « khētꝺ » (kṣētra); MB. গেঁড়ুয়া « gẽṛuā » (MIA. *gĕṇḍu-); জেঠা « jēṭhā » (jyēṣṭha-tāta); দেখে « dēkhē » (dĕkkhaï, dṛkṣ-); নেড় « nēṛꝺ » (*dēśī* lĕṇḍa); নেত « nētꝺ » *fine cloth* (nētra); MB. পেম « pēmꝺ » (pĕmma, prēman); পেলে > ফেলে « pēlē, phēlē » *casts, throws down* (pĕllaï, prērayati); পেট « pēṭꝺ » (*dēśī* pĕṭṭa); বেটা « bēṭā » *son* (bĕṭṭa- < ? vētra-: cf. vaṅśa *family*); বেত « bētꝺ » (vētra); বেড়া « bēṛā » (vēḍha, vĕḍḍha, vĕṭṭha, vēṣṭa-); শেয়, শেজ « śējꝺ » (śĕjja, śayyā); শেল « śēlꝺ » (śĕlla, śalya); শেঠ « śēṭhꝺ » (śĕṭṭhi, śrēṣṭhin); হেঁট « hẽṭꝺ » (hĕṭṭha = ? *adhiṣṭāt; Sanskritisation, in the ' Mahā-vastu,' hēṣṭā); etc.

(iii) OIA. « āi » > MIA. « ē, ĕ » > Old Bengali « ē » > NB. « e » [e, ɛ, æ]; also OIA. « -ay- » > MIA. « ē, ĕ » > Bengali « ē ». গেরুয়া « gēruā » (*gāiruka); MB. চেঅন « cēẘånå » (caitanya); তে « tē » in compounds (tray-); তেল « tēlꝺ » (tĕlla, tāilá); MB. বেজ « bējå » (vāidya); বেহাই, বেয়াই « bēhāi, bēyāi » (vāivāhika); শেয়ালা « śēyālā » (śāivāla-); etc.

Dēśī words like ঢের « ḍhērꝺ » *much* (cf. MIA. *dēśī* ḍaharī, Beng. ḍaharꝺ *deep*), ঢেঁকী « ḍhẽkī » *husking machine*, ঢেঁড়স « dhẽṛåsꝺ » *a vegetable, 'lady's fingers,'* ঢেঁড়ী « ḍhẽṛī » *an ear-ornament*, ঢেকুর « ḍhēkurꝺ » *belching*, ঢেকা « ḍhēkā » *a push*, etc., are of uncertain origin.

(6) MIA. « ŏ, ō ».

166. (i) OIA « ō » before one consonant remains in Bengali: *e.g.*, MB. কোইল, কুইলা « kōilă, kuilā » (kōkila-); কোল « kōlʼ » (krōḍa); কোণ « kōṇʼ » (kōṇa); কোষা « kōṣā » (kōṣa-); গোআলা « gōālā » (gōpāla-); গোরু « gōru » (gō-rūpa); গোসাঁই « gōsāi » (gōsvāmin); ঘোড়া « ghōṛā » (ghōṭa-, *dēśī*); জো, যো « jō » *opportunity, chance* (yōga); যোয়ায় « jōāy » *is supplied* (yōgāyatē); তোড়ে « tōṛē » (trōṭayati); তোলে « tōlē » (tōlayati); থোড়া « thōṛā » (stōka + -ḍa-); দোলা « dōlā » (dōla-); ‡পোলা « pōlā » (pōta-la-); পোষ « pōṣʼ » (pōṣa); ফোড়া « phōṛā » (sphōṭa-); MB. মো « mō » (mōha); মোআ « mōā » (mōdaka-); মোচা « mōcā » *plantain* (mōca in Pali: *dēśī*); রোঁ « rō » (rōman, lōman); রোয় « rōy » (rōpayati); MB. শোহে « śōhē » (śōbhatē); ষোল « ṣōlă » (ṣōḍaśa); সোঁতা « sōtā » (sŏnta-, srōtas); etc.

(ii) OIA. « ō » before two consonants > MIA. « ŏ » before two consonants > Bengali « o »: *e.g.*, MB. ওঠ « ōṭhă » (ŏṭṭha, ōṣṭha); কোটাল « kōṭālʼ » (kŏṭṭa-pāla. kōṣṭha-pāla); কোল « kōlʼ » *Kōl, non-Aryan people* (MIA. kŏlla); খোঁপা « khōpā » (MIA. khŏmpa- < ?); গোঁড় « gōṛʼ » *fleshy navel*; *a non-Aryan tribe* (MIA. *dēśī* gŏṇḍa); গোঠ « gōṭhʼ » (gōṣṭha); গোত « gōtʼ » (gōtra); ঘোল « ghōlʼ » (MIA. ghŏlla = ghūrṇa- ?); গোঁফ « gōphʼ » (*gŏmpha, gumpha); গোফা « gōphā » *cave* (*gŏppha-, gumphā < ?); জোত « jōtʼ » (yōktra); জোংড়া « jōṇṛā » *shell fish* (MIA. *jŏṇga-ḍa-, *dēśī*, as in OB.); জোনাকি « jōnā-ki » *moon-light*, as in Assamese, = *fire-fly* in Bengali (jŏṇha-, jyōtsnā); টোপর « ṭōpărʼ » *helmet, bridegroom's tinsel crown* (MIA. *ṭōppa-ra-: *dēśī*); ডোম « ḍōmʼ » (ḍōmba); ঢোল « ḍhōlʼ » *drum* (MIA. ḍhŏlla-: *dēśī*); পোথা, পোথী > পুথী « pōthā, pōthī > puthī » (potthaa < *pōstaka, Skt. pustaka, pustikā); বোড়া « bōṛā » *a snake* (bōḍṛa-); যোত « jōtʼ » (yōtra); লোধ « lōdhʼ » (lōdhra); etc.

(iii) OIA. « āu̯-, ăv-, āv-, uv- » before single and double consonants; also OIA. groups « -am-, -up- », etc. > « -av-, uv- », > Late MIA. « ō-, uv- » before single consonant, « ŏ » before two consonants > Bengali « o »; *e.g.*, ওঝা « ōjhā » (ŏjjha, uvajjhāa, upādhyâya); ওড়ন, ওঢ়ন « oṛ(h)ănʼ » (ŏḍḍhaṇa, *ōvĕḍḍhaṇa, ava-vēṣṭana); ‡ওস « ōsʼ » *dew* (*ośśa, avaśyā); ওড়িয়া, উড়িয়া « ōṛiyā > uṛiyā » (ŏḍḍiya-, āu̯ḍrīya-); কোঁচ, কোচ « kōcʼ, kōcʼ » *a North*

Bengal tribe (*kaw̃ōca: cf. Sanskritisations kuvaca, kambōja); গোরা « gōrā » (gaura-); চোর « cōr৵ » (cāura); ছোঁএ « chõ̆ » (MIA. chuvaï=spṛśati-); ছোঁচ « chõ̆c৵ » (*śoñca, śāuca); থোয় « thōy » (thāvei, sthāpayati); দোনা « dōnā » *leaf-cup* (damanaka-); ধোবা « dhōbā » (√dhāv; -b-< ?); নো, লো, লোহা « nō, lō, lōhā » (lāuha-); সোনা « sōnā » (suvarṇa-); সোহাগ « sōhāg৵ » *husbands' love* (sāubhāgya); MB. লোণ, লুন>নুন « lōṇ৵, luṇ৵, nuṇ৵ (lavaṇa) »; মো, তো « mō, tō » (mama, tava); সোয় « sōy » (suvaï, svapiti); পোয়া « pōā » ¼ (pāvaa, *pāðaga, pāda-ka); etc., etc.

Cases of interchange between « i » and « ē » and between « u » and « ō », which characterise Bengali phonology, are treated later, under Vowel Harmony.

[III] Vowels in the Interior of Words.

(1) Vowels not in Contact in MIA.

167. Elision of vowels in the middle of words through absence of stress occurs sporadically in the earlier forms of IA. Examples have been adduced at p. 278. Elision of whole syllables by haplology sometimes occur in OIA.: *e.g.* Vedic « tuvīra(va)vān, ir(adh)adhyāi, ma(dhu)-dugdha, śīrṣa-(sa)kti », etc. (Cf. Macdonell, 'Vedic Grammar for Students,' p. 19.) But a regular tendency to drop unstressed vowels in the interior of words manifested itself only as late as the 15th century in Bengali, as we have seen before (pp. 295 ff.). It would be seen that the preference which Bengali has developed for words of two syllables, or *morae*, is responsible for the loss of a medial vowel: this loss commonly takes place when a primitive word (primitive so far as Bengali is concerned) is extended by the addition of an « -ā » or « -I » affix. This is the dimetristic or bimoric (dvi-mātrika) principle operating on length in Bengali words (see 'Bengali Phonetics,' § 55).

Loss of vowels in the interior of words through lack of stress, in MB. and NB.:—

(i) Loss of OIA., MIA. « -ă- »: *e.g.*, আগলায় « āg৵lāĕ » *guards* (argalayati); *আটতীস, আটত্রিস « āṭ৵t(r)is৵ » (aṣṭa-triṅśat); ওড়না « ōṛ৵nā » *veil* (ava-vēṣṭana-); উনিশ « uniś৵ » (una-viṅśati); করনা, কন্না « kar৵nā, kannā »

(karaṇa-), and similar cases of the verbal noun in « -ana- », like ধরনা « dhårṇā » (dharaṇa-), কলনা, কল্পা « kålṇā, kållā » *coquetry* (kalana-), কাঁদনা, কান্না « kǎdṇā, kānnā » (krandana), etc., etc.; কাঠড়া « kāṭhṛā » *lumber* (kāṣṭha + ḍa-); কলমী « kalṃī » (kalambika); গুমসা « gumṣā » (? grīṣma-); ঘোড়গাড়ী « ghōṛṇ-gāṛī » (ghōṭa-*gaḍḍikā); চিতল, চিথল « cit(h)ålṇ » *a fish* (cittahala, citra-phala); টাঁকশাল « ṭǎkṇ-śālṇ » *mint* (ṭaṅka-śālā); গাধা « gādhā » (gaddaha-, gardabha-); পঁয়ত্রিস for -তীস « pāyṇ-t(r)īsṇ » (pañca-tiṁśa, pañca-triṁśat); বধনা « bådhṇā » *water-jug* (vardhana-); বাদলা « bādṇlā » *rains* (vardala-); পসারী « pāsārī » < « *panṇ-sārī », cf. Hindī « pansārī » (paṇya-śālika); নরুণ < নরুণী « nåruṇṇ < nåruṇī » (*naha-haraṇiă, nakha-haraṇikā); ময়রা « måyṇrā » (madaka-); ময়না « måynā » (madana-); ভিমরুল, *ভিঙ্গরুল « bhimṇ-rula, *bhiṅṇ-rula » (bhṛṅga-rōla); সিঁথা « sīthā < *sīm̃anta- » (sīmanta-); সকড়ী « såkṇṛī » *leavings of meal, refuse* (*saṅkaṭikā); শিথান « śithānṇ » < « *śirṇ-thānā » *head of bed* (śiras + sthāna); ভাশুর « bhāsurṇ » < « *bhāi-śvaśurā » *husband's elder-brother* (bhrāṭṛ-śvaśura); দেরখো « dērṇkhō » < « *dia-rākh-uā » (dīpa-rakṣa-); *sts.* কদমা « kådṇmā » *a sweet-meat* (kadamba-); ঘটকালি « ghåṭṇkāli » *profession of a match-mater* (*sts.* ghaṭaka + ūla-); ছকড়া « chåkṇṛā » (*chakkaḍa-, śakaṭa-); মেঘলা « mēghṇlā » (mēgha-la-); and in recent polysynthetic expressions like 'আদ্দিন' « eddin » *so many days*, (= ētā dinṇ), যদ্দিন « jåddin » *so long* (= jåtā dinṇ), তখনি « tåkhṇni » *immediately* (= tåkhånṇ + i), etc.

In the affix « -tavya- », giving the future (and verbal noun) affix of Bengali, -ইব- « -ibå- », there is loss of « - ă - » : করিব « kåribå » (kåribba, kariabba, *karitavya, kartavya); দিব « dibå » (*diabba, *ditavya = dātavya); চলিব « cålibå » (*caliabba, calitavya, cf. cartavya); নিব « nibå » (*niabba, nētavya), etc., etc. This loss of course, is of Vowels in Contact (q.v.), and is pre-Bengali. Also in the past and adjectival affix ইল « -ilå » < « -(i)ta- + -ila » : সুতিল « sutilå » (*suttilla, sutta-illa, supta + ila); পাকিল « pākilå » (*pakkilla-, pakka-illa, pakva + ila-); etc.

(ii) OIA., MIA. « -ā- » : loss in Bengali, in Late MB. and NB. times : আখড়া « ākhṇṛā » (akṣa-vāṭa-); আঙ্গরা « āṅṇgrā » (aṅgāra-); উখড়ে, উখড়য় « ukhårē, ukhṇṛåĕ » from উখাড়ে, উখাড়য় « ukhārē, ukhāṇråĕ » (utkhātayati); so উপড়ে, উপড়য় « upårē, upṇṛåĕ » (utpātayati); OB.

« kāhără » (kārā-gṛha) ; কুমড়া « kumaṛā » (kuṣmâṇḍa-) ; Calcutta Bengali গয়লা « gåyaḷā » = গোয়ালা « gōālā » (gōpāla-) ; গাবরাট « gābaṛāṭ » (garbhâ-gāra-kāṣṭha) ; বাঙ্গলা « bāŋ(g)ḷā » (vaŋgāla-) ; etc. Cf. Standard Colloquial forms of names, with implication of contempt, like রাখ্‌লা « rākhḷā » from « rākhāḷ » *a personal name* (= rakṣā-pāla-), গোপ্‌লা « gōplā » *sts.* (= gōpāla-) ; etc. ; and ' কোজ্জাচ্চ ' « kōjjāccå » = কোথা যাইতেছ « kōthā jāitēchâ » *where are you going ?*, কোত্থেকে « kōtthēkē » = কোথা থাকিয়া « kōthā thākiyā » *from where ?* etc., etc.

Unstressed original « -ă- » and « -ā- > -ă- », when flanked before or after, or on both sides, by a high vowel (preferably an « -i »), are changed to « -u- » in Late MB. and NB. The intermediate stage of this change was an [o] sound : [ə > o > u]. This is due to Vowel Harmony which characterises Bengali phonology : see next chapter.

(iii) OIA., MIA. « -ĭ-, -ī- » . Between consonants, the « i » vowel in the interior of a word in Bengali is reduced to « ă », as it is found in MB. and NB. orthography, and it is now dropped in NB. Possibly in Late MB. the elision of the « i » vowel characterised the pronunciation ; although the orthography, by not using the *virāma* in the place of the elided or quiescent « i », suggests the presence of, and, it seems, even helped to bring in, an « ă = å » pronunciation. Examples : কুট্‌নী « kuṭnī » *bawd* (kuṭṭinī) ; খন্‌তা « khantā » (khanitra-) ; ঘরণী « ghår(å)ṇī », OB. « ghariṇī » (gṛhiṇī) ; চাঁদনী, চাঁদিনী « cādni < cādinī » *moonlight* (*candrinikā) ; পরখ « pårākhaṛ », পরখা « pårāḷkhā » (parīkṣā, parīkṣ-) ; পয়্‌লা « påyaḷā, *påhlā, påhålā, påhilā » (pahilla-, pratha + ila-) ; পরে « pårē » from MB. পহে « pårhē, påhrē = påhirē, pårihē » (*parihaï, paridhīyatē) ; পড়্‌শী « pårśī » from MB. পড়িশী, পড়শী « pårisī, pårâśī », OB. « paḍiẏēśī » (prativēśin) ; পরশে « pårāśē » *serves food*, OB. « *pâriẏēśaï » (pārivēśayati ; cf. Hindī parōsai) ; পান্তা « pāntā » *watery* (pānī, pānīya-) ; পিঁপ্‌ড়া « pīpṛā » MB. পিঁপীড়া « pīpīṛā », OB. « *pimpīḍā » (also « pimpaḍā », as in Sarvânanda) (cf. Skt. pipīlikā) বড়শী « bår(å)śī » *hook* (baḍiśa-) ; মিন্‌সা « minsā » *fellow, man (in contempt)* < « *minisā, munisā », cf. ‡মুনিস « munisaṛ » *day-labourer* (Aśōkan Prakrit munisa = manuṣya) ; সরষা, সরিষা « sårṣā, sårişā [ʃoriʃa] (sarisava-, sarṣapa-) ; *sts.* form like পেত্‌নী « pētnī » (prētinī) ; colloquial forms of names,

contemptuous, like বিপ্‌নে, রস্‌কে, ফট্‌কে « bipnē, råskē, phåṭkē » etc. (vipina + iyā, sphaṭika + iyā, rasika + iyā); etc., etc.

In NB. compounds also: চিরুন-দাঁতী « cirun-dãtī » *comb-toothed* from চিরুনী « cirunī » (=*cirāwanī) *comb*; পানফল « pān-phåla » for পানী-ফল « pānī-phåla » *water chestnut*; পান-কৌড়ী « pān-kåuṛī » *a water-bird* (pānī + kåuṛī, cf. kukuḍā, kukkuṭa-); পাখ-মার « pākh-mārअ » *a bird-killer* (pakṣī + māra-); গাড়য়ান « gāṛ-ānअ, gāṛåwānअ » *cab-man* (gāṛī + wānअ), etc.; সেদিনে « sē-dinē » *on that day* >colloquially 'সিদ্‌নে' [ʃidne], etc. Intervocal « -i- », after « -ă-, -ā », is the most common Bengali vowel to have been dropped in the development of NB. from MB. The vowel « i » wherever possible underwent epenthesis in MB.; and the epenthetic « i » was weakened and dropped in West Bengali, altering the quality of the contiguous vowels, although this epenthetic « i », full or weakened, still remains in East and North Bengali. (See under 'Epenthesis.')

There is loss of « -i- » in the formation of the past and adjectives base -ইল « -ilå » of Bengali: and this loss is pre-Bengali: *e.g.*, চলিল « cålilå » (*calilla-, *calia-illa-, calita + ila-); আনিল « ānilå » (*āṇilla-, cf. Ardha-māgadhī āṇilliya; *āṇĭa-illa-, ānīta + ila); রাখিল « rākhilå » (rakkhilla-, rakkhia-illa-, rakṣita + ila); etc., etc. (See later, 'Vowels in Contact.')

(iv) OIA. and MIA. « -ŭ-, -ū- ». Between consonants, this vowel behaved like « i » in Bengali—although the « ă » pronunciation of « -u- » is not so common. Examples: আঙ্গটা, আঙ্গটী « āṇṭā, āṇṭī » *ring* (aṇguṣṭha-); আঁকশী « ãkśī » *pole-hook for gathering fruit* (aṇkuśikā); উঁচ-কপালী « ũc-kåpālī » *high browed* (*term of abuse among women*), cf. উচু « ũcu » *high*; কুঁকড়া « kũkṛā » (kukkuṭa-); কুড়মী, কুর্ম্মী « kuṛmī, kurmī » *a caste* (kuṭumbin); ঠাকরন « ṭhākrån » *honoured lady* (MIA. *ṭhakkurānī); বাবলা « bāblā » *acacia* (barbula-); MB. নিহুড় « nihuṛ- » *return* (ni-ghuṭ) is found as নিহড় « nihåṛ- »; similarly, বাহুড়, বাহড় « bāhuṛ-, bāhåṛ- » *return* (vi-ā-ghuṭ); বিজলী « bij(å)lī » from বিজুলী « bijulī » (vijju-, vidyut-); familiar forms of names, like 'ওৎলো' [otlo] for অতুল, অতুল-উআ « åtulå + uā », etc. Cases of loss of « -u- », however, are not so common as that of « i ».

Through epenthesis also « -u- » is lost. In Late MB., and in most Bengali dialects, this epenthetic « -u- » became « i », and fell together with it.

(v) MIA. « -ē- », from various sources in OIA., is rarely lost in early Bengali. It is weakened to « i » in some cases, when followed by « i » in the next syllable, and to « ă ». *E.g.*, OIA. « ākhēṭika » (< ?) = OB. « ahērī » *hunter*; MIA. « amhēhi, tumhēhi » > Bengal আমি, তুমি « āmi, tumī »; OIA. « prativēśin » > MIA. « *paḍivēsī » > OB. পড়বেষী « *paḍavēṣī » in MS. = « *paṛiẏēśī » > MB. « pāṛiśi » > NB. পড়শী « pāṛśī »; OIA. « parivēśayati » > Late MIA. « *pariwēśēï, -aï » > OB. « *pariẏēśaï, *paravēśaï » > MB. *পরিসে, পরসে « pāriśē, *pāråśe » > NB. পরশে « pāråsē »; OB. « bahēñcī » > NB. বইঁচী « bāīcī « *a fruit*; OIA. » bahēṭaka(?)(cf. Pischel, 'Grammatik der Pkt.-Sprachen,' §115) > MIA. « bahēḍaa- » > OB. « bahēḍā, bahaḍā » (Sarvânanda) > MB. বহড়া « bāhāṛā », NB. বয়ড়া « bāyṛā » [bɔĕṛā]; OIA. « kāravēlla, *kăravēlla- » > Late MIA. « karavĕlla » > NB. করেলা, করলা « kārēlā, kār(å)lā » *a vegetable*; *sls.* সন্দ « sāndā » > OB., MB. « *sandaha » (sandēhā); etc. Cf. Bengali আধ্‌লা « ādhlā » *a half piece*, Hindōstānī « adhēlā ».

The MIA. form in « -ē- » for the causative is lost to Bengali, having followed the simple verb form: OIA. « cālayati », > Late MIA. « cālēï » > « *cālaï » > Beng. চালে « cālē »; MIA. « kārāpayati = kārayati » > Late MIA. « karāvēï, karāvaï » > B. করায় « kārāĕ »; etc.

In NB., following the bimoric principle, « -ē- » is commonly dropped in familiar forms of names, like « Varēndra- » > বরেন « bārēnd̪ » : বর্‌না « bārnā », « Gaṇēśa- » : গণ্‌শা « gāṇśā », « Narēśa- » : নর্‌শা « nārśā », etc.

(vi) MIA. « -ŏ- , -ō- », from various sources: loss rare in Bengali. MIA. « tambōla » > NB. তামলী « tāmlī » (tāmbulika); আলুনী < আলোনী « āluni < *ālōnī », occasionally « álni » (*alōṇia, alavaṇika); NB. দামড়া « dāmṛā », cf. OB. « dāmbōḍā » (Sarvânanda) (damya-); পড়োল, পরোল, পরলা « pāṛōld̪ pārōld̪, pār(å)lā » (paṭōla-); etc. Cf. NB. গামছা < গা + মোছা « gāmchā < gā + mōchā » *towel*, lit. *body-wiper*.

Like « -å-, -ā- > -å- » of Bengali flanked by high vowels, « -o- » in the interior of a word becomes « -u- »: this is treated under Vowel Harmony.

168. Interior vowels remain in Bengali when they occur (through loss of original MIA. or OB. final vowel) in the last syllable of the word in NB., and are closed by a consonant.

(i) « -ă- » : আঁচল « ãcâl# » (añcala) ; আশথ, অশথ « āśâth#, âśâth# » (aśvattha) ; উজল « ujâl# » (ujjvala) ; কাঁদন « kãdân# » (krandana)) ; কেঅট, কেওট « kēâṭ#, kēŏṭ# [kæoṭ] » (kēvaṭṭa, kāivarta) ; গাড়ল « gāṛâl# » (gaḍḍala) ; ঘায়ল, ঘায়েল « ghāyâl#, ghāyēl# » (ghāta-la) ; চরণ « cârâṇ# » (caraṇa) ; ছাঅন, ছাওন « chāân#, chāŏn# » (chādana) ; ছাঁদন « chãdân# » (*chandana) ; জীঅন, জীওন « jiân#, jiŏn » (jīvana) ; ঢাকন « ḍhākân# » (*ḍhakkaṇa, √sthag) ; তাতল « tātâl# » (tapta-la) ; দেঅর, দেওর « dēâr#, dēŏr# [dæor] » (dēvara) ; নায়র « nāyâr# » (nāgara) ; নিয়ড় « niyâṛ# » (nikaṭa) ; নেঅছ, নেওছ, নেউছ « nēâch-, nēŏch-, nēuch- » (nēvaccha, nēpathya) ; পাঁজর « pãjâr# » (pañjara) ; পিছল « pichâl# » (piccha-la) ; পিতল « pitâl# » (pittala < pīta-la) ; ফোড়ন « phōṛân# » (sphōṭana) ; বাঁধন « bãdhan# » (bandhana) ; লালস « lālâs# » (lālasā) ; শাবল « śābâl# » (śarvalā) ; সায়র, সায়ের « sāyâr#, sāyēr# » (sāgara) ; হঅন, হওন « hâân#, hâŏn# » *being* (*ahana < √as ? bhavana ?) ; etc., etc.

In a few words, « -ă- » occurs as « -i- » : the reason of this change is not clear : আঙ্গিনা « āṇ(g)inā », besides আঙ্গন « āṇ(g)ân# » (aṇgana) ; কাছিম « kāchim# » (*kacchiw̃a, *kacchiva, *kaśśipa < kaśyapa > kacchapa) ; ছাতিম « chātim# », MB. ছাতিঅন, ছাত্রিঁয়ণ « chātiân̂, chāñiyân̂ » (chattavaṇṇa, chattivaṇṇa [Vararuci, II, 41] sapta-parṇa) ; OB. « pōkhira- » (puṣkara, puṣkariṇī, also puṣkiriṇī, as in the 'Divyâvadāna') ; ফড়িঙ্গ, ফড়িং « phâriṇ(g)# » *grass-hopper* (MIA. phaḍiṇga, *paṭiṇga, pataṇga) ; etc.

In the present participle affix « -anta- » < ইত, ইতে « -itâ (it#), itē » we have a regular change of « -ă- » to « -i- » in Bengali : *e.g* , চলিত « câlit- » (calenta, calanta) ; যাইত, জাইত « jāit- » (jā-enta, jāanta = yant-) ; খাইত « khāït- » (khāenta, khāanta, khādant-) ; তুরিৎ « turit » *quick* (turanta, *turenta, *tvarant-), etc. It is not unlikely that here there is the influence of the past and future bases in « -il-, -ib- ». The 3rd persons plural affix « -anti » became in MB. এন্ত « -entâ » , now এন « -ēn# » in NB. : করেন « kârēn# » < করেন্ত « kârentâ » (karanti, kurvanti) : it is a case of Umlaut in Early MB. Change of « -ă- » to « -o- », through influence of a « -w̃- » glide, is found in a few instances given above. This, and cases of change of « -ă- » to « -u- » from this « -o- », through influence of a high vowel « i, u » in the word, are treated under Vowel Harmony : see later. « -ă- »

becomes « e » in Bengali through contact with the « y̆ » glide : a few examples can be found above.

In certain cases, « -ă- » occurs as « -ā- », both before one consonant and two consonants of MIA. : *e.g.*, করাত « kårāt্a < *kara-vāta » (MIA. « kara-vatta », OIA. « kara-patra » ; cf. Marāṭhī, Gujarātī « karvat », Hindī, « karaut, karōt ») ; চড়াই « cåṛāi » *sparrow*, beside চড়ুই < *চড়ুঈ « cåṛui < *cåṛåĭ » (caṭaka, *caṭakikā) ; MB. নয়ান « nåẏānt্a » (nayana) ; MB. বয়ান « bayānt্a » (båẏåna, vadana) ; ‡ সয়াল « såẏālt্a » (sakala) ; MB. পড়াহ, পড়া « påṛā(hå) » (paṭaha). Instances are not very many.

(ii) « -ā- », = MIA. « -ā-, -ă- » : আনাজ « ānājt্a » (annăjja, annâdya) ; OB. « ācāya » (ācăyya, ācārya) ; উজায় « ujāč » (ud-yāti) ; এগার « ēgārâ » (ēkādaśa) ; কড়াই, কড়া « kåṛāi, kåṛā » (kaṭāha) ; কেয়ারী « kēyārī » (kēdārikā) ; কাপাস « kāpāst্a » (karpāsa) ; গোহাল « gōhālt্a » (gōsālā) ; গোয়ালা « gōālâ » (gōpāla-) ; চাঁড়াল « cā̆ṛālt্a » (caṇḍāla) ; চিরাতা « cirātâ », OB. « cirāyita » (kirāta-tikta-) ; দেধান « dē-dhānt্a » (dēva-dhānya) ; নেহাই « nēhāi » *anvil* (*nidhāpikā) ; MB. নিহালে « nihālē » (nibhālayati) ; MB. নিসান « nisānt্a » *music* (niḥsvāna) : MB. নিশাস « niśāst্a » (niḥśvāsa) ; পাঁচালী « pā̆cālī » *a kind of verse composition* (pañcālikā) ; পয়থান « pāẏthānt্a » (pada-sthāna) ; বাঙ্গালী, বাঙালী « bāṇ(g)ālī » (vaṇgālika) ; বাখান « bākhānt্a » (vyākhyāna) ; বেরাল « bērālt্a » (viḍāla) ; বিহান « bihānt্a » (vibhāna) ; MB. মেহার « mēhārt্a » (*maẏālaya, mahālaya ; mahāgāra ?) ; মশান « måśānt্a » (śmaśāna) ; যোয়ান « jōānt্a » (yamāna, yamānika) ; সাঁতার « sā̆tārt্a » (santāra) ; শিথান « śithānt্a » (śiras-sthāna) ; শিয়াল « śiyālt্a » (śṛgāla) ; সোহাগ « sōhāgt্a » (sāu̯bhāgya) ; হেঁতাল « hē̆tālt্a » (hintāla) ; etc., etc.

(iii) OIA « -ĭ-, -ī- » ; MB. আশিন « āśinâ » (āśvina) ; আথির, অথির « āthirâ, åthirt্a » (asthira) ; ‡আঁইষ « ā̆iṣt্a » [ā̆iʃ] (āmiṣa) ; আলিপন « ālipānt্a » *decorative designs painted on the floor with rice-paste* (ālimpana) ; আহীর « āhīrt্a » (ābhīra) ; কাহিনী « kāhinī » (*kathinikā) ; কুমীর « kumīrt্a » (kumbhīra) ; MB. কণিয়ার « kåṇiyārâ » (karṇikāra) ; ‡ গহীর « gahīrt্a » (gabhīra) ; গাভিন, গাবিন « gāb(h)in » (garbhiṇī) ; চল্লিশ « cållist্a » (catvāriṅśat) ; চাঁদিনী « cā̆dinī » (*candrinikā) ; তীস « tīst্a » in বত্তীস « båttist্a » etc., OB. « batisa » (-triṅśat) ; জামীর « jāmīrt্a » (jambīra) ; ডাহিন, দাহিন « ḍāhint্a, dāhint্a », also *sts.* দখিন « dåkhint্a » (dakṣiṇa) ; দাড়িম

« dāṛima » , ডালিম « ḍālima » (dāḍimba) ; নাতিন « nātin » (*naptrinī) ; পাঁচীল « pā̃cīla » (prācīra) ; MB. পড়িছা « pāṛichā » (pratīkṣaka) ; বহিত, বোহিত, বুহিত « bāhitā, bō-, bu- » (vahitra) (see p. 319, bottom) ; MB. বাণিজার « bāṇijārā » (vāṇijya-kāra) ; বানিয়া, বেনে « bāniyā, bēnē » (vāṇija-) ; বাহির « bāhira » (bāhira, bahir) ; MB. মঁদির « mādirā » (mandira) ; হরিণ « hāriṇa » (hariṇa) ; হরিয়াল « hāriyāla » (hārita, harit + āla) ; etc., etc. Cf. also MB. -ই- « i » in passive forms, from MIA. « -i- » : করিয়ে « kāriyē » (kariaï, kriyatē) ; কাটিয়ে « kāṭiyē » (kaṭṭiaï, kṛtyatē) ; দেখিএ « dēkhiē » (dekkhiaï, *dṛkṣyatē = dṛśyatē) ; etc.

(iv) OIA. « -ŭ-, -ū- » : আঁকুশী « ākuśī » (aṅkuśa-) ; আঁকুর « ākura » (aṅkura) ; ইঁদুর « īdura » (indura) ; MB. কাপূর « kāpūrā » (karpūra) ; কুকুর « kukura » (kukkura) ; ‡ খাজুর, খেজুর « khājura, khējura » (kharjura) ; গরুড় « gāruṛa » (garuḍa) ; চৌধুরী « cāudhurī » *a title* (caturdhurika) ; জড়ুল « jāṛula » (jaṭula) : MB. তাঁড়ুল « tāṛula » (taṇḍula) ; MB. দাদুর « dādura » (dardura) ; দোছুট « dōchuṭa » *two pieces of cloth, dhōtī and chādar* (dvisūtra) : MB. পাহুন « pāhunā » (prāghuṇa) ; নিঠুর « niṭhura » (niṣṭhura) ; নিষুত « niṣuta » (niṣupta) ; বহুড়ী « bāhuṛī » (vadhūṭī) ; বাঁধুলী « bādhulī » (bandhuka-) ; ভাশুর « bhāśura » (bhrātṛ + śvaśura) ; মানুষ « mānuṣa » (manuṣya) ; মউরী « māurī » < মহুরী « māhurī » (madhurikā) ; MB. রাতুল « rātula » (*raktula) ; রাউৎ « rāuta » (rāja-putra) ; শাশুড়ী « śāśuṛī » (śvaśrū + ṭī-) ; সিঁদূর « sīdūra » (sindura) ; MB. সাঁপুড়া « sāpuṛā » (sampuṭa-) ; হিঙ্গুল « hiṅ(g)ula » (hiṅgula) ; নেউর « nēura » (nūpura) ; etc.

(v) MIA. « -ē- », from various sources in OIA. (« ē, āi » etc.) : এর « -ēra » *genitive affix* (kēra < MIA. *sts.* *kāira < kārya) ; অঢেল, আঢেল « aḍhēla, āḍhēla » *plentiful* (*aḍḍha-ēlla, āḍhya + ila) ; OB. « ahērī » *hunter* (ākhēṭika) ; MB. উদেশ « udēśa » (uddēśa) ; OB. « uēkh- » MB. *sts.* উপেখ « upēkhā » (upēkṣā) ; গণেশ « gāṇēśa » ; OB. « sābēaṇa » (Caryā 26 : saṁvēdana) ; etc.

(vi) MIA « -ō- », from various sources in OIA. « -ō- », occurs as « -u- » through Vowel Harmony. আঁকোর « ākōra » (aṅkōṭ[h]a) ; কনুই < *কণোহি « kānui < *kāṇōhi » (kaphōṇi) ; MB. আমোল « āmōla », NB. অমূল « āmūlā » (amŏlla, amūlya) ; MB. বিছোহ « bichōhā » (vikṣōbha) ; MB. হিলোল « hilōlā » (hillōla) ; OB. « kiñcōhi » (Sarvānanda), NB. কেঁচুই, কেঁচো « kēcui, kēcō » *earth-worm* (cf. kiñculikā) ; সাঁজোয়া « sājōā » *armour* (saṁyōga-) ; etc.

(2) Vowels in Contact.

169. OIA., at least in prose, did not allow hiatus, and vowel groups except the diphthongs « āi, āu » were unknown to it. In MIA. of the Transitional, Second and Third periods, with the loss of the single intervocal stops, OIA. separated vowels became MIA. vowels in contact (*udvṛtta*, *uddhṛta* or *śēṣa* vowels: cf. Pischel, §164), except where a glide sound, « ẏ » or « v (ẇ) », intervened. In Late MIA. (Apabhraṁśa) and Early NIA., there was a threefold treatment of the OIA. vowels brought into entire or partial contact (i.e. contact with intervening « ẏ, ẇ » glide) by the elision of stops. (Cf. J. Bloch, 'Langue Marathe,' § 53 ff.) The three kinds of treatment were—

[a] the retention of the original OIA. vowels as separate vowels, by inserting a euphonic « ẏ » or « ẇ »;

[b] the *udvṛtta* vowels were turned into diphthongs;

[c] they were contracted into a single vowel.

[a] Insertion of Euphonic Glides.

170. Insertion of glides was brought in (at least in some dialects like Ardha-māgadhī, to judge from the « ẏa-śruti » in spelling) at a period when the spirant pronunciation of the original intervocal stops was dying out, but was not entirely dead. (See before, pp. 85, 252.) At that stage, when its memory was not lost, there was a consciousness in the speaker that there was a consonant between the vowels, even when it existed no more; and the time taken up by the original stop, or its later spirant modification, in pronouncing the whole word, was now utilised in passing from one vowel to another. This sort of deliberation, so to say, between the resultant detached vowels, when the tongue position changed from one vowel to another, resulted as a matter of course in the production of intermediate vocalic sounds, or *glides*. In a rapid passing from one vowel to another, the glides would not be audible; but during the Transitional and Second MIA. stages, the effect of the historical presence of the old intervening stop was still in force in the IA. speech, and the glides were quite audible

sounds, taking the place of the original consonants. The glides were very short vowels; and whether they tended to be a front or back sound depended on the character of the preceding or following original vowels. In this matter, there was no reference to OIA. and Early MIA.: « -p- > -v- » becoming « -ẇ- », and then « -ẏ- », through influence of preceding vowel; also an original « v »: *e.g.*, « dīpa- > dīva > dīẇa >NIA. diẏā »; « āviśati > āẇiśaï > NIA. āẏiśē » (see p. 123). In the Transitional MIA. stage, and also in the Second MIA. stage, there was undoubtedly some difficulty felt in representing the glides when they were heard. The letters य and व could not very well be used, since at that time they had spirant values [ʒ, ɹ] and [v, ʊ]. The « ẏa-śruti » in inscriptional Prakrit of the Transitional MIA. stage is in all likelihood for a spirant pronunciation, which was traditionally carried on in the later Jaina Ardha-māgadhī orthography (see pp. 83-85). The use of य, व on a large scale for the vocalic glides could come in only in the Second and Late MIA. stages, after the complete passing away from the Aryan speech of the spirant articulation of stops and of the original semi-vowels; for then only could य, व be free to represent the semi-vowel sounds of « ẏ, ẇ » once more. Second MIA. ('Prakrit' and Apabhraṁśa) orthography normally does not indicate the glides, although they certainly occurred between the vowels, as can be seen from NIA. pronunciation and spelling, and phonology. Here the old tradition was strong in the orthography. The orthography with « ẏ », favoured by the Jainas, seems to have some influence. The use of य, व for the glide sounds seems to have gained in favour from the Apabhraṁśa stage, and in the Early NIA. period: but usage differs in the different NIA. languages; and spelling is a very capricious thing in the Indian literary languages based on the vernaculars. Typical examples of NIA. glides can be given from Western Hindī: OIA. « sūkara » > MIA. « sūgara, sūg̃ara, sū(ẇ)ara »>Hindī सूअर, सूवर « sūẇar »; OIA. « dīpa- » > MIA. « dība-, dīb̃a-, di(ẇ/ẏ)a- » > Hindī दिआ » diẏā »; OIA. « kātara » > MIA. « kādara, kāð̃ara, kā(ẏ)ara » > Hindī कायर « kāẏar »; OIA. « rājan, rāja- » > MIA. « rāja » [rɑːjə], « rā(ẏ/ẇ)a » > Hindī राय (राव) « rāy (rāẇ) »; OIA. « sūcikā » > MIA. « *sūjigā, sūjig̃ā

sū(ẏ)ī(ẏ)a » > Hindī सुई « sūī » = *सुयी or *सुवी [su:ĭi:] or [su:ŭi:]; OIA. « bhēda » > MIA. « bhēŏa, bhē(ẇ)a » > Old Hindī भेव « bhēẇa »; etc.

Forms with the glides were also inherited by OB. from the Māgadhī Apabhraṅśa. But as seen from the Early MB. of the ŚKK., they were mostly diphthongised, or contracted, by the beginning or middle of the 14th century at the latest. This is treated in the next two sections. The glide sounds in Bengali were, normally, the half close vowels [ĕ, ŏ]: see pp. 257, 259, 269. They were represented by য (y = ĕ), ব (w = ŏ) in Old Bengali, and Pre-Bengali as well; and frequently they were unrepresented in orthography: *e.g.*, OB. « bādiyā » (Sarvânanda) = NB. বাদিয়া, বেদে « bādiyā, bēdē » *snake-charmer*; « mahaā, mahuā » (ibid.) for « *mahaẇā, mahuẇā » = NB. মহুয়া « mâhuā » (madhuka-); পিবই « piẇaï » (Caryā 6), cf. MB. পিয়ে « piyē » (piaï, pibati); « avaṇāgavaṇā » (Caryā 7: āgamana-gamana-); « niyaḍḍi (Caryā 5), ṇiaḍi (Caryā 7) », MB. নিয়ড় « niyârâ » (niaḍa, nikaṭa); « dēẇī (= dēẏī?) » riming with « hōï (= hōẇī, hōẏī) » (Caryā 17); « chēẇa, bhēẇa » (Caryā 45) (chēa, bhēa = chēda bhēda); etc. The use of ব for the « ẇ » glide, however, quickly became obsolete in Bengali writing. ব was used for the sound of « b », initially or in the interior of words; জ was used for « j »; and য « y » was left free for one of the glide sounds. Instead of devising a new letter exclusively for the « ẇ » glide, as Assamese, and Maithilī, and Kaithī, did (see p. 226), Middle Bengali either left unnoticed the « ẇ » glide, the same thing that Oṛiyā did, or employed the letter য « y ». It seems that a confusion between য and ব as letters for the intervocal « ẏ, ẇ » glides occurred in OB. orthography itself: আবেশী « āvēśī » (Caryā 33), for instance, stands for « *āẏiśi » whence MB. NB. আইসি, আসি « āïsi, āsi (= -śi) » (āviśāmi): cf. the old Tibetan transcription « ayiśa » (p. 123, *ante*). The use of the letter য = য « y » for the « ẇ » glide, as much as for the proper « ẏ », is of extremely common occurrence in MB. and NB.; *e.g.* আয়র, আঅর « āẏârâ, āârâ = *āẇârâ », NB. আর « ārṛ », cf. Assamese « āru < *āurṛ » *and* (avara, apara); MB. তরুয়র « târuẏârâ = târuẇârâ » (ŚKK.: = taru-vara); সাথুয়া = সাথুআ « sāthuẏā, sāthuā = sāthuẇā » *companion*, NB. সেথো, ‡ সোথা « sēthō, sāthā » (sātha + -uā: sārtha-); ধুয়া = ধুআ « dhūẏā, dhūā =

dhūẇā » *refrain* (dhrūva-) ; মোয়া = মোআ « mōẏā, mōā = mōẇā » (mōdaka-) ; etc. In later Middle Bengali, the letter ও « ō » was often used : *e.g.* হয়া, হআ, হওয়া, হও « hâẏā, hâā, hâōā = hâẇā » *being, been* ; খায়া, খাআ, খাওআ, খাও « khāẏā, khāā, khāōā = khāẇā » *eating, eaten*. Bengali orthography in Late MB. and NB. times looked upon with disfavour the juxta position of vowels, as Sanskrit did not allow it : hence spellings like ধুআ, হআ, হওআ, খাআ, খাওআ fell into disfavour with the Paṇḍits, and especially a spelling like হও, খাও where the vowel ও « ō » was treated like a consonant, with the « mātrā » vowel added to it. The use of য (য়) on a large scale as a letter avoiding hiatus was thus fully established in the standard form of Bengali, from Late MB. times : thus, ধুয়া, হওয়া, খাওয়া. Further য (য়) had become a colourless letter, a mere vowel-carrier, in MB. It is thus we have the establishment of the group ওয় « ōy » for the simple sound of « ẇ » before « ā, ō » in NB. In Late MB. and NB., after intervocal হ « -h- » had become quiescent, a vowel glide came in between two vowels, but the হ continued to be written ; and the letter হ « h » came to be used occasionally to indicate the glide sounds in other words, where it historically ought not to come. Occasionally this resulted in a « h- » pronunciation being established : thus, Bengali বাহান্ন « bāhānnå », also pronounced « bāānnå » (dvāpañcāśat), but Oṛiyā « bābånå », Maithilī, W. Hindī, Gujarātī « bāwan », Marāṭhī « bāvanna », Panjābī « bawañjāh » ; বিহুলা, বেহুলা « Bihulā, Bēhulā », for বিউলা « Bi(ẇ/ẏ)ulā » = Skt. « Vipulā », the name of the heroine of the Manasā legend.

In ordinary NB. pronunciation, there is not much of a deliberation, or slow enunciation, and the « ẏ, ẇ » glide is not ordinarily an audible sound, except between low vowels (e, o, å, ā). There has been thus a tendency towards diphthongisation and contraction,—words like MB. শিয়াল « śi-ẏ-ā-lå » being reduced to [ʃial, ʃial], and শেল, শ্যাল [ʃe:l, ʃæ:l], and সায়র, সাআর « sā-ẏ-å-rå, sā-ẇ-å-rå » [ʃaĕɔrɔ, ʃaŏɔrɔ] to সায়ের [ʃaer, ʃaĕr] or to [ʃaor, ʃaŏr], and শূআর, শূয়র « śu-ẇ-å-rå » [ʃuŏɔrɔ] to শুওর, শোর [ʃuor, ʃo:r], etc. (NB. may be said, however, to prefer the « ẏ » = [ĕ] glide). Thus vowels which were detached from each other in OB., and in Early MB., by the glide sounds representing the old stops of OIA., have become vowels in contact in Late MB., suffering from loss of glide, and have become

diphthongs in NB. Only in final syllables, in final positions in some archaic forms, and in the altered quality of the connected vowels (as well as in slow and deliberate pronunciation), that traces of the Late MIA. glides are found in Bengali. The original OIA. « -v- » has fallen together with the glides, frequently altering its character to « ẏ » from « ẇ », as noted before.

(i) « -ẏ- » glide in Bengali :

কেয়ারী « kēẏārī » (kēdārikā) ; কেয়া « kēẏā » (kētaka-), cf. কেওড়া « kēŏṛā », also in Hindī, and in Marāṭhī ; খেয়া « khēẏā » (kṣepa-) ; MB. বিয়লী « biẏalī », NB. Standard Coll. বিউলী « biulī < *biolī, *biâlī » *cleaned pulse* (vidalita) ; ‡ ছায়রা « chāẏṛā » (chāa-ḍa-, chāyā) ; জীয়ে « jīẏē » (jīvati) ; দেয়া « dēẏā » *cloud* (dēva-) ; MB. বায় « bāẏ » (vāta) ; ‡মায় « māẏ (mātā) ; রায় « rāẏ » (rāja)—an early borrowing from North India? cf. Māgadhī Pkt. « lāja » ; সায়র « sāẏarɸ » (sāgara) ; MB. কুয়িলা « kuẏilā », NB. ‡ কুইলা « kuilā » (kōkila) ; পিয়ারী « piẏārī », NB. প্যারী « pyārī = [pæri] » (priya-kārikā) ; MB. হিয়া « hiẏā » (hiaa-, hṛdaya-) ; খয়ের « khâẏērɸ » (khadira) ; MB. উয়ে « uẏē = uẇē ? » (udēti) ; বয়ান « bâẏānɸ » (vadana) ; রোয় « rōẏ < rōẇē » (rōpayati) ; কইলা « kâĭlā », also diphthongised to কৈলা « kâĭ-lā », < « *kaẏilā » *a black cow or heifer* (kapila-) ; বাইশ « bāiśɸ < *bāẏiśa » (dvāviṅśati) ; MB. আইচ « āĭcɸ » < « āẏicca » *a surname* (āditya) ; etc.

(ii) « -ẇ- » glide in Bengali, commonly written য় : কেওড়া « kēŏṛā < *kēẇaḍā » (kēta- + ḍa-) ; মোয়া « mōẇā » (mōdaka-) ; ছাওন « chāŏnɸ < chāẇaṇa » (chādana) ; *sts.* ছাওয়া for ছায়া « chāẇā = Skt. chāyā » (chāyā > chāā- > chāẇā-) ; ধুয়া « dhūẇā » (dhrūva-) ; কূয়া « kūẇā » (kūpa-) ; ধোয়া « dhōẇā » (dhōā-, dhāuta-) ; ছাওয়াল « chāẇāl » (śāba + āla) ; MB. ছাও « chāŏ » (śāba) ; MB. বাও « bāŏ < OB. *bāẇa » (vāta) ; MB. মাও « māŏ < OB. *māẇa » (mātā) ; MB. শাও, ‡ শাঁও « śāŏ, śãŏ » (śāpa) ; also আউল « āŭlɸ » < « *āẇula » (ākula) ; বাউল « bāŭla » < « *bāẇula » (vātula) ; রাউৎ « rāŭtɸ » < « *rāẇuta » (rāja-putra) ; MB. মাউলানী « māulānī » < « *māẇu- » (mātulānī) ; etc., etc.

[b] Diphthongisation of Vowels in Contact.

171. Diphthongisation and contraction of contact-vowels went hand in hand in the few cases where they are found in the earlier stages

of MIA., before the wholesale dropping of intervocal stops. This diphthongisation, of course, is of vowels of different quality, and not the simple assimilation of similar vowels. As early as the 3rd century B.C., we have in the Aśōka inscriptions forms like « thaira- » (sthavira), « traidasa » (trayōdaśa), « mōra < *maura, *maüra » (mayūra) (Girnar), and « tēdasa » (trayōdaśa), « ujēnī » (ujjayinī) » etc. (Dhauli). These changes, however, are of the character which changed OIA. « āi, āu, aya, ava » to « ē, ō ». In cases like Second MIA. « kēla » (*kaila, *kaïla, *kadila = kadala) = NIA. (Hindī) « kēlā », « cō- » < « cau, caü » (catur-), « thēra » (thaira, *thaïra, *thavira, sthavira), « bōra » Bengali ‡বোর « bōṛa » (*baura, *baüra, *badura = badara), etc., similarly there was diphthongisation before contraction took place. (Cf. Pischel, ' Grammatik der Pkt. Sprachen,' § 166.)

In the development of Bengali, we see that dipthongisation on a large scale took place from early times. Diphthongisation of the « ă+i » and « ă+u » vowels in contact occurred to a certain extent in OB. and in Māgadhi Apabhraṅśa, as spellings like « jāu » = « jaü » (jatu : see p. 185), « nai » = ? « naï, naī » (nadī: p. 185), « cāu » = « caü » (catur- : p. 185) in the inscriptions, and like *sts.* « jaüvaṇa » (yāuvana), beside « jāutuka » (yāutuka), and « tāilōē » (trāilōkya-) for « *taïlōē » in the MS. of the Caryās, would show. So in forms like « gaa-illa,[1] gaẏa-illa » > গৈল, গেল *gai-là, gēlà », cf. ' Bihārī ' « gail » (gata+ila-), « kaẏa-illa[1] > কৈল kai-là » MB. করিল « kăr-ilà » is a new formation (kṛta+ila-), « maẏa-illa[1] » > মৈল « mai-là » (mṛta+ila-) (or « gaa-illa » > « ga-ailla > ga-ĕlla », whence « gaēlā » ; so « kaēlā », which occurs also in OB.) ; « *chaẏala- > *chai-la- », cf. MB. ছেলি « chēli » *goat* (chagala, *chagalika), « *chaẏaṇa- > *chaï-ṇa- » > NB. ছেনা « chēnā » *caseine* (chagaṇa), « *paẏatthāṇa > *pai-thāṇa » > MB. পৈথান « paithāna » *foot of bed* (padasthāna), we find the presence of a diphthongisation in Māgadhī Apabhraṅśa or Old Bengali. The alphabet had letters only for the diphthongs « ai, au » ; possibly the speech actually had other diphthongs,

[1] These have restricted the genuine Māgadhī forms ' kaḍa, maḍa, gaḍa,' < Old Māgadhī ' kaṭa, maṭa, *gaṭa ' (= ' kṛta, mṛta, gata '—the last by analogy), which have been noticed by Vararuci (XI, 15) : Bengali কড়, মড়া ' kaḍ, maḍā ' are found ; গড় ' gaḍ- ' occurs in the ŚKK.

like « ēu, ōu, āu, āi, iu », etc., which could be represented only as « ē-u, ō-u, ā-u, ā-i, i-u », by means of two separate vowels. Final « -aï » of verbs (calati <calaï) became a diphthongal vowel (calai), probably during the 13th century in Bengali, to be simplified to the simple vowel « ē » (cālē) in the 14th century; and a form like খা-ই « khāï » similarly became a diphthong খাই « khāĭ », to be reduced to খায় « khāy » in Late MB. and NB.

Examples of Diphthongisation in Bengali.

In addition to vowels brought together by loss of OIA. stops, the loss of intervocal « -h- » of MB. has given rise to new contact vowels, which have been diphthongised in NB.

MIA. « aï, aŵi », OB., eMB. « ahi », > MB. NB. অই, ঐ, এ « âï, âi, ē », also অ « â » in some cases: কইলা « kâïlā, kâilā » *dark, e.g.*, কইলা গোরু (kapilā); কই « kâi » *a fish* (kavayī); কই « kâï, kâi » *where* (MB. kahi = MIA. kahi, OIA. *ka-dhi); OB. « *kâihaṇa » > MB. কেহেন « kēhēna », কেহ্ন « kenhâ » > NB. কেন « kēnâ » *why*?; খই « khâi » (khâdikā); চই « câi » (cavikā); চৈছ, ছই « châi » (chadis); জই, জৈ « jâï, jâi » *oats* (yavikā); থই « thâi » *depth, bottom of a sheet of water* (*staghikā); দই « dâi » (dahi, dadhi); নই, নৈ « nâi » (i) *river*: cf. নৈহাটী « Nâi-hāṭī » *a town* (nadī); (ii) *a heifer* (navikā); (iii) *ninety* (navati); MB. পইসে, NB. পসে « pâisē, pâsē » (praviśati); পইতা, পৈতা « pâitā » *sacred thread* (pavitra-); পইঠা, পৈঠা « pâiṭhā » *masonry steps at the base of building* (pratiṣṭhā-); বৈসে, বসে « bâisē, bâsē » (*baïśaï, upaviśati); ভৈষ « bhāiṣ♯ » as in the adjective ভৈষা, ভয়সা « bhāiṣā, bhâyṣā » (mhaïsa, cf. Pali mahiñsa = mahiṣa); সই « sâi » (sahi, sakhi); etc.

MIA. « aü, aŵu » > OB. « au » > MB., NB. « âu, ō »; also OB., MB. « ahu » > NB. « âu, ō »: কনোজ « kânōj♯ » (kanaüja, kannaüjja, kānya-kubja); কোন্ « kōn♯ » < eMB. কোণ « kōṇâ » (kauṇa, kaüṇa = kaḥ + punaḥ); চৌ, চৌ « câu-, cō- » (caü-, catur-); জৌ « jâu » (jaü, jatu); পৌছা « pāuchā », MB. পহুঁছা « pâhũchā » *arrive* (MIA. *pahuñca, pahucc[h]a, = OIA. *pra-bhūccha, IE. *pro + bheŭ + -sko- [?]); বউ « bâu » (vadhū); মৌচাক « mâu-cāk♯ » *honeycomb* (madhu-cakra); MB. রৌদ « râudâ » NB. রোদ, ‡রইদ « rōd♯, râĭd♯ » (MIA. *s/s.* raüdda, rāudra); শউল, শোল শইল « śâul♯, śâĭl♯ śōl♯ » *a fish* (śakula); MB. হোঁ « -hõ » in verb forms, 1st person = OB. « *haũ, hâu » (ahakaṁ, aham); etc.

Late MIA. «aya, ava» in some cases became «ai̯, au̯» in Bengali, apparently through «samprasāraṇa» by dropping of the «-a-» in the syllable «-ya, -va»: *e.g.*, পৈথান «pai̯thāna» (*paẏatthānā, padasthāna); MB. (ŚKK.) বৌহারী «bau̯hārī» *daughter-in-law, wife* (*bavahārī < vyavahārikā *female slave*); MB. (ŚKK.) মৌহারী «mau̯hārī», elsewhere «mōhārī, mōhārī» *a kind of flute* (*mawa-hāra-, maa=mada- [?]); দৌড় «dau̯ṛ» (*dau-ḍa, *dava-ḍa, drava-ḍa); MB. *sts.* নৌতুন «nau̯tunā», NB. নোতুন, নতুন «nōtunā» *new* (nava-); etc.

The other diphthongs which originated in the eMB. period were «āi» and «āu», from earlier «āï, āü». There was also diphthongisation by epenthesis. *E.g.*, আইসে «āiśē» (āviśati); নাইয়া «nāiyā», NB. নেয়ে «nēyē» (nāvika-); আউলা «āulā», NB. এলো «ēlō» *dishevelled* (āüla, ākula); ‡কাউআ «kāuā» (kāka-+uka-); MB. মাউলানী «māulānī» (māülāṇī, mātulānī); রাইত «rāit» < রাতি «rāti» (rātri); সাউথা, সাইথা «sāuthā, sāithā» < সাথুআ «sāthuā», NB. সেথো «sethō» *companion* (sārtha > sātha+uka-), etc. Diphthongs with the high vowels «i, u» forming the second part, like «iu, ui, ēi, ēu», may have originated early in the MB. period; the diphthongs ending in low vowels, excepting «āŏ, āŏ», in words like বায় «bāĕ» (bāẏa, vāta), শাও «śāo» (śāẇa, śāpa), where we have vocalisation of «ẏ, ẇ», came in Late MB. and in NB. The change of MB. «-å-» to «-o- > -u-» give rise to a number of diphthongs in MB. and NB. (See later, under 'Epenthesis,' 'Vowel Harmony,' and 'Origin of the New Bengali Diphthongs.')

[c] Contraction of Vowels in Contact.

172. Cases of MIA. contraction of «udvṛtta» vowels, where they were «ă» followed by «i» or «u», have been noted in §171, in examples like «kēla, tēraha, bōra, mōra», etc. Contraction of «udvṛtta» vowels by assimilation is quite a common phenomenon in Second and Late MIA. (cf. Pischel, §§ 165 ff.); and Bengali inherited a number of these MIA. contracted forms: *e.g.*, OB. «khāï» (khāaï, khādati); MB. ধায় «dhāĕ» (dhāaï, dhāvati); পাইক «pāïkā, pāïkā» («pāāïkka», *sts.* < «pādātika»; but more probably a Persian borrowing); আঁধার «ãdhārā» (andha-āra,

andha-kāra); OB. « kaśālā » (Caryā 13 :=« *kāśālā, *kaṅśālā » ?: cf. MIA. « kaṅśāla- » =« kāṅsya-tāla ») ; রাউৎ « rāutt্ » (rāautta, lāutta = rāja-putra) ; দেউল « dēul্ » (dēula, dēvakula), etc.

But in a large number of cases, the « udvṛtta » vowels were not contracted by assimilation in MIA. They were generally retained as distinct syllables in Māgadhī Apabhraṅśa and in OB., being preserved by the glide « ẇ » or « ẏ » which came in. The contraction habit, however, had manifested itself in Māgadhī Apabhraṅśa; it was not uncommon in OB., and seems to have been widely operative in Bengali in the 13th century, during the transition from OB. to MB.; and it had finished its work by the end of the 14th century.

(i) The group « ăă (ăẅă) » of Late MIA. and OB. This was contracted to a long « å » [ɔ:] sound, which may be represented in transliteration by the symbol « å ». (See p. 260.) The aspirate, « h », between vowels was dropped in MB., and the group became « åhå > åå », which also was contracted to « å ». OIA. « ămă » > Late MIA., OB. « aẅa » similarly became [ɔ:] in MB., and this was represented by অঁ « ā ». The « å » fell together with original « ă = å » in Late MB. In final positions, this « å » optionally has the [o] pronunciation, in the Standard Colloquial, the same as original single « -ă = å » (as in *ts.* and other forms).

« ăă, ăẅă > å > å » in the initial syllable. Examples: MB. অথান্তর « åthāntårå », beside MB., NB. আথান্তর, আথন্তর « āthāntårৎ, āthântårৎ » *bad plight* (aẅathāntara, avasthântara) ; কলা « kålā » *plantain* (kålā, kaẅalā-, kaala- = kadala-) ; কই « kåi » *a fish* (*kåī, kavayī) ; কড়া « kåṛā » *cowry shell* (kåṛā, kaẅaṛā, kavaḍḍa-, kaparda-) ; MB. গন « gånå » *way* (gaẅaṇa, gaẅaṇa = gamana) ; OB. « găṇă » =[gɔ:nɒ] (Caryā 35 :<gaẅaṇa, gaaṇa = gagaṇa) ; চক « cåkৎ » (*cavakka = catuṣka) ; চড় « cårৎ » *slap* (*caẅaḍa = *capaṭa, cf. capēṭa) ; চটী « cåṭī < cåṭī » *inn, serai* (OB. cavaṭī = *name of village:* pp. 67, 183, 185) ; জ « jå » *measure* (*jaẅa, yava) ; MB. ধল, NB. ধলা « dhålå, dhålā » (dhavala-) ; ন « nå » (nava) ; *sts.* নধর « nådhårৎ » *plump, buxom* (navadhara) ; নগুণ « någuṇৎ » *'nine-fold,' a Brahman's sacred thread* (nava-guṇa) ; নই « nåi » (navati) ; নদীয়া, ন'দে « nådīyā, nōdē » *Nadiyā city* (nava-dvīpa-) ; ননী « nånī » (nånī, navanīta) ; *sts.* লঙ্গ « låṇgå » (låṇgå

lavaṇga); শ « śå » (śata); MB. সৎ, সতা « såt, såtā », cf. সৎমা « såt-mā » *step-mother* (savatti, sapatnī); সঁপে « sāpē » (sawāppēï, samarpayati); etc.

Cf. also পর « pårɲ » (pahara, prahara); গম « gåmɲ » *wheat* (*gahama, *gādhama, *gandhama ?=gōdhūma); নহ « nåh »=ন+*অহ « nå+√*åh- » as in নহিলে, নহিবে « nåhilē, nåhibē », etc., negative forms of the verb হ « hå » *to be* (na+√as); etc.

« aa, awa, aw̃a, aha > å > å, ō » in interior and final syllables. MB. আইহ « āïhå » (avihaa, avidhavā); আঠার « āṭhārā » (aṭṭhāraha, aṣṭādaśa); উনঞ্চাশ « unåñcāśɲ » beside উনপঞ্চাশ « unåpañcāśɲ » (una-pañcāśat); উননই « unå-nåi » (una-navati); ‡কাদো « kādå>kādō » (*kādaw̃a, kardama), beside কাদা « kādā »; এগার « ēgārå » (ēgāraha, ēkādaśa); গোকল « gōkålɲ » (gō-kavala); NB. *sts.* চক্কত্তী « cåkkåttī » *a surname* (cakravartin); চোদ্দ, চৌদ্দ « coddå, cåuddå » (caüddaha, caturdaśa); MB. জায়তি « jāẏåti » *horoscope* (jāẏaw̃attiå, jāta-patrikā); তের « tērå » (tēraha, troyōdaśa); দলুই < দলই « dålui <dålåï » *a surname* (dalaw̃aï, dalapati); দশরা « dåśårā » (daśaharā); দান, দানো « dānå>dānō » (dānava); নরুণ, নরুণী « nårun̤(ī) » (*nahaharaṇī, nakha-haraṇa-); পাল, পালো « pālå>pālō » *pounded flour from the roots of a plant* (pallava); পুরান « purānå » (purātana); পনের « pånērå », পনর « pånårå » (pannaraha, pañca-daśa); পলাশন « pålāśånɲ » *place-name* (palāśa-vana); বার « bārå » (bāraha, dvādaśa); বাসর « bāsårɲ » (bāsa-hara, vāsa-gṛha); বুড় « buṛå » (buḍḍhaa, vṛddhaka); ভাল « bhālå » (bhallaa, bhadraka); ‡মান « mānå » in Haijong Dialect (mānava); MB. ('Śūnya Purāṇa') *sts.* ভগতী = ভোগতী « bhågåtī = bhōgåti » (bhōgavatī); ভরসা « bhåråsā » *reliance, trust* (bhara-vaśa-); মাসরা « māsårā » *monthly stipend* (māsa-hara-); মান্দারন « māndāråṇɲ » *place-name* (mandāra-vana); মালঞ « mālåñcå » *garden* (mālaw̃añca, māla-mañca); রসুই < *রসঈ « råsui < *råsåī » *cooking* (rasavatī *kitchen*); লাঙ্গট « lāṇg(g)åṭɲ » (*laṇgawaṭṭa, liṇgapaṭṭa); সাঁকো « sākå>sākō » *bridge* (saṇkaw̃a, saṇkrama); ষোল « ṣōlå » (sōlaha, ṣoḍaśa); সতের, সতর « såtērå, såtårå » (sattaraha, saptadaśa); *sts.* হিনস্থা, হেনস্তা « hinåsthā > henåst(h)ā » (hīna-avasthā); *sts.* অপচ « apɲcå » (*åpåcåå, apacaya); etc., etc.

In verb forms: *e.g.*, indicative and imperative 2nd person plural > NB. 2nd person singular or plural, indicative and imperative: OIA. « -ata,

-atha > MIA. *-aa, -aha > OB., eMB. -aa, -aha, -å>NB. -å, -ō, -ŏ »: *e.g.*, NB. কর « kårå » < MB. কর, করহ « kårå, kårâhå » (Skt. kuruta, kurutha); চলিও, চ'লো « câliō, cōlō » *you will go* (*precative future*) < MB. চলিহ « câlihå » (calihaha, calişyatha); খাও « khāŏ » < MB. খাহ « khāhå » (khāaha=khādatha); in the past and future bases ইল, ইব « -ilå, -ibå », as contrasted with the North Bengali and Bihari forms without the final « -ă »: *e.g.*, চলিল « câlilå » (*calillaa, calita+ila+ka), কর্‌িব « kåribå » (*karibbaa, kartavya-ka); in the past habitual or conditional ইত « -itå » : চলিত « câlitå » (calanta+ka); and in verbal nouns or passive adjectives in আন, আনো « -ānå, -ānō » : করান « kårānå, kårānō » (OIA. -āpana-ka, -māna-ka).

« aa > å » is the rule in Bengali. But in a few cases, we find « åu » instead of « å »: the « åu » development seems to be exotic, and is due to the influence of the Western dialects: *e.g.*, কৌড়ী « kåuṛī », beside কড়া, কড়ি « kåṛā, kåṛī » (kaparda-); সোঁপ « sāup- », beside সঁপ « sāp- » (samarp-); চৌক « cāuk-, » beside চমক, চঙক « cåmåk-, cawăk-, *cāk- » *startle* (camakka-); দৌড় « dåuṛ » *run* may be an old form in Bengali, through « samprasāraṇa », of which a few cases are known (see p. 345), but it may as well be a borrowing from the West, the genuine native Bengali root for *running* being, as in Oṛiyā, ধা « dhā » (dhāv).

The final « -ă » of OIA. and MIA. drops in Bengali. It is final « -ăă » which is retained as « -å, ō » in NB. Where in NB. we have « -ā » finally, the Late MIA. form does not seem to have ended in two syllables with short « -ăă », but unquestionably there was a long « -ā ». MIA. « kāla » *black* can give only *কাল্ « *kālɸ » in NB. But we have ordinarily কাল=কালো « kālå =kālō », and কালা « kālā » ; and we have কাল্ « kālɸ », with elided final « -ɸ », possibly in a compound form like কাল-শিরা « kālɸ-śirā » *black vein*, '*black and blue*' (*mark of a blow*). The first can come only from a basis like « kālå, kālawa, kālaa=OIA. kāla-ka », with the pleonastic « -ka » affix; the « -ā » in the form কালা « kālā » is an affix giving a definite force, =*the black one* ; and this can only be from some affix like « -ā-ka », with a definiteness that came to be associated with « -ā » : cf. ঘোড়াটা « ghōṛā-ṭā » *horse-that-big-one=that horse* ; but ঘোড়াটী « ghōṛā-ṭī » *horse-that-little-one* = *that nice little horse.* (See page 302.) The « -ā » nouns and verbal adjectives of Bengali and

other NIA. are probably to be referred to oblique (genitive) forms of Late MIA. and Early NIA. Where the original nominative affixes were lost, in some forms of NIA., it is this oblique in « -ā » that took its place. *E.g.*, Skt. « ghōṭakaḥ »=Śaurasēnī nominative « ghōḍaō »>Śaurasēnī Apabhraṅśa nominative « ghōḍaü », whence Braj-bhākhā « ghōṛau », Kanaujī « ghōṛō », etc.; the nominative forms apparently fell into disuse in Panjābī and in the dialects which form the basis of Hindōstānī, where we have now « ghōṛā » for the nominative, which is in all probability the old genitive singular « ghōḍā(h)a < ghōḍaassa < ghōṭakasya » (or ? dative singular « *ghōḍaāa < ghōṭakāya ») ; just as in the nominative plural form the original affix was lost, and the instrumental plural or the genitive plural took its place : *e.g.*, W. Hindī « ghōṛō, ghōṛan » etc. = « *ghōḍaahi, *ghōḍaāṇa » = « *ghōṭakēbhis, ghōṭakānām ». The same seems to have been the case with many NB. « -ā » nouns. (See later, under *Morphology* : 'the Noun.')

(ii) The groups « ăā, āă, āā », with intervening glide « ẇ » or « ẏ » in Late MIA. and OB., became « ā » in eMB. : আর « ārṛ », also eMB. আঅর « āẇărā » (avara, apara) ; NB. এঁষানি « ẽṣāni »<*আঁইষানি « ãĩṣānī » (*āẅiśa-ẅāṇī=āmiṣa+pānīya) ; আড় « ārṛ » *awry, slant* (? āvarta) (but আওট « āŏṭ » *stir (milk, etc.)* = « ā+√vart- ») ; ইঁদারা « ĩdārā » *a big well* (indrâgāra-) ; ইন্দাস « indāsṛ » *place-name* (indrâvāsa) ; *sts.* উপাস « upāsṛ » (upavāsa) ; OB., MB. উআরী, ওয়ারী « uārī, ōārī » *pavilion* (upakārika) ; করাত « karātṛ » *saw* (*karaẇātă, *kara-pātă, kara-patra ; cf. karavāla) ; কোটাল « kōṭālṛ » (koṭṭa-āla, kōṭṭa-pāla) ; so গয়ালী « găyālī » *a class of Brāhmans from Gayā* (gayā-pālika), রাখাল « rākhālṛ » *herdsman* < MB. রাখআল « rākhă-ālă » (rakṣhā-pāla), ভুজালী « bhujālī » *a short sword* (bhuja-pālika : cf. kara-vāla), মাতাল « mātālṛ » *drunkard* (« matta+āla » ? ; but cf. Hind. « matwālā », Beng. poetic মাতোয়ারা « mātwārā »=« matta-pāla-»), etc. ; গলাশী « gălāśī » (gala-pāśikā) ; গোয়াড়ী « gōāṛī » *place-name* (gōpa-vāṭikā) ; চকা « căkā » (cakravāka) ; চিরাতা « cirātā », OB. (Sarvânanda) « cirāyita » (kirāta-tikta) ; তা « tā » (tāpa) ; MB. দিশারী « diśārī » *pilot* (diśāẇārī, diśā+kārin) : দোহার « dōhārṛ » *singers in chorus* (dhruva-kāra) ; MB. ধাই « dhāī » (dhāvati) ; *sts.* নারাণ « nārāṇṛ » (nārāyaṇa) ; পায় « pāĕ » (*prāpati=prāpnōti) ; পাটাতন « pāṭātănṛ » *deck, wooden boards on flooring* (*pāṭă-pātănă=paṭṭa+pattana) ;

পারা « pārā » (pārāda); *sts.* প্রাচিত্তির « prācittirꝺ », also প্রাচিৎ « prācitꝺ » (« *prāẏacittira » for « *prāẏaścittira », « *prāẏacitta » = « prāẏaścitta »); বাঁধায় « bā̃dhāĕ » (*bandhāvaï, *bandhāpayati); রসান « råsānꝺ » (rasāyana); etc. See also §149 (ii), p. 302, and §150(i), p. 307.

A large number of disguised compounds in আর « ārꝺ » = « āgāra, ākāra » come under this: *e.g.*, ভাঁড়ার « bhā̃ṛārꝺ » (bhāṇḍâgāra), কুমার « kumārꝺ » (kumbha-kāra), etc.

Cf. also Persian words like বরাদ্দ « barāddå » *fixed* (bar-āvard), উমেদার « umēdār » *applicant* (*umēda-vār = umēd-vār), etc.

When, however, « -ā » in a group « -ăā, -āā » occurs as a special affix, as in হআ, খাআ « håā, khāā », there is no contraction in MB. and NB., and the « ẇ » glide comes in: হওয়া, খাওয়া « håẇā, khāẇā », etc.

(iii) The Late MIA. groups « aï, aü »: see also *ante*, under 'Diphthongisation.'

« aï » > « ē », occasionally « i », in MB.: *e.g.*, the affix for the verb 3rd person, এ « -ē » (-aï, -ati); MB. এহেন « ēhēnå », NB. হেন « hēnå » (*aïhaṇa-, MIA. aïsaṇa-); cf. OB. « gharahi », NB. ঘরে « gharē » (gṛha + *-dhi); OB. « amhē, tumhē », MB., NB. আমি, তুমি « āmi, tumi » (*amhahi, *tumhahi = asmābhis, yuṣmābhis); etc.

« aü » > « u »: *e.g.*, দেউল « dēulꝺ » (MIA. dēula, dēva-kula); চলুক « cål-u-k » imperative 3rd person, MB. চলু « cål-u », OB. চলউ « calaü » (calatu); cf. MIA. « ahu », also affix for imperative 2nd person = OB. « -u »: « chāḍu = chaḍḍahu » (Caryā 50); মাহুত « māhutꝺ » *mahout* (*mahaüta, *mahaẽwatta, mahāmatra); etc.

(iv) The Late MIA. groups « ae, ao » > « ai, i, ē; au, ō »:

OB. « maĩ », MB. NB. মুঞি, মুই « muñi = muĩ, mui » (*maēṇa, mayā + -ēna); so « taĩ » > তুই « tui » (*taēṇa, tvayā + -ēna); OB. « kaēlā », beside MB. কৈল « kåilå » (*kaella, *kailla < *kaẏa-illa); তো « tō » *then* (taü, taō, tadō, tataḥ), a non-Māgadhī form possibly.

(v) Late MIA. « āï, āü » remain in OB., eMB.; in NB., they are contracted to « ā » or « ē », except when occurring finally: *e.g.*, NB. আসে, ‡এসে « āsē, ēsē », MB. আইসই « āïsåï » (āviśati); cf. also NB. বার, বের « bārꝺ, bērꝺ » < lMB. বাইর, বৌর « bāirꝺ, bāĩrꝺ » (bāhira, bahir); NB. এলো

« ēlō » (i) *came* (=āïlå, *āïlla, āyāta+ila), (ii) *dishevelled*=MB. আউলা, আলা « āülā, āïlā » (ākula-); NB. খাক্ « khāk », MB. খাউক « khāü-kå » (khāü, khādatu); etc. Finally: গাই « gāi » (gāvī); আড়াই « āṛāī » (*aḍḍhāī, *aḍḍhāïa, ardhatṛtīya); লাউ « lāu » (alābu); etc.

For the Late MB. > NB. contraction of « åï > åĭ, oi » in West Central Bengali, in connection with Epenthesis, see § 186.

(vi) Late MIA. « āē » is a very rare group in the interior of a word. Finally, OB. eMB. « āē » becomes the diphthong [ɑĕ] in NB.: করায় « kårāĕ » *causes to do* (kårāc, kårāvēï). The group « āō » became « āu » in MB., contracted to « ā » in NB., in পাখাজ « pākhājḍ », MB. পাখাজু « pākhāju » standing for <*পাখাউজ « *pākhāüjå » (*pākhāōjå, *pakkhāŏjja, pakṣātōdya), now generally ousted by পাখোয়াজ « pākhwājḍ », from Hindōstānī « pakh-wāj » (=pakṣa-vādya).

(vii) « ĭĭ, ĭī, īĭ, īī » became « ī » =« i » in NB.: *e.g.*, চিঁড়া, চিড়া « cĭṛā, ciṛā » *flattened rice* (ciiḍa-, ciẏiḍa-, civiḍa-, cipiṭa-); আশী « āśī » (asī, aśīti); ঘী « ghī » *brains*, OB. « ghiẅī » (Sarvânanda) (*ghiia, *ghṛtikā); চলি « cåli » *I walk* (*caliĭ, *caliẅi, *calimi, calămi=calāmi); জীই « jĭi » *I live* (*jĭi, *jĭẅiẅi, *jīvami=jīvāmi); দিল « dilå » (*di-illa-, *dia-illa-, dita=datta+ila-); নিল « nilå » (*nī-illa-, *nīa-illa-, nīta+ila-); খাইল « khāilå » (*khāi-illa-, *khāia-illa-, khādita+ila-); Cf. MB. করী, চলী « kårī, cålī » (? « *karii, *calii=*karihi, *calihi », imperatives in « -hi »); etc.

(viii) Late MIA. « ia, ĭa » had a three-fold development in Bengali:

(a, b) In initial syllables, generally = « ē »: এত « ētå » (ĕttia, *iatt-, iyat-); MB. *sts.* খেমা « khēmā » (*khiamā, *khyamā=kṣamā); eMB. তিঅজ « tiåjå », NB. তেজ « tējḍ » (*tiajja < *tiijja = tṛtīyá); *sts.* নেম « nēmḍ » (niama, niyama); *sts.* বেথা « bēthā » (*biathā, vyathā); দেড় < MB. দেঢ় « dēṛḍ<dēṛhå » (diaḍḍha, dvyardha); *sts.* বেভার « bēbhārḍ » (*biåbåhārå, vyavahāra); MB. *tbh.* বেহারিব « bēhāribå » *will employ* (viahāra-, vyavahāra); MB. বেবথা « bēbåthā » (*biåbåthā, vyavasthā); দেশলাই « dēśḍlāi » (*diaśalāïa, dīpa-śalākikā); etc. So সীঁতি « sĭti » is probably from « *sẽti » by Vowel Harmony (*siāntī < *sĭẅantia, sīmanta-). But cf. জীঅন, জীওন « jĭånḍ, jĭōnḍ » (jīvana), শিঅর, শিওর<MB. শিহর « śiårḍ, śiōrḍ<śihårå » (śikhara). « -ia- » in the middle of a word remained in eMB.; but when followed

by an « i », it became « io > iu » in IMB. and NB., through Vowel Harmony, which see.

(c) Final « -ia » became « ī > » : see § 149 (i), § 150 (ii). OB. « īha » > MB. « ia » > « ī », as in শী « śī » *a surname* (? *śīha = siṅha ; or < śiva ?). MB. ইহ, ইঅ « -i(h)å », precative imperative affix, is contracted to « ō » : চলিহ > চ'লো « cålīhå > cōlō », রাখিহ > রেখো « rākhihå > rēkhō » ; but after a vowel in causatives there is no contraction : *e.g.*, রাখাইহ > রাখিও « rākhāihå > rākhiō ; cf. দিহ > দিও « dihå > diō ».

Final « ia », strengthened by the pleonastic affix « ā » in OB., became « iẏā », in the Bengali indeclinable in ইয়া « -iyā », to be modified to « ē », with accompanying umlaut, in NB. : *e.g.*, এসে « ēsē » < MB. আসিয়া « āsiyā », আইসিয়া « āisiyā » (MIA. āvisia + ā, āviśya) ; so ক'রে « kōrē » < করিয়া « kåriyā » (MIA. karia + ā, *-karya) ; etc.

(ix) « ŭŭ, ŭū (ūŭ, ūū) » became « ū » in OB., « u » in NB. : *e.g.*, দুনা « dunā » (*duuṇa-, dviguṇa-) ; দুলী « dulī » (*duulia, dukūlikā) ; etc.

(x) « ua, ūa » occur as « u » in Bengali : OB. « uārī » MB. উয়ারী « uārī » (*uaārī, upakārika *pavilion*) ; OB. « kāmarū » (kāma-rūpa) ; গোরু « gōru » (*gōrūa, gōrūpa) ; ধূনা « dhūnā » (dhūpana-) ; বাছুর « bāchurå < bāchårū » (vatsa-rūpa) ; বাঁধুলী « bắdhu-lī » *a flower* (bandhuka-) ; সাজারু « sājāru » (*sajja- + rūa, sayya-rūpa, śalya-rūpa) ; MB. সুন্ধি « sundhi » (*suandhia, sugandhika) ; জোয়াল « jōālå » < জুআল « juālå » (yuga + āla) ; OB. « tu » (*tuva, tuaṁ = tvam) ; etc. See § 149 (iv), § 150 (iii). Possibly, in forms representing OIA. feminine « -rūpā, -ukā » etc., = Late MIA. « uă », we have assimilation of « u, ū » + consonant + « ā ».

(xi) « ēa » became « ē » : ছেনী « chēnī » *chisel* (chēaṇī, chēdanikā) ; MB. দে « dē » (dēva, dēha) ; cf. MB. দেহরা « dēhårā » *temple* (dēa-hara-, dēva-gṛha-) ; বেন « bēnå » *child-birth, travail* (*bēaṇa, vēdanā ?) ; but we have « ēa > ēwa » in দেওর « dēōr » [dæor] (dēvara), কেওড়া « kēŏṛā » [kæŏṛa] (kēta-ka-). See §149(v), p. 303.

(xii) Late MIA. « ēi » in final positions is reduced to « ĕ » in the verb of the 3rd person : *e.g.*, বাঁধায় « bắdhāĕ » (bandhāvēi, *bandhāpayati) ; to « ii, i » through Vowel Harmony, in the verb of the 1st person, in some roots like দে « dē » — দেই > দিই, দি « dēi, dii, di » *I give* ; etc.

« ēu » became « iu » by Vowel Harmony, and « iu » is contracted to « i »; *e.g.*, NB. দিক্ « dik », MB. দিউক, দেউ(ক) « diuk♯, dēu(ka) » (dēu < *dētu = dadātu).

(xiii) « ōa » is contracted to « ō ». *E.g.*, আলো « ālō » (ālōka); ধোয় « dhōĕ » (*dhōvaï, dhāvayati); থোড়া « thōṛā » (stōka + -ḍa); রোয় « rōĕ » (*rōvaï, rōvĕï: rōpayati); সোয় < *সোই « sōĕ < *sōi » (?*sōvaï, svapīti); MB. হোএ « hōē » (*hōaï, bhavati); cf. *sts.* ব্যামো « byāmō » (vyāmōha). See § 149 (vi).

(xiv) « ōi » is found as « ō » in the MB. word *জোশী « jōśī », *spelt* as যসী « yasī = jōsī » in the 'Mayanāmatīr Gān' (Dacca SPd. edition, p. 25). The contraction of « ōi, ōu » belongs to MB. and NB. phonology: see next chapter.

[B] Treatment of OIA. « ṛ »

[I] « ṛ » in Tadbhava Words.

173. OIA. « ṛ » as a sonant disappeared in MIA. Prakritisms in Vedic like « vikaṭa, śithira » are, for example, on the basis of an « ar, ra » or « ir, ri » pronunciation of « ṛ ». In Late OIA. at least, « ṛ » undoubtedly had developed other pronunciations, beside that of the proper sonant « ṛ », and « ᵃra », namely « ra ar, re er, ri ir, ru ur ». See p. 243, *ante*. (Cf. Vidhuśēkhar Śāstrī, 'Bāṇlāy Uccāraṇ' in the 'Pravāsī' for Vaisākha, 1318; 'Ṛ-kāra-tattva,' VSPdP., 1324, pp. 183-185). These pronunciations of « ṛ » are of course quite distinct from the ablaut grades of Primitive Indo-European, « ĕr ŏr, ēr, ōr » or « ĕl ŏl, ēl, ōl », which are found in OIA. forms like « bhar-a-ti, bhār-a-s » etc.; they are merely Indian vernacular modifications of the original Indo-European zero grade, or « ṛ, ḷ ». Forms like MIA. « ghara<*garha=gṛha, ghata<ghrata=ghṛta, gēha<*greha, *gerha=gṛha, vĕṇṭa<*vrenta, *vernta=vṛnta, amia<*amrita=amṛta, rukkha<*vrukkha =vṛkṣa » sufficiently indicate the manifold pronunciation of « ṛ » in Late OIA. The lines along which OIA. « ṛ » was modified in the various dialect-areas are not known. It can be surmised from the Aśōka inscriptions that in the Early MIA. period, the dialects of the North-west normally changed « ṛ » into « ri, ur » (the « ur » occurring after labials), in which

the « r » element was retained; that the dialect of the South-west (Girnar) turned it to « a »; and the North-eastern dialect made it « i, u » (the latter before labials), without the « r », but cerebralising a following dental [1] (cf. Truman Michelson, 'Inter-relation of the Dialects of the 14 Rock Edicts,' JAOS., 1909, pp. 77ff.; Jules Bloch, 'Langue Marathe,' § 31). The « i » treatment seems also to have been favoured in the Midland, as in the North-east. But even in the Early MIA. of the Aśōka inscriptions, we find that there is no regularity of the change which OIA. « ṛ » underwent in a particular dialectal area, North-western, or South-western, or North-eastern (cf. Jules Bloch, *op. cit.*, p. 47). The North-eastern speech of Aśōka shows, in addition to « i, u », « ă » also, in words like « kaṭa, viyāpaṭa, vithaṭa, maṭa- » (kṛta, vyāpṛta, vistṛta, mṛta); forms in « ă » like « kaḍa, maḍa » are also noted by Vararuci for Māgadhī of the Second MIA. period (see p. 343, footnote). It seems that intermingling of dialects early in the history of MIA. overlaid any original tendencies or preferences for special vowels in the different dialect areas; and judging from the way in which « ṛ » in *tss.* and *stss.* was pronounced in Middle Bengali (see § 174), it can also very well be assumed that the « i, u, a, e » treatments of « ṛ » all obtained side by side in the same area, in the transitional stage from OIA. to MIA. So far as the *tbh.* words in NIA. are concerned, no sure line of isogloss is possible in this matter.

It will be seen that quite a number of MIA. forms, showing modification of OIA. « ṛ », were adopted into Classical Sanskrit.

(1) OIA. « ṛ » > « ă » in MIA. This, either through compensatory lengthening, or through stress, became « ā » in some cases in Bengali. আজ « ājj » in আজলী « ājjalī » *a foolish girl* (aju-, ṛju); ‡আজবুঝ « ājjabujhj » >

[1] Indo-European group of 'l' + dental occurs as a single cerebral sound in OIA., as in Vedic, but 'ṛ, r' + dental remains a combination of two sounds. The eastern dialect (Māgadhī) has only 'l,' and no 'r': is it that 'ṛ, r' + dental was also a case of 'l' + dental in this dialect, so that this 'Prakritism' in changing a dental to a cerebral was really an extension of the old habit which characterised OIA. in general? See later, under Consonants: 'the Cerebrals.'

simpleton (*aju-bujjha-, ṛju-budhy-); কাছারী « kāchārī » (kaccaharia, kṛtya-gṛha-); কান, কানু, কানাই « kānà, kān-u, kān-āi » (Kaṇha, Kṛṣṇa); OB. *sts.* « kasaṇa » (*kraṣaṇa, kṛṣṇa); কড় « kàṛ৷ » *bracelet, ring* (kaṭa, kṛta); ঘর « ghàṛ৷ » (*garha, gṛha); ঘাঁট « ghāṭ৷ » *stir with fingers* (*ghaṇṭa, *ghaṭṭa, ghṛṣṭa), beside ঘুঁট « ghũṭ৷ »; MB. তড় « tàṛà » (taṭa, tṛta); দঢ় > দড় « dàṛ(h)à » (daḍha, dṛḍha), beside OB. « diḍha »; ধড় « dhàṛ৷ » *torso* (*dhaṭa, dhṛta); ধড়া, ধড়ী « dhàṛā, dhàṛī » *cloak* (dhaṭa, dhaṭī=dhṛta-); নড় « nàṛ৷ » *a caste* (naṭa, OIA. nṛtu *dancer*); নাচ « nāc৷ » (nacca, nṛtya); মড়া « màṛā » *corpse* (maṭa, mṛta); মাটী « māṭī » (*maṭṭia, mṛttikā); বাঁট « bāṭ৷ » *teat* (*vaṇṭa, vṛnta), beside বোঁটা « bõṭā »; ‡বড় « baṛ৷ » *the banyan tree; a coil of rope* (vaṭa, vṛta); ভড় « bhàṛ৷ » *soldier, servant* > *a surname* (bhaṭa, bhṛta); সড়ক « sàṛàk৷ » *street* (*saḍa-, *saṭa = sṛta); also in forms like MB. কৈল, মৈল « kàilà, màilà » (kaẏa-illa, maẏa-illa = kṛta, mṛta), see p. 343, which are not Old Māgadhī, but later importations or formations in Late Māgadhī.

(2) « ṛ » > « i » in Bengali. অমিয়া « àmiyā » (amia-, amṛta-); MB. গিধ, গীধ « gìdhà » (giddha, gṛdhra); ঘী, ঘি « ghī » (ghia, ghṛta); ঘিন্ « ghin৷ » (ghṛṇā); ঢীঠ > ঢীট « ḍhīṭ(h)৷ » (ḍhiṭṭha, dhṛṣṭa); MB. তিণ « tiṇà » (tṛṇa); তিয়জ « tiyàjà », NB. তেজ « tèj৷ » (« *tiajja, *tiijja, tṛtīyá »: change of « yá » to « j » not Bengali—this is a Western form); MB. তেহেন, NB. তেন « tē(hē)nà » < « *taïhaṇa » (taïsaṇa, *tādisaṇa, tādṛśana); OB. « dīsaï » (dissaï, dṛśyatē); MB. দিঠি « diṭhi » (dṛṣṭi); OB. « diḍha » (dṛḍha); পিঠ « piṭh৷ » (piṭṭha, pṛṣṭha); বিছা « bichā » (vṛśca-, cf. vṛścika); ভিমরূল, * ভিঙ্গরূল « bhim৷-rūl৷, bhiṇ- » (bhṛṇga-rōla); মিঠা « miṭhā » (miṭṭha-, miṣṭa=mṛṣṭa); শিং « siṇ » (sṛṇga); শিঙা « śiṇā » *trumpet* (śṛṇga-); OB. « siṭhi=sīṭhi » (sṛṣṭi); শিকল « śikàl৷ » (śṛṇkhala, sṛṇkā-); শিয়াল « siyāl৷ » (śṛgāla); হিয়া « hiyā » (hiaa-, hṛdaya); etc.

(3) « ṛ » > « u ». OB. « uju », Chittagong dial. « ujjā » (ṛju); ঘুঁট « ghũṭ৷ » *stirring* (*ghuṇṭa, *ghuṭṭa=ghṛṣṭa); আউশ, আউষ « āuś৷, -ṣ৷ » (āvṛṣa), see p. 320; *পিউসী > পিসী « *piusī > pisī », *মাউসী > মাসী « *māusī > māsī » (pitṛ-, mātṛ-, +svasṛ-); MB. পাউষ « pāuṣà » (prāvṛṣa); পুছে « puchē » (pucchaï, pṛcchati); বুঢ়া > বুড়া « buṛ(h)ā » (vṛddha-); ভুনা, ভুনি « bhunā, bhuni » *fried* (*bhunna-, *bhṛj-na-); OB., MB. রুখ « rukhà » (vṛkṣa);

শুনে « śunē » (*śuṇaï, śṛnōti); ফুটে « phuṭē » *bursts* (phuṭṭaï, Sanskrit sphuṭ <OIA. *sphṛt); etc.

(4) « ṛ » > « e »: OB. « beṇṭa », also Middle Oṛiyā as in Purī Inscription of 1470 (*vĕṇṭa, vṛnta); cf. Oṛiyā « √ghēn » *take* (√gṛh-n-).

(5) « ṛ » > « o »: বোঁটা « bōṭā » *stem of flower* (*vŏṇṭa, vṛnta).

[II] « ṛ » IN TATSAMAS AND SEMI-TATSAMAS IN BENGALI.

174. The above are instances of OIA. > MIA. > NIA. change of « ṛ » in Bengali. The Bengali alphabet possesses ঋ « ṛ » as a letter of the alphabet, and its common pronunciation is রি « r+i ». This « ri » value for « ṛ » is found all over Northern India; but in the South, including the Oṛiyā and Marāṭhī tracts, the pronunciation is « ru ». The « ri » pronunciation in NB. is only one out of the various traditional pronunciations of the letter « ṛ » in MB.,—*viz.*, « ri ir, re er, rå år, ro or » (but never « ru, ur »)—and some of these are still current. The name of the letter ঋ is « ri », and the other varieties of vowel used in the pronunciation of words in « ṛ » are now giving place to « i », in educated speech. This « ri » pronunciation is a very old one, and frequently in the inscriptions, back to the oldest ones, there is interchange between « ṛ » and « ri ». Confusions like « pṛya » for « priya », « alaṅkrita » for « alaṇkṛta », « śṛdhara » = « śrīdhara », « śṛhaṭṭa » = « śrīhaṭṭa », « riṣikēśa » = « hṛṣīkēśa », as in the early Bengal inscriptions, testify that « ri » was the recognised value for « ṛ » in the Late MIA. period in Bengal. The Tibetans obtained the Indian alphabet by way of Khotan (A. F. R. Hoernle, 'MS. Remains etc. from Central Asia,' Introduction), but they were subjected to influences from Bengal from the 7th century onwards, and the Tibetan way of writing « ṛ, ḷ » of Sanskrit by « r+i, l+i » is doubtless based on an Old Bengali pronunciation.

In Early Oṛiyā, the pronunciation of « ṛ » was as in Bengali, but from the 15th century onwards it became « ru », probably through Telugu influence. Upper India knows of no other forms than « ri », or « ir » by metathesis, as can also be seen from early *sts.* forms in Western Hindī and Eastern Hindī: *e.g.*, « ritu (ṛtu), trisnā (tṛṣṇā), mrittu (mṛtyu), kisān

(kṛṣāṇa), krisna (kṛṣṇa), birdha (vṛddha), nirpa (nṛpa), mirdaṇga (mṛdaṇga), hirdaya (hṛdaya), rikhīkēsa (hṛṣīkēśa) », etc.

In MB. documents, and in the old-fashioned spelling in the early 19th century papers and printed works (which still obtains in places removed from the standardising influence of schools), forms like ঘৃত, ঘ্রেত « ghṛtā, ghrētā », ম্রগ « mrāgā », প্রথক « prāthāk », পৃয়োজন « pṛyōjānā », শ্রিগাল « śrigālā », অম্রত « āmṛtā », নির্প « nirpā », ক্রিপিণ « kripiṇā » (kṛpaṇa), গ্রহ « graha » (gṛha), পহ্রতে « pāhṛte » for পরিতে « pāritē » *to wear*, etc., etc. are quite common. The 'Crepar Xaxtrer Orthbhed' (see pp. 136, 234) similarly writes « crepa, omert, ghirna, hirdoe, prothoqhe (= pṛthak-), mirtica, prothibe (= pṛthivī), bretha (= vṛthā) » etc. In MB. « ṛ » in *ts.* and *sts.* words fell together with original « -rā » and « -ri ». And « rā, ri, re, ro, ār, ir, er, or » are interchangeable in Bengali when they occur after a consonant. The « r » is frequently assimilated with the following consonant in folk pronunciation. অমৃত « amṛta » is thus pronounced as [ɔmrito, ɔmirto, ɔmrɔto, ɔmɔrto, ɔmroto, ɔmorto, ɔmreto, ɔmerto; ɔmɔtto, ɔmotto, ɔmetto]; প্রণাম « praṇāma » as [pronam, pornam, prenam, pernam; ponnam, pennam]; প্রবোধ « prabōdha » as [probodfi, porbodfi, prebodfi, perbodfi; pebod]; so প্রদীপ « pradīpa » becomes [prodip, pridip, predip, pordip, perdip], and even পিদিম, পিদ্দীম [pidim, piddim] through intermediate stages like * « pridīpā > « pidīwā, pidiw̃ā » and « pirdīpā > piddiwā, piddiw̃ā » ; প্রভৃতি « prabhṛti » commonly becomes [p(r)ibfiiti, pirbfiiti] ; the ordinary pronunciation of ক্রমে « krāmē » is [kreme, kerme] ; ব্রত « vrata » is normally turned to [bɔrto, berto; bɔtto, betto], and নিমন্ত্রণ « nimantraṇa » and গ্রহ « graha » have given the *sts.* নেমন্তন্ন « nēmāntānnā » and গেরো « gērō » through Middle Bengali pronunciations like « *nimāntārṇā » and « *gerhā ». This interchange of post-consonantal groups of vowel + « r », or their metathesis, has turned তীরহুত « tīrɦhutɦ » (tīrabhukti) to ত্রিহুত « trihutɦ » in Bengali. Foreign words are equally affected: *e.g.*, Portuguese « egreja » *church* gives Bengali গির্জ্জা « girjā » beside গৃজা « gṛjā = grijā », and the Persian « mīrzā » *prince* occurs as মৃজা « mṛjā = mrijā » beside মীর্জ্জা « mīrjā ».

In the dialectal Bengali of Chittagong, « ṛ » becomes « iri » : cf. « girit (ghṛta), biriṣ (vṛṣa) », etc.

The general practice in NB. orthography is to treat ঋ « ṛ » as a compound letter, « r+i ». A word like আবৃত « ābṛtâ » is normally pronounced [abrito], when the fact that the ঋ « ṛ » in this *ts.* is a vowel is remembered; but commonly in pronunciation the « b » is 'doubled,' as in Bengali a consonant before a « r » or « l » is always doubled: *e.g.*, [abbrito]. ঋ is commonly used, because of the convenient shape of its subscribed form, ৃ, to denote the group « ri » in foreign names, instead of the complicated group of subscribed « r+ĭ, ī » (ি, ী): *e.g.*, বৃটেন « bṛṭēn » for ব্রিটেন « briṭēn » *Britain*, খৃষ্ট « khṛṣṭâ » for খ্রীষ্ট, খ্রিষ্ট (properly *খ্রিস্ত) « khrīṣṭâ, khriṣṭâ (khrista) » *Christ*; even পৃভি কাউন্সেল « pṛbhi-kāunsel » for প্রিভি- « pribhi- » *Privy Council*, ক্রমিনাল « kṛmināl » *Criminal*, ক্রকেট « kṛkēṭ » *Cricket*, etc.: we have even ঋষিবর « ṛṣibâr্ » for *receiver*, and Baṇkim Chandra writes ঋড « ṛḍ » for the English name *Reid*. ৠ « ṝ » does not occur in Bengali outside the alphabet. It is an unfamiliar letter, and frequently the long vowel is wrongly employed in writing for « ṛ ». ঌ « ḷ » is only a letter in the alphabet, pronounced « li », and it does not figure in Bengali.

[C] Nasalisation of Vowels in MIA. and NIA.

[I] Final « Anusvāra ».

175. The « anusvāra » and « anunāsika » of OIA. both meant nasalisation of vowels (see p. 244). OIA. « anunāsika » vowels are not preserved in MIA. « Anusvāra » could not occur before stops and aspirates, which had only corresponding nasals, « ṇ, ñ, ṉ, n, m », before them in OIA.; « anusvāra » occurred before « y, r, l, v, ś, ṣ, s, h » only. Final « -m » became the « anusvāra » in MIA.; and original « anusvāra » remained. OIA. « -m » > Early and Second MIA. « -ṁ » became a frank nasalisation of the preceding vowel in the Late MIA. period (Apabhraṁśa), and this final nasalisation still survives in Gujarātī and Marāṭhī ordinarily, when in MIA. we have groups like « -aaṁ, -aüṁ, -ĭ/īaṁ, -u/ūaṁ », etc.; *e.g.*, Gujarātī « karvũ » (*kariavvaüṁ, kartavya-kam), « ghaṇũ » (ghaṇaüṁ, ghaṇakam), « pèhlũ » (pahillaüṁ, pratha-ila-kam), « hũ » (haũ, haüṁ =

ahakaṁ, aham), « sũ » (saüṁ, sākam), « sõ » (saüṁ, śatam), « ẽśi < *asĭ » (asīiṁ, aśīti), « nēvũ » (navaïṁ, navati), etc.: Marāṭhī « śẽ » (saẏaṁ, śatam), « karṇẽ » (karaṇaẏaṁ, karaṇakam), « mōtĭ » (mŏttiaṁ, māuktikam), « taḷẽ » (taḷāẏaṁ, taṭākam), « bĭ » (bīaṁ, bījam), « tārũ » *ship* (tāruaṁ, tārukam), « nībũ » (nimbuaṁ, niṁbukam), « pākhrũ » *bird* (pakkha-rūaṁ, pakṣa-rūpam), etc., etc. Western Hindī (Braj-bhākhā) has also cases of this survival of the final nasal of OIA.: *e.g.*, « haũ » *I* (ahakaṁ), « māranaũ, māribaũ » (māraṇa-kaṁ, māritavya-kam), etc. This final nasalisation is not preserved in other NIA. A case like OB. « hãu = haũ », found also in MB. as the verbal affix for the 1st person, ৌ « -hõ », seems to be a survival from the Māgadhī Apabhraṁsa (or through nasalisation of intervocal « w̃ » ? *E.g.*, « aham > ahakaṁ > *haaṁ >*hawã > *hawa > haũ »); and -ঁ « -hã » in তঁ, জঁ, ইঁ « tihã, jihã, ihã », etc., honorific forms of pronouns, which is from OIA. « -ēṣām » > MIA. « -ēhaṁ », is due to the analogy of the other genitive plural affix « -āṇa » from « -āṇăṁ » = « -ānām » (see p. 306). The final « anusvāra » may be said to have been lost to Bengali. As for the « anusvāra » in the interior of words, before the semivowels, liquids and sibilants, and the aspirate « h », it was dropped in many cases in MIA. itself; but where it occurred in MIA., before the sibilants for example, it behaved like a class nasal before its corresponding stop or aspirate, and has generally been continued down in all NIA.: as a nasalisation of the preceding vowel, which is lengthened by way of compensation (*e.g.*, « hãsɬ » = « haṁsa », « mãsɬ » = « māṁsa » etc.), or as the dental nasal « n » in the North-western Indian speeches which do not simplify double consonants (*e.g.*, Panjābī « hans »), or again as a separate nasal syllable in a language like Oṛiyā which does not wholly nasalise the class consonants (*e.g.*, Oṛiyā « bãũśà bāṅśà » = « vaṁśa »: cf. the NB. pronunciation of « anusvāra » in *tss.* = [ŋ, ŋɔ], from MB. [w̃, w̃ɔ]).

[II] Class Nasals and Interior « Anusvāra » of MIA.

(1) MIA. Nasals inherited from OIA.

176. In its development from OIA. and MIA. to NIA., « anusvāra » thus fell in line with the class nasals before their corresponding stops and

aspirates. MIA. of the Second period possessed intervocally either double stops (or stop + its aspirate), or nasal + stop or aspirate (see p. 254). The vowel preceding such a group of double stops, or nasal + stop or aspirate, was always a short one in MIA. The Aryan dialects entered the NIA. stage throughout the greater part of India when the double stops (with or without aspiration) were simplified, and there was compensatory lengthening generally. This has been described before (p. 259). In the case of groups with the nasal, the nasal as an independent sound was lost in NIA., and compensation for this loss came in by both lengthening and nasalising the preceding vowel: the line of change has been indicated at p. 259. Before the final absorption of the nasal into the preceding vowel, there would be a stage when it was pronounced very short: *e.g.*, « aŋka » [aŋka, ɒŋkɒ] > আঁক [ɒ̃ŋkɒ, ɑ̃ŋkɒ, ãŋkɒ] > আঁক « ā̆k » [ã:k]. This 'reduced' nasal can be expressed by a small « ŋ, n m » etc., written above the line [ᵑ, ⁿ, ᵐ]. Such short or reduced nasals are found elsewhere: in Sinhalese, for instance, in its *tbh.* element (cf. W. Geiger, 'Litteratur and Sprache der Sinhalesen,' §17). A similar stage of reduced nasals undoubtedly obtained in IA. in the mainland, probably during the Late MIA. period, and certainly during the transitional period between MIA. and NIA. In Oṛiyā, among the Magadhan speeches, the vowels have not been nasalised to the entire absorption of the original nasals, which may be said to obtain as reduced sounds: *e.g.*, Oṛiyā କାନ୍ଦଣା [kãⁿdəṇa] *weeping* (krandana-), ଦାନ୍ତ [dãⁿtə] (danta), ପାଞ୍ଚ [pãⁿcʃə] (pañca), etc. = Bengali কাঁদনা > কান্না [kãdna > kãnna], দাঁত [dã:t], পাঁচ [pã:cʃ]; in Oṛiyā, the nasal is fully uttered in Sanskrit words like « dānta » < « √dam », « pāñca-janya », etc., but it is not at all so prominent in the *tbh.* words, which, besides, have the vowel nasalised. It seems that in OB. and in eMB., dialectally undoubtedly, the reduced nasals obtained: although the use of the ঁ « candra-bindu », which is found in inscriptions in the mystic syllable ওঁ « õ » (now pronounced indifferently [o:ŋ] or [o:m]) is an early evidence that the full nasalisation of vowels came in in Proto- and Old Bengali speech (see p. 226). The Caryā MS. spellings like « chānda, bāndha, tentalī, kāndha, sāŋkama, ṭāŋgi, pāñca, ḍombī, bhaṇḍāra » etc. may be taken to show that the reduced nasals were the

rule in OB. So, too, Sarvânanda's spellings « kiñcōhi (NB. কেঁচো kēcō, Skt. kiñculaka), siṇkala (=śṛṇkhala), vahēñcī *a fruit* (= NB. বইঁচী bâîcī), bāndhulī (NB. বাঁধুলী bâdhulī=bandhuka) », etc., would be equally indicative of the reduced nasal. But the Caryās show full nasalisation of original class nasals and of « anusvāra » by means of the « candra-bindu » as well. Apart from the fully nasalised vowel in the affixes like « -ẽ, -ī », we have spellings with the « candra-bindu » like the following: « hãu (ahakaṁ), mãsa (māṁsa), ãsu (aṁśu), ũcā (*uñca-=ucca-), hāḍī=hãṛī, *not* *hāṇḍī (-bhāṇḍa-), bãjhē (vañjhā, vandhyā), sãjhē (sañjhā, sandhyā), bãddhi=bãdhi (*sts.*<vandhyā) »; and Sarvânanda has « jhaṁpāṇa » (=yāpya-yâna), with « anusvāra » for the expected « candra-bindu », rather than « *jhampāṇa » with « -mp- »: cf. « pimpaḍā, dāmbōḍā », with « m » and not with « anusvāra ». The complete absorption of the nasal thus belongs to the OB. period, although it also seems that the reduced nasal still held the field in OB. The orthography in this matter, employing the class nasals after the lengthened vowel, however, may be archaic only, without reference to the actual pronunciation. In the eMB. of the ŚKK., from the spellings of words it would seem an analogous state obtained. The spelling here, too, might be only archaic. Thus we have আঙ্গ « āṇgå » (aṇga); but আঁচল « ãcalå » (añcala), 4 times, beside আঞ্চল « āñcålå », 11 times; আন্ধারী « āndhārī » (andha-kārika); কাঙ্কণ « kāṇkaṇa » (kaṇkaṇa), but কাঁচ(ী) « kãcå(ā) » *unripe*; কাঁড়ার « kãṛhārå » *helmsman* beside কাণ্ডার « kāṇḍhārå » (=karṇa-dhāra); কাঁতি, কাঁতী « kãti, -ī » beside কান্তি « kānti »; কাঁদ « kãd- » (√krand), once, beside কান্দ « kānd- », 11 times; কাঁপ « kãpå » (kamp-), twice, besides কাম্প « kāmpå », 5 times; কাঁশ kãśa » thrice, beside কংশ « kaṁśa » (=Kaṁsa), 10 times; so চাঁদ « cãdå » (candra), 4 times, beside চান্দ « cānda » 14 times. In the Standard Colloquial and in West Bengali generally, in North Bengali and Assamese, we have no longer any reduced nasals, only nasalised vowels. But in certain tracts in the East Bengali area, we have still traces of the full nasal, mainly in connexion with the voiced consonants followed by a vowel; and vocal nasalisation is frequently absent. Thus, we have [tsã:d], beside [tsãⁿder, tsɑⁿder]=চাঁদ, চাঁদের, West Bengali [ʧã:d, ʧãder]: we have even [t̪sã̆:n < t̪sã̆nd]; [bã:d,

bāⁿdɑ] = বাঁধ, বাঁধা [bã:d(ɦ), bãd(ɦ)ɑ]; [boĩⁿd-] = বঁধু [bɔ̃dɦu] (bandhu); [pã:ts, pã:ʧ] = পাঁচ [pã:ʧ]; [ʃã:r, ʃã:r] = ষাঁড় [ʃã:ṛ] (ṣaṇḍa); [ʃãⁿtsɑ] = সাঁচা [ʃãʧa] (satya-); [ḍũᵐbur] = ডুম্বুর > ডুমুর [ḍumur] (ḍumbura < udumbara); etc. But the persistent retention of the nasals as distinctly audible sounds, albeit reduced, does not mark East Bengali pronunciation in the same way that it does that of Oṛiyā. OB. and eMB., as in the Caryās and the ŚKK., may be taken to represent a mingling of dialects, showing both reduction and complete absorption of the nasals; or, what is equally likely, the spelling with the full nasals is merely an archaic thing, and is not a proper key to the pronunciation which had already become nasal. The influence of Skt. *tss.* in orthography, which is always conservative, is to be taken into consideration in discussing the OB. and eMB. conditions in this matter.

177. Below are given instances of nasalisation of vowels in Bengali through class nasals and « anusvāra » occurring with consonants in OIA.

As Bengali vowels normally are more or less nasalised when preceded or followed by a nasal, the « anusvāra » becomes superfluous, and is often not used in writing.

(i) Unvoiced stops and aspirates preceded by class nasals: the vowel is nasalised (after being lengthened), and the stop or the aspirate remains. *E.g.*, আঁক « ãkɬ » (aŋka); কাঁকণ « kãkaṇɬ » (kaŋkaṇa); পাঁক « pãkɬ » (paŋka); শাঁখা « śãkhā » (śaŋkha-); পাঁচ « pãcɬ » (pañca); মাচা = *মাঁচা « mācā = mãcā » (mañca-); সাঁচ, ছাঁচ « sãcɬ, chãcɬ » (sañca); পোঁছ « põch- » *wipe* (pra + uñch); বাঁট « bãṭɬ » (*vaṇṭa, vṛnta); গাঁঠ « gãṭh » (gaṇṭhi, granthi); শুঁঠ « śũṭh » (śuṇṭhi); তাঁত « tãt » (tantu); দাঁত « dãtɬ » (danta); পাঁতি « pãti » (panti < paŋkti); ‡কাঁথ « kãthɬ » (kanthā); কাঁপ « kãp » (kamp-); চাঁপা « cãpā » (campaka-); গোঁফ « gõphɬ » (gumpha); etc.

Sibilants with preceding « anusvāra » remain, with the « anusvāra » nasalising the preceding vowel: *e.g.*, আঁশ « ãśɬ » *fibre* (aṁśu); কাঁসা « kãsā » *bell-metal* (kāṁsya); কাঁসারী « kãsārī » (kāṁsya-kārin), but cf. Oṛiyā *tbh.* « kaṁsā, kaṁsāri » [kɔ̃ⁿʃa, kɔ̃ⁿʃari]; পাঁশ « pãśɬ » *ashes* (pāṁśu), cf. Oṛiyā « pãũśà »; বাঁশ « bãśɬ » (vaṁśa), cf. Oṛiyā « bãũśà »; মাস = মাঁস « māsɬ = mãsɬ » (māṁsa), cf. Oṛiyā « mãũsà »; হাঁস « hãsɬ » (haṁsa).

OIA. « anusvāra » following the high vowel « i » is lost in « viṅśati »> MB. « vīsa, *vīśa »>Bengali বিশ « biśa », -ইশ, -শ « -(i)śa » in composition : একুশ « ekuśa » (ēkaviṅsati), বাইশ « bāïśa » (dvāviṅśati) ; so -তিস, -তিশ, *sts.* তিরিশ « tisa, tiśa, tiriśa » (triṅśat), চল্লিশ « cālliśa » (catvāriṅśat), etc.

(ii) Class nasals with voiced consonants, and « anusvāra » with « h, y, v ».

(a) « -ŋg- » of MIA., from OIA., became « ~ŋg- » with reduced nasal in Proto-Bengali, and possibly also in OB. In the NB. Standard Colloquial, « -ŋg- », or rather, « ~ŋg », is assimilated to a full [ŋ], written ঙ্গ, ঙ, ং (finally only) « ŋg, ŋ, ṁ(m̐) », although the OB. and eMB. condition, with the stop sound « g », is preserved intervocally in some parts of East Bengal. *E.g.*, আঙ্গিনা, আঙিনা « āŋ(g)inā » (aŋgana-) ; আভাঙ্গ, আভাং « ābhāŋ » (abhyaŋga) ; গাঙ্গ, গাঙ, গাং « gāŋgā=gã^{ŋ}gā > gãŋ=gāŋ » *a river* (gaŋgā) ; *dēśī* words like চিঙ্গড়ী, চিঙড়ী, চিংড়ী « ciŋgaṛī » *prawn, lobster* (ciŋga-ṭa- ; cf. Hind. jhiŋgā), চাঙারী, চাঙড়া « cāŋārī, cāŋgaṛā », etc., *basket* (OB. *caŋgēḍā, Caryā 10), চাঙ্গা, চাঙা « cāŋgā » *well, in good spirits* (*dēśī* caŋga), জোংড়া « jōŋgaṛā » *snail* (OB. joŋgaḍā), ডাঙ্গস, ডাঙস « dāŋgaśa » *spear*, etc. ; জাঙ্গাল, জাঙাল « jāŋ(g)āla » *dyke* (jaŋgāla) ; বাঙ্গাল, বাঙাল « bāŋgāla > bāŋāla, bāŋāla » (vaŋgāla), but East Bengali often [bãŋgal] ; ভাঙ্গ, ভাং « bhāŋ » *hemp* (bhaŋgā) ; ভাঙ্গে, ভাঙে « bhāŋ(g)ē » *breaks* (<bhaŋga), but cf. ভাঁগ « bhã̄g- » in the ŚKK., at least 26 times, against ভাঙ্গ « bhāŋg- »=[bʰãŋg-], 14 times ; *tbh.* রাঙ্গা, রাঙা « rāŋ(g)ā » *red* (raŋga-) ; রাঙ্গ, রাঙ, রাং « rāŋ » *tin* ; also in রাংচিতা « rāŋ-citā » *a plant* (raŋga-citra-) ; but cf. *sts.* রঙ, রং « rāŋ » *colour* ; লঙ্গ, লং « lāŋgā, lāŋ » (lavaŋga-) ; শিঙ্গ, শিঙ, শিং « śiŋ », শিঙ্গা, শিঙা « śiŋ(g)ā » (śṛŋga-) ; OB. « sāŋga »=[ʃãŋga] (Caryā 10), found in NB. সাঙ্গাৎ, সাঙাৎ « sāŋ(g)āt », in the Calcutta dialect স্যাঙাৎ [ʃæ̃ŋat] (see p. 322) = *friend* (saŋga+-vant-), has given place to the *ts.* সঙ্গ, সঙ্গে, সঙে « sāŋgā, sāŋ(g)ē » in NB. The group « ŋg » of OIA. and MIA. thus normally becomes « ŋ » in NB. (with nasalisation of preceding vowel generally not expressed in writing). But eMB. spellings like ভাঁগ « bhã̄g- », and Caryā spellings like লাগ « lāga » (= lãga = *nãga < *naŋga < nagga = nagna), to rime with সাঙ্গ « sāŋga » (= ? sãga <saŋga, cf. NB. সগাই sagāi < *sāgāi *union, irregular marriage among certain lower castes*), in Caryā 10, and মাগা « māgā »

(=« mãgā », MIA. « *maŋga < magga = mārga »—cf. also the OB. spelling মাঙ্গ « māŋga » in Caryās 8, 13, 14) to rime with সাঙ্গা « sāŋgā = sãgā » (writted সুঙ্গা in MS.), as in Caryā 8, would establish the normal transformation of « -ŋg- » of OIA. to « ~ŋg, ~g » in OB. The assimilation was thus a thing of MB. and NB. times; and similar though later assimilation of « ~nd » « ~mb » to ~n, ~m » are found in NB.

Tatsama words retain « -ŋg- » in full, intervocally; when closing a syllable, and in *sts.* forms, there is assimilation: *e.g.*, জঙ্গল « jaŋgal » *forest*, জঙ্গুলে « jaŋgulē » < জঙ্গলিয়া « jaŋgal-iyā » *belonging to the forest*, but জঙ্‌লা, জংলা « jaŋlā » *wild*; মঙ্গল « maŋgal », but মঙ্‌লা, মংলা « maŋglā » as a contracted proper name; etc.

OIA. « -ŋgh- » became « ~ŋgh » in OB., and with the dropping of the aspiration, the group fell together with the Bengali modification of « -ŋg- »: জাঙ, জাং « jāŋ » (jaŋghā); শিঙ্‌নি > শিক্‌নি « śiŋni > śikni » (śiŋghāṇa-); and the word « saŋgha », which would give in NB. a form *সাং « *sāŋ », seems to have merged into সাঙ্গ « sãŋga » < « saŋga ».

OIA. « -ñh- » in the word « siñha » lost its nasalisation in Early MIA. —« sīha »: the MIA. form possibly subsists in the NB. surname শী, সী « śī, sī » (see p. 352), originally forming part of personal names, like most non-Brāhman surnames in Bengal. In the *sts.* সিংঘি, সিংগি « siŋg(h)i » we have the normal change of « -ñh- » to « ŋg(h) ».

(b) « -ñj- » becomes « ~j » in NB., doubtless through a stage of « ~ñj »: *e.g.*, আঁজলা « ãjlā » (añjali-); গাঁজা « gājā » (gañja-, gañjikā); পাঁজি « pāji » (pañjikā); পাঁজর « pājar » (pañjara); পিঁজরা « pījrā » (piñjara); ভাঁজ « bhāj » *folding of cloth, paper etc.* (bhañj). The Maithilī change of « ñj » to « ññ > ñ », as in « āñu, añu < añju » = « *aṅśu » (aśru), is unknown to Bengali.

« -ñjh- » of MIA. became « ~jh » in Bengali: *e.g.*, ঝাঁঝ « jhājh » *strong flavour*; *huge cymbals* (cf. jhañjhā); বাঁঝা « bājhā » (vañjhā, vandhyā); সাঁঝ « sājh » (sañjhā, sandhyā).

OIA. « anusvāra » + « y » became « -ñj- » in MIA., and the Bengali development was « ~j »: সাজোয়া « sājōā » *armour, corslet* (sañjōa-, saṁyōga-: cf. Hind. sañjōwnā, sañjōnā *arrange*).

(c) « -ṇḍ- » > « ~ṛ » in Bengali : আঁড়ুআ >এঁড়ে « ãṛuā>ẽṛē » *bull-calf* (aṇḍa+uka-); slang « ãṛṛ, ẽṛṛ » [æ̃r] *testicles* (aṇḍa); ‡ কাঁড় « kãṛṛ » *arrow* (kāṇḍa) ; খাঁড় « khãṛṛ » *sugar, molasses*, খাঁড়া « khãṛā » *sacrificial sword* (khaṇḍa) ; গোঁড় « gõṛṛ » *fleshy navel* (see *ante*, p. 67), *the Goṇḍs* (*dēśī* goṇḍa) ; চাঁড়াল « cãṛālṛ » (caṇḍāla) ; ছিঁড়ে « chĩṛē » (chiṇḍati) ; দাঁড়, ডাঁড় « dãṛṛ, ḍãṛṛ » *oar, bird's perch* (daṇḍa) ; নাড়>নেড় « nãṛṛ>nēṛṛ » [næ̃r] *hard stools* (laṇḍa, lēṇḍa, *dēśī*) ; পাঁড় « pãṛṛ » *huge, ungainly, ugly* (paṇḍa *eunuch*), পুঁড় « pũṛṛ » *sugar-cane, a caste* (puṇḍa, puṇḍra) ; ফাঁড় « phãṛṛ » *breadth* (*of a pot generally*) (cf. phaṇḍa *belly*) ; পিঁড়া « pĩṛā » *wooden board, plinth* (*dēśī*?=piṇḍa : cf. Hindī pẽṛ *tree*, vṛkṣa-piṇḍa in the 'Mahāvastu') ; ভাঁড় « bhãṛṛ » (bhāṇḍa) ; মুড়া = *মুঁড়া « *mũṛā, muṛā » (muṇḍa-) ; রাঁড় « rãṛṛ » (raṇḍā) ; শুঁড় « śũṛṛ » (śuṇḍa) ; সাঁড় « sãṛṛ » (saṇḍa) ; সাঁড়াশী « sãṛāśī » (*saṇḍaṅśia, sandaṅśikā) ; হাঁড়ী « hãṛī » < (« -haṇḍa- < -bhāṇḍa- », in compounds).

In a few cases, we have « n » for « -ṇḍ- »—through an early assimilation of « ṇḍ » to « ṇṇ » : খান, খানা, খানি « khānṛ, khānā, khāni » *piece, article* (*determinative word*), *place* (=khaṇḍa-) ; cf. Oṛiyā « khâṇḍâ » *piece, part, fragment, a single one*, « khāṇḍi » *pot-sherd* : Bengali পত্রখানা « pâtrâ-khānā » =Oṛiyā « pâtrâ-khâṇḍâ » *the letter*, lit. *the letter-piece*, '*one piece letter*' ; « bānā » *penis* (*dēśī* baṇḍa-), cf. Oṛiyā « bâṇḍā ». In both the cases, forms with the normal « ~ṛ » occur—though « khãṛṛ » has got another meaning (see above). The « -n- » forms may be due to the influence of similar words —*e.g.*, « sthāna » > থান « thānṛ » *place, rectangular piece* (*determinative*) ; and « bāṇṛ » *arrow*. Cf. Hind. « gannā » *sugar-cane*=« ikṣu-gaṇḍa- » as in the 'Mahāvastu.'

« -ṇḍh- » of MIA. > « ~ṛ » in NB., with loss of aspiration : ঢুঁড়ে « ḍhũṛē » *seeks* (*dēśī* ḍhuṇḍhaï) ; MB. কাঁড়ারী « kãṛārī » *helmsman*, MB. কাণ্ডার « kaṇḍhāra » (*kaṇṇa-dhāra-, karṇa-dhāra-).

(d) OIA. « -nd- » > Beng. « ~d- » : ইঁদুর « ĩdurṛ » (indura) ; ইঁদারা « ĩdārā » (indrâgāra) ; কাঁদ « kãd- » (krand) ; *sts.* কেঁদরা « kẽdṛā » (kēndra-) ; চাঁদ « cãdṛ » (candra) ; ছাঁদ « chãdṛ » (chanda) ; বুঁদ « bũdṛ » (*bundu = bindu) ; MB. *sts.* মাঁদির « mādirâ » (mandira) ; সিঁদুর « sĩdūrṛ » (sindūra) ; সুঁদরী « sũdṛrī » *a tree, much used for fire-wood* (sundara-) ; *sts.* কোঁদল= কঁদল,

« kõdâlâ < kādâlâ » (kandala < √krand); বাঁদর « bãdarâ » *monkey*, from Hindōstānī « bandar » (vānara); etc. Cf. Persian borrowings like চাঁদা « cãdā » *subscription*; রাঁদা, রেঁদা « rãdā, rẽdā » *carpenter's plane*; বাঁদী « bãdī » *slave-woman*; হিঁদু, হেঁদু « hīdu, hẽdu » = « candah; rand+ā; bandah+ī; hindū, hẽndō »; and cf. an English borrowing like জাঁদরেল « jãdrēl » *a general, big person, big* (slang), from « general », through « *jānrēl, *jāndrēl », = Hind. « jandrāl ».

In dialectal and standard Bengali there are a few instances of assimilation of « nd » > « ~d » to « ~n, n »: *e.g.*, কান্না « kānnā < kãdnā » (krandana-); চান্ « cānâ » [tsã:n] = « cãdâ » (candra); কাঁদতে > কাঁত্তে, কান্তে « kãdte > kãtte, kānte », from কাঁদিতে « kãditē » *to weep* (krand-); similarly with « ndh », which is found as « n » in বাঁধিতে > বাঁদ্তে, বাঁত্তে, বান্তে « bãdhite > bãdtē, bãttē, bānte » *to bind* (bandh); etc.

« ndh » becomes « ~d(h) »: আঁধি « ādhi » *dust-storm* (andhikā); আঁধার « ādhārâ » (andhakāra); কাঁধ « kãdhâ » (skandha); *sts.* গাঁধা- « gādhā- » *to smell* (gandha-); ধাঁধা « dhãdhā » *doubt, paradox* (dhandhā); বাঁধ « bãdhâ » *a bond, a dam* (bandha); ফাঁদ « phãdâ » *net*, a blend of « phāsâ » (= pāśa) and « bandha » (?); সোঁধা « sōdhā » (sugandha-); etc.

(e) OIA. « -mb-, -mr- » > MIA. « -mb- ». The fortunes of « -mb- » were similar to those of « -ŋg- »: there has been uniformly an assimilation of the stop element, and the nasal generally has survived: although the « ~b » treatment is found occasionally. Examples: আম « āmâ » (MIA. amba < *āmbra, āmra); OB. « kāmalī » *a man's name* (Kambalika = Kambalâmbara-pāda); চুমা « cumā » (cumba-); জাম « jām » (jambu); ডিম « ḍimâ » (ḍimba); তাম্লী « tāmlī » *a caste* (tāmbulika); *sts.* কদম « kâdâmâ » (kadamba); শামুক « śāmukâ » (*śambukka, śambu-ka); শিম « śimâ » (śimba); শিমুল « śimulâ » (śimbalī = śālmalī); MB. (ŚKK.) সমুন্ধ « sâmundhâ », *sts.*, once, beside *ts.* সম্বন্ধ « sâmbândhâ », 11 times; *sts.* ‡ সমন্ধী, সুমুন্দি « sâmândhī, sumundī » *wife's brother* (sambandhin); etc.

We find as early as in the Aśōkan inscriptions (of the eastern area) a form showing the « mb > mm » treatment, like « lummini = lumminī » for « lumbinī » (at *Rumin*-dei). But we have absence of assimilation in « tambapaṁni, aṁba », at Delhi and Kalsi, the dialects of which are

on an eastern basis. The « mb » > « ~b » treatment seems to have characterised Old Bengali—at least, in West and West Central Bengal: the Eastern Rāḍha dialect is a dialect showing « ~b »; also Oṛiyā; *e.g.*, আঁব « ãbअ » (amba, āmra), cf. Oṛiyā « āmbā » [ãᵐbɔ]; তাঁবা « tãbā » (tamba-, tāmra), cf. Oṛiyā « tāmbā » [tɔ̃ᵐbɑ]; নাব- « nāb- = nãb- », MB. নাম্ব « nāmbā- » *get down* = Literary Bengali নাম « nām- », East Bengali ‡ লাম « lām- », (namma-, nam-); নেবু « nēbu = nẽbu », beside লেবু « lēbu » (nimbuka); MB. সাম্বায়, সাম্ভায়, beside সামায় « sāmāy, sāmb(h)āy » *enters*, cf. OB. সমাই « samāi » *enters* (<? samāyāti); OB. (Caryā 28) « tāmbōlā » (tāmbula-); OB. « dāmbōḍā » (Sarvânanda: Skt. damya-) = NB. দামড়া « dāmṛā » *ox*; MB. জাম্বীর, জাম্ভীর beside জামীর « jāmb(h)irā, jāmīrā » (jambīra). Cf. the MB. name (W. Bengal) হাম্বীর, হাম্ভীর « hāmb(h)īrā » < Perso-Arabic « amīr ».

OIA. « -mbh- » > « mbh » in OB., MB., also « mh, mm » in MB. > NB. « m », without nasalisation of preceding vowel: কুমার « kumārअ » (*kumhārā, kumbhāra = kumbha-kāra); কুমীর « kumīrअ » (kumbhīra); খামার « khāmārअ » *barn* (? skambhâgāra), cf. MB. খাম্ভা, খাম্বা « khāmb(h)ā » (skambha-); থাম « thāmअ » (stambha); সামালে « sāmālē » *bears, holds, saves* (sambhālayati, sambhārayati); etc.

Also MIA. « mh » from various sources in OIA.: কুমড়া « kumअṛā » (kumhaṇḍa, kuṣmâṇḍa); বামুন « bāmunअ » (brāhmaṇa), cf. 'Bihārī' « bābhan » (*babbhaṇa, bambhaṇa < bamhaṇa < brāhmaṇa); আমি, তুমি « āmi, tumi » (amha-, tumha- = asma-, yuṣma-); etc.

OIA. « anusvāra » + « v » became « mb » so far as NIA. was concerned, at least in Northern and Eastern India: *e.g.*, *sts.* কিম্বা, সম্বাদ « kimbā, sâmbāḍअ », beside the proper কিংবা, সংবাদ « kiṁvā, saṁvāda »; cf. MB. (ŚKK.) *sts.* সমাদ « sâmāḍā » (saṁvāda); NB. *sts.* সম্বর « sâmbār- » *arrange, flavour with spices* (saṁ-vṛ); etc.

(f) Where two nasals of MIA. are reduced to one, there is nonasalisation of the vowel (except such as comes in through its being followed bya nasal), and an « ă » is changed to « ā »: *e.g.*, আন « ānअ » (aṇṇa, anya); কান « kānअ » (kaṇṇa, karṇa); MB. কাহ্ন, কান « kānhā, kānā », NB. কানু « kān-u » (*kaṇṇa, kaṇha, kṛṣṇa): চাম « cāmअ » (camma, carma); সোনা « sōnā » (soṇṇa-, suvarṇa); MB. সানা « sānā » *corslet* (sannāha); etc.

(2) 'Spontaneous Nasalisation' in MIA. and NIA. Onomatopoetics.

178. The above are cases where the nasalisation in Bengali corresponds to, or is based on, a nasal or « anusvāra » in OIA. But there are cases in Bengali and other NIA. in which *tbh.* words show nasalisation where there is no nasal in the corresponding OIA. form, as in Sanskrit: *e.g.*, Bengali ‡হাঁস « hãs- », Hindī « hãs », but OIA. «√has- »; Hindī « sãcā » (= satya-), « nĩd » (nidrā), « sãp » (sarpa); Marāṭhī « kãsav », beside « kāsav » (kacchapa); Hindī, Marāṭhī « ãsū » (aśru); etc. These are cases of the so-called 'spontaneous nasalisation' in NIA. It seems there was an old tendency in Indo-Aryan, imposed upon it, it may be, by the non-Aryan speeches, towards articulating through both the mouth and the nose, and thus bringing in a nasalisation. This seems to have resulted also in a nasal after-glide of the vowel, an « anusvāra », which was normally altered to a full class nasal corresponding to the stop sound which might follow: but the « anusvāra « was retained before the sibilants and other open consonants. Prakrit spelling preserves the « anusvāra » in most cases. This nasalising habit goes back certainly to Late OIA. and Early MIA. times: *e.g.*, a Pali form like « mahiṁsa » (mahiṣa), = Hindī « bhaĩs < *mhaiṁsa »; and a case like Skt. « karkaṭa » *crab* and « kaṅkaṭa » *armour* (cf. Bengali কাঁকড়া « kãkṛā » *crab*; compare Latin « cancer » and Greek « karkínos » *crab*), which seem to be allied, would show that it was found in OIA. But it was prominent, as can be seen from the extant remains, from the Second MIA. Period. Second MIA. had forms like « vaṇka (= vakka, vakra), daṁsana (= dassana, darśana), jampaï (= jappaï, jalpati), phaṁsa (phassa, sparśa), paṇkhi (= pakkhi, pakṣin), etc. (see Pischel, §§74, 86). This kind of spontaneous nasalisation was a characteristic thing in Second MIA. phonology; and *dēśī* words seem to have a special preference for alternative forms with the intrusive « anusvāra » or nasal. The NIA. words with nasalised vowels can in most cases be referred to MIA. forms with intrusive nasal: and for such cases, where the extant remains in MIA. (Pali, Prakrit, Apabhraṁśa) do not furnish us with forms showing this spontaneous nasalisation, we have to go to MIA. hypothetical forms. (G. A. Grierson, 'Spontaneous Nasalisation in the Indo-Aryan Languages,' JRAS., 1922, pp. 381 ff.) Spontaneous

nasalisation is therefore not a NIA. phenomenon : for the NIA. forms given above, we have to postulate Second MIA. forms like « *haṁsa- (= hassa, hāsya), *saṁca (= sacca, satya), *nindā (= niddā, nidrā), *sampa (= sappa, sarpa), *kaṁchava (= kacchava, kacchapa), *aṁsu (= assu, aśru) », etc., in the analogy of existing nasalised forms. And it would be seen that the nasal occurs in double consonant groups generally. As Grierson has shown, in many cases the MIA. nasal or « anusvāra » is not transformed into the nasalisation of the vowel in NIA., but remains as a pure nasal, or as what may be called a reduced nasal—the rhythm of the sentence commonly determining the matter.

So far as NIA. is concerned, these forms with spontaneous nasalisation are of the same category as those which show original OIA. or historical nasalisation, being equally inherited from MIA. All NIA. do not entirely agree in details, although all share in the results of this general principle or preference of MIA.: words with spontaneous nasalisation occur in one NIA. speech, say, Western Hindī, but are absent in another, say, Bengali, and *vice versa*: *e.g.*, Bengali has সাপ « sāp্ঢ », পা « pā » ছাড়ে « chāṛē » from « sappa, pāa, chaḍḍ- », whereas Hindī shows « sā̃p, pāw̃, chā̃ṛē » from « *sampa, *pāw̃a, *chaṇḍ » of MIA., and Bengali কথ, কয়েথ « kāthা, kāyēthা » from « *kaw̃attha, *kaỳattha, kaïttha » (kapittha) can be compared with Marāṭhī « kavāṭh » (*kavaṇṭha) : conversely, Bengali has পুঁথি « pũthi » (*ponthia) beside Hindī etc. « pōthī » (potthia), কুঁদন « kũdāṇা » *jumping* beside Hindī « kūdnā », etc.

Examples in Bengali: আঁখ « ā̃kh » (*aŋkhi, akkhi = akṣi) ; আঁখর « ā̃khārা » beside আখর « ākhārা » (*aŋkhara, akkhara = akṣara) ; আঁচ « ā̃c » (*aṁci, acci = arciṣ) ; আঁঠি « ā̃ṭhi » *stone of fruit* (*aṇṭhi, aṭṭhi = asthi) ; ইঁট beside ইট « īṭা, iṭা » (*iṇṭa, iṭṭa < *iṭṭha = iṣṭa) ; উঁচু, উঁচা « ũcu, ũcā » (*uñca, ucca) ; উঁট, উট « ūṭা, uṭা » (*uṇṭa, uṭṭa < *uṭṭha = uṣṭra) ; কাঁকড়া « kā̃kaṛā » (*kaŋkaḍa-, kakkaḍa = karkaṭa : cf. kaŋkaṭa *armour*) ; কাঁকুড় « kā̃kur » (*kaŋkōḍia, kakkōḍiā = karkōṭikā) ; কাঁখ « kā̃khা » (*kaŋkha, kakkha = kakṣa) ; কুঁকুড়া « kũk(u)ṛā » (*kuŋkuḍa-, kukkuḍa = kukkuṭa) ; কোঁখ « kõkh » (*koŋkha, kokkha, cf. kukṣi) ; কুঁজা « kũjā » (*kuñja-, kujja, khujja = kubja) ; কুঁদে « kũdē » *jumps* (*kundaï,

kuddaï = kūrdati); ঘিঁষ « ghĩṣ- », ঘেঁষ « ghẽṣ- », ঘাঁট « ghãṭ- », ঘিঁট « ghĩṭ- », ঘুঁট « ghũṭ- » (*ghiṁsa-, *ghaṇṭa, *ghiṇṭa, *ghuṇṭa=*ghissa, ghaṭṭ[h]a, ghiṭṭ[h]a, ghuṭṭ[h]a=√ghṛṣ-, ghṛṣṭa); চাঁছে « cāchẽ » *scrapes* (cañchaï, cacchaï, *tacchaï=takṣati); চেঁচা « cẽcā- » *shout* (*ciñca-, *cicca, cf. cīt-kāra); চুঁচি « cũci » (*cuñca- ?, cf. cucuka); ছেঁচে « chẽcẽ » (*cheñcaï ? *śeñcayati, śēcayati); ছেঁদা « chẽdā » (*chenda-, chidda=chidra); ছুঁৎ « chũtʌ » *ruse* (*chunta, *chutta, *śatta=sūtra); ছোঁয় « chõĕ » (*chuṁvaï, chuvaï = spṛśati); ছোঁচ « chõcʌ » (*choñca, *śōca = śāuca); ঝাঁঝর « jhãjhâra » (*jhañjhara, jhajjhara=jharjhara); ঢেঁটা « ḍhẽṭ(h)ā » (*ḍheṇṭa, ḍhiṭṭha=dhṛṣṭa); তুঁতিয়া « tũtiyā » (*tuntha-, Skt. tūttha); তুঁষ « tũsʌ » (*tuṁśa ?, tūṣa); নাঙ্গা, নাঙা « nāṇg(g)ā » (*naṇga-, nagga=nagna); MB. নিন্দ, নীঁদ « nindà, nĩdà » (*ninda, niddā=nidrā); পাঁচোল « pãcīlʌ » (*pāñcīla ?=prācīra); পুঁটি « pũṭ(h)i » *a fish* (*poṇṭhi, poṭṭhi, prōṣṭhi); পুঁথি « pũthi », beside পুথি « puthi » (*ponthia, potthia=pustikā); পিঁপড়া « pĩpʌṛā » (*pimpaḍa-, *pimpiḍa-, *pippi/aḍa, cf. pipīlikā); পহুঁছ, পৌঁছ « pa(h)ũch- » *arrive* (*pahuñca, *pahuccha, OIA. *pra-bhū-ccha: see p. 344); পেঁড়া « pẽṛā » (*peṇḍa-, pēḍa=pēṭaka); ফাঁকি « phãki » (*phaṇkia, cf. phakkikā); ফাঁস « phãsʌ » (phaṁsa = pāśa); বাঁটুল « bãṭula » *bullet, pellet* (*baṇṭula, vaṭṭula = vartula); মাং « māṇ » (*maṇga, magga=mārga); মাঙ্গে = মাঙে, beside মাগে « māṇ(g)ẽ, māgẽ » (*maṇgĕï, maggēi = mārgayati); শাঁশ « śãśʌ » (*śaṁśa, *śaśśa=sasya); সাঁজারু « sãjāru », also সেঁজারু « sẽjāru » *porcupine* (*saṁja-, sajja-, *seṁja-, sejja-=śalya-+rūpa); সাঁচা « sãcā » (*saṁca-, sacca=satya); হাঁস beside হাস « hãs-, hās- » (*haṁsa-, hassa, hāsya); হাঁক « hãkʌ » (*haṇka, hakka); হেঁট « hẽṭʌ » (*heṇṭ[h]a, heṭṭha=*adhiṣṭāt); etc.

Of the Bengali dialects, that of Rāḍha, especially West Rāḍha, has a great fondness for nasalisation, and this tendency is noticeable from the 14th century (ŚKK.). The conjunctive participle affix ইয়া « -iyā » is particularly noticeable as being always nasalised in West Rāḍha, into ইয়াঁ, ইঞা, ইঁঞা, ইঞা, etc.=« iyã », and this nasalisation still subsists. It is especially absent or weak in East Bengal.

In cases like চুঁচি « cũci », ছোঁচ « chõcʌ », ছেঁচে « chẽcẽ », ছুঁচ « chũc » etc., noticed above, as well as কাঁচ « kãcʌ » (kāca), পেঁচা « pẽcā » (pēcaka),

where we have a single « c » in OIA., the nasalisation may be specially Bengali, being only a carrying on of the MIA. phonetic peculiarity in NIA.; so also in forms like চুঁ « √cũ » *leak* (cyav), and ছোঁ « chõ » *touch* (MIA. chuv-), জুঁই « jũi » (jūhī, yūthī), and in words showing nasalisation of MIA. vowels in contact, or of a form like তুঁষ « tũṣa », with one consonant only. Or it may be through nasalisation in OB. of the « w̃ » glide into « w̃ »: cf. « chuvaī, *chuw̃aï, *chuw̃aï, NB. chõy ». NB. shows some cases of spontaneous nasalisation in foreign loan-words as well: *e.g.*, হুঁশ « hũś » *senses* < Persian « hōś », হুঁকা « hũkā » < Perso-Arabic « ḥuqqah », পেঁপে « pẽpē » < Portuguese « papaia », হাঁসপাতাল « hãspātāl » < English « hospital », etc.

179. Onomatopoetics are a characteristic class of words in NIA. which have nasalised vowels. Most NIA. onomatopoetic forms go back to MIA., they are of indigenous development (see *ante*, p. 175), and as a rule they cannot be traced to OIA. In the few that are found in Vedic, nasals do not form any conspicuous element (cf. Whitney, 'Sanskrit Grammar,' §1091a, §1135). Cf. NB. চেঁচা « cẽcā » *shout*, OIA. « ciccikā » *a bird*. The MIA. equivalents of Bengali onomatopoetics are not always found, but the principle of formation is the same. Nasalisation in NB. onomatopoetics prefers the [æ̃]=earlier [õ] sound; *e.g.*, কট্‌কট্ « kaṭ-kaṭ », but কাঁট্‌কাঁট্ [kæ̃ṭ kæ̃ṭ]; টুক্‌টুক্ « ṭuk-ṭuk », but টাঁক্‌টাঁক্ [ṭæ̃k ṭæ̃k]. (See references at p. 175, for lists of onomatopoetics in Bengali etc., and their significance.)

180. Nasalisation is a noteworthy thing in NIA. phonology, but, nevertheless, there are cases showing the dropping of an original OIA. nasal. In origin such elision is undoubtedly dialectal, like the preservation of the 'spontaneous nasalisation' of MIA. As has been said before, nasalisation is left unnoticed in Bengali orthography when there is a pure nasal in the preceding or following syllable: মাচা « mācā » (mañca), মাথন « māthaṇa » (manthana), নন্দ « nanāda » (nanandṛ) etc. are not cases of loss of nasalisation. Loss of OIA. nasalisation figured in MIA. itself in a few words which have been inherited by NIA.: *e.g.*, OIA. « viṅśati, triṅśat, siṅha » > MIA. « vīsa, tīsa, sīha » > NIA. « bis (vīs), tis, si ». Examples from

Bengali are আলিপনা, আলপনা « ālipānā, ālpānā » (ālimpana-); কিছু « kichu » (cf. kiñcid); কুলঞী « kulâjī » (kula-pañjī); ছটাক « chaṭâk৵ » cf. Hind. « chaṭāk » (*ṣaṭ-ṭaṇka); টাকা « ṭākā » beside *টাঁকা « *ṭãkā » > ‡টেঁয়া « ṭẽyā » (ṭaṇka-); MB. তিত « titâ » *wet* (√tim); দাড়া « dāṛā » (*daṇḍhă < daṅṣṭrā); MB. নিছ « √nich » (nirmanch); পালকী « pālaṅkī » beside পালঙ্ক, পালঙ্গ, পালং « pālaṅk/gâ, pālaṇ » (*pallaṇkia, *paryaṇkikā); পোদ « pōdâ » *a caste* (?puṇḍra); ভয়সা « bhâysā » (*adj.*) (Pali mahiṅsa-, mahiṣa); ভিতর « bhitârâ » (abhyantara); ভিজ « √bhij » (abhyañj-); রেড়ী « rēṛī » (ēraṇḍa-); শিকল « śikâlâ », beside OB. « siṇkala » (śṛṇkhala, sṛṇkā); সকড়ি, সগড়ী « sâkâṛī », sâgâṛī » *leavings of meal*, beside সঁকড়ি « sãkâṛī » (śaṇkaṭa-); MB. সাচান, সেচান « sācānâ, sēcānâ » *hawk* (sañcāna); etc. The loss of the nasal in the present participle affix ইত « -it- » from « -ant- », in the locative affix তে « tē » from « *anta-dhi > *antahi », in the dative post-position তরে « tarē » from « antar-ē », is specially Bengali, i.e., originated in the NIA. period.

[III] Nasalisation through Intervocal '-m-,' '-n-.'

181. There are two other cases of nasalisation in NIA., also derived from MIA.

(i) Single intervocal « -m- » of OIA. became « w̃ », bilabial spirant nasalised, a nasal [ʊ], after the Second MIA. Period. With palatal vowels, « w̃ » figured as « ỹ » in Early NIA. This « w̃, ỹ » normally occurs in NIA. as a mere nasalisation of a contiguous vowel. *E.g.*, আইঁষ, আঁইষ, আঁষ « āīṣâ, ãiṣâ, ãṣâ » (*āw̃iśa, āmiṣa); ভূঁই « bhũi » (bhūw̃i, bhūmi). In Late MIA., a « ẇ » sound at times became « w̃ » through analogy or infection, and nasalised a vowel in NIA.: *e.g.*, eMB. পোঁআর « põārâ » (*paw̃āra, pavāla, prabāla); শুঁয়া « sũā » tendril (*śūw̃ā, *śūẇa-, *śūa-, śūka-); so probably OB. « *haũ » < « *haw̃a, haẇaṁ < hakaṁ = aham ». Conversely, there are cases of denasalisation of « -m- > -w̃- > -w- » in NB.: *e.g.*, কাদা « kādā » (kardama); চলি « câli » *I walk* (*caliw̃i, *calimi = calāmi); cf. also পাঁচই, সাতই, আটই « pắcâï, sātâï, āṭâï », p. 303, beside ছউই « châũï » (*cha-mika). This is discussed under 'Nasals,' in the Phonology of the Consonants.

(ii) In the OB. and eMB. affix « -ẽ » for the instrumental, we have a case of nasalisation of the vowel through contact with original « -n- » which dropped out: « -ēna » > -ēṇa, -ēṇaṁ » > « -ēṁ, -ẽ ». So OIA. genitive plural affix « -ānām » gives « -ã » in Bengali. (See pp. 303, 306, *ante*; also in *Morphology*, under 'Inflexions of the Noun,' and 'the Pronouns.')

Post-consonantal '-m-, -ñ-' in Tatsamas.

In *ts.* words in NB., « -m- » subscript nasalises the vowel, and is not itself pronounced separately: *e.g.*, রুক্মিণী « rukmiṇī » [rukkīni], আত্মা « ātma » [attã], পদ্ম « padma » [pɔddɔ, pɔddo], শ্মশান « śmaśāna » [ʃɔ̃ʃan], ভীষ্ম « bhīṣma » [bʰiʃʃɔ], বিস্মরণ « vismaraṇa » [biʃʃɔrɔn], Skt. তস্মৈ, তস্মিন্ « tasmāi, tasmin » etc. = [tɔʃʃɔ̃i, toʃʃin]. The pronunciation [atmɑ] for আত্মা = [attã, ãttã, ãttɑ] is on rare occasions heard, but that is un-Bengali. In the group জ্ঞ « jñ », « -ñ- » similarly nasalises the vowel and is dropped: জ্ঞান « jñana » = [gæ̃:n], বিজ্ঞ « vijña » = [biggɔ].

CHAPTER IV

PHONOLOGY OF THE NATIVE ELEMENT: VOWELS

[D] Intrusive Vowels (« Viprakarṣa », Anaptyxis).

182. The introduction of a glide vowel between two consonants forming a group has been referred to before (p. 256. See Pischel, § 131ff.; Geiger, Pali Grammar, § 29 ff). It has occurred in all the periods of IA., as of other Indo-European speeches. The glide vowel comes between a liquid, « r, l » or a nasal, « m, n » *plus* a stop, or the other way, or between a sibilant and another consonant; or, again, between two stops. The intrusion of the vowel takes place most frequently in connection with a liquid or nasal. A glide breath or voice, which is easily transformed into a vowel, comes in between two dissimilar stops when the first one is fully exploded and articulated: and the normal Indian habit, ever since the assimilation of dissimilar consonant groups leading in the MIA. period, has been to pronounce consonants in full, favouring the incoming of the glide. (See p. 251.) Hence Indian pronunciation of English words like *act*, *begged* [æk*t*, bɐg*d*] commonly becomes [ækʰtʰ, ækᵊtᵊ, ækʰtʼ] and [begᵊdᵊ], and *button*, *sudden* [bʌ*t*n̩, sʌ*d*n̩] become [bʌtən, sʌdən]. The sounds of « r, l, m, n » can be pronounced by themselves, and in this they partake of the nature of vowels, and so they can easily bring in a vowel in their train; and the same remark is to a slight extent true of the sibilants. Apart from these vocalic glides, there are the consonantal glides « w̌, y̌ », in origin also vocalic sounds, which occur between two vowels. Their nature has been discussed before (pp. 338 ff.).

From the Early MIA. period, Sanskrit borrowings were coming in, and they often showed this intrusive vowel. In Second and Late MIA., old worn-down *tbh.* forms were frequently replaced by cognate *ts.* forms, and NIA. has duly inherited them. Thus the proper *tbh.* « sāsava, sassava » (sarṣapa) was replaced by « *sarisava », whence Hindī « sarsõ », Beng. সরিষা, সরষা « sarişā, sarṣā »; instead of the expected OB. *tbh.* « *pāma » < MIA.

« *pamma » < OIA. « padma », we have in OB. (Caryā 49) পউআ « pāüā = paüā » < MIA. *s/s.* with intrusive vowel « *paüẅa, paduma » < « padma ». The Old Māgadhī *th/t.* « kaṭṭaviya », written « kaṭaviya » in the Aśōka inscriptions, from OIA. « kartavya », came to be replaced, possibly during the Transitional MIA. period, by a *s/s.* with anaptyxis « *karitavya, *karitabba », which became in Late MIA. « *kariabba », the source of the Magadhan করিব « kårib- », « karab- » etc: the Old Māgadhī « *kaṭṭaviya » would have given a NB. *কাট্টই « *kāṭui ».

Apart from those cases of « viprakarṣa » in MIA., mainly with the liquids and sonants (which are rather difficult to distinguish if one of the two consonants is not a stop in OIA.), NIA. has carried on this principle in adopting *ts.* words, and foreign words. This practice was quite a characteristic habit of the NIA. speeches in their 'Old' and 'Middle' period; and in Modern NIA. it has fallen into disfavour, through the greater influence of Sanskrit on the literary language. The « viprakarṣa » forms are never used in prose, and in conversation, except in the case of some stereotyped or well-established forms: but they are thought quite proper for poetry. Each language has its preferences for « viprakarṣa » forms: where Hindī will use forms in writing and conversation like « bhagat, ratan, jatan, magan, sanēh » etc., Bengali will prefer « bhåktå, råtnå, jåtnå (yåtnå), mågnå, snēhå (or 'stēhå') »; but in the colloquial, forms like « puttur, bhuru, nåkkhåttår, tiriś, båjjår » would be perfectly proper in Bengali.

In Bengali, intrusive vowels determine their nature from those in their contiguity, as in most languages. Words, *ts.* or foreign, cannot end in two consonants in Bengali: either they must have the prop of a final vowel, or « viprakarṣa ».

Examples of « viprakarṣa » in Bengali:

(i) « -ă- »: অন্তরযামী « åntårå-yāmī » (antar-yāmin); আরসী « ārāsī » (ādarśa- : MIA.: see p. 256); করম « kårāmă » (karma); কিশন « kiśană » (kṛṣṇa); গরব « gårābă » (garva); গরজে « gårājē » (garjati); গরাস « gårāsă » (grāsa); চন্দর « cåndåră » (candra); চক্কর « cåkkåră » (cakra); ছরাদ « chårādă » (śrāddha: see p. 190); জনম « jånāmă » (janma); *s/s.* জোচ্ছনা.

জোছনা « jōcchânā, jōchânā » (jyōtsnā); তরাস « târāsʻ » (trāsa); দরশন « dârâśânʻ »; দীপতি « dīpâti » (dīpti); ধরম « dhârâmʻ; নক্ষত্তর « nâkkhâttârʻ » (nakṣatra), cf. *tbh.* MB. নখতা « nâkhâtâ »; পত্তর « pâttârʻ » (patra); পরশ « pârâśʻ » (sparśa); পাত্তর « pāttârʻ » (pātra); পরাণ, পরাণী « pârāṇ(ī) » (prāṇa, -ī); MB. বজর, NB. বজ্জর « bâjârâ, bâjjârʻ » (vajra); MB. বিদগধ « bidâgâdhâ » (vidagdha); MB. বেকত « bēkâtâ » (vyakta); ভকত « bhâkâtʻ »; ভাদ্রবধূ « bhādrâ-bâdhū », also ভাদ্দরবউ « bhāddârʻ-bâu » < « *bhādârâ, bhātârâ », with influence of genitive « -ârâ » (bhrāṭṛ-vadhū); মগন « mâgânʻ »; মরত « mârâtʻ » (marta); মরম « mârâmʻ »; মূরছা « mūrâchâ »; মূরতি « mūrâti »; যতন « jâtânʻ » (yatna); রতন « râtânʻ »; লগন « lâgânʻ »; MB. লুবধ « lubâdhâ »; স্বপন « svâpânʻ »; স্বরগ « svârâgʻ »; শাস্তর « śāstârʻ »; স্বতন্তর « svâtântârʻ »; etc., etc.

Cf. ‡গারস্থ « gārâsthâ » < « * garahastha » or « *garhastha, or « *grahastha » (=gṛhastha); MB. জরম « jârâmâ » *birth*, a very common word, is a back formation from the *tbh.* জাম « jāmâ », found in OB., = MIA. « jamma » <OIA. « janma », on the analogy of « karama, dharama < karma, dharma > kamma, dhamma > *tbh.* kāma, dhāma »; we have even a false restoration to pseudo-Sanskrit of this « jârâma », to জর্ম্ম « jarmâ ».

(ii) « -i- »: ইন্দির « indir » (indra); ‡কিরে > কিরিয়া « kirē < kiriyā » an oath, *e.g.*, তোর কিরে « tōrʻ kirē » (*I swear*) *on thy funeral rites* (kriyā); MB. গিরিষ, গিরিশ « girişâ, giriśâ » (MIA. « *giriśśa » = « gri-ma »: a genuine Māgadhī form, with « *-śś- » for « -ṣm- »; cf. a *tbh.* গুম-ট « gumâ-tʻ » *heat, stuffiness* = MIA. « *gumha », probably connected with « gimha »); NB. *sts.* গিরিষ্মী « girişmī » [girīj̃j̃ī] (grīṣma); ‡গিরিৎ « girit » (ghṛta); ছিরী, ছিরি « chirī, chiri » (probably MIA. *sts.* = « śrī »; cf. *tbh.* ছী « chī »); তিরিশ « tiriśʻ », beside ত্রিশ « triśʻ » : the *tbh.* is তীস, তিস « tisʻ, tīsʻ » found in compounds (triṇśat); MB. *sts.* তিরি « tiri » (MIA.: strī); পিরীতি, পিরীত « pirīt(i) » (prīti); MB. পিলিহা, পিলীহা « pilihā, pilīhā » whence NB. পিলে « pilē » (plihā); বরিষা « bârişâ » (? MIA.: varṣā); MB. বিমরিষ « bimârişâ » (vimarṣa); MB. সিনান « sinânâ » (?MIA.: snāna); MB. সিনেহ « sinēhâ » (? MIA.: snēha); সরিষা « sârişā » (MIA.: sarṣapa-); etc.

(iii) « -u- »: আগুনি, আগুন « āgun(i) » (agni); MB. দুরুবার « durubārâ » (durvāra); MB. দুরুযোগ « durujōgâ » (duryōga); দুবার, দুআর, দুয়ার « duwārâ

< dwārā » (dvāra); পদুম, -মিনী « padumā, -mini » (« padma »; cf. OB. « paũā » < MIA. « paduma- »); MB. পুহুপ « puhupā », through Braja-bulī influence (*puhpa = puṣpa); পুত্তুর « puttura » (putra); ভুরু « bhuru » (bhrū); মুকুতা « mukutā » (muktā); MB. লুবুধ « lubudhā » (lubdha); শত্তুর « śāttur » (śatru); শূদ্দুর « śūddura » (śūdra); MB. সুখুম « sukhumā = » (? MIA., = sūkṣma); সুমর « sumārā » (smar-, smṛ »; the MIA. *sts.* « sumara » gives MB. সোঙর « sōw̃ār- », with change of « -m- » to « w̃ »); etc. Cf. English *flute* > ফুলুট « phuluṭ ».

« -ē- »: গেরাম « gērāma » (grāma); ছেরাদ্দ « chērāddā », besides ছরাদ « chārāda »: see p. 190; পেরেত « pērētā (prēta). Cf. English *glass* > গেলাস « gēlās ».

(v) « -ō- »: শোলোক « śōlōka » (ślōka); folk Bengali সোরোত « sōrōta » (srōtas); etc.

For « viprakarṣa » in foreign words, see ' Phonology of the Foreign Elements.'

[E] Prothesis of Vowels.

183. A change similar to that of the Latin « sperare » to French « espérer » also characterised the transformation of a few words from OIA. into MIA.: *e.g.*, Pali « itthī » < « *istrī = strī », « umhayati » < « *usmayatē = smayatē ». The prothetic vowel, however, was exceedingly rare in MIA., groups like « sk-, st-, sp-, sm- » being almost always assimilated or altered to « kh-, th- (ṭh-), ph-, mh- ». In *ts.* forms in NIA., too, we find the prothetic vowel in some words. It occurs as « ă- » or « i- ». The « ă- » seems to have become « ā » in MB., and the MB. forms have been continued down to NB.: *e.g.*, আস্নান « āsnāna » (snāna), cf. Hindī « asnān »; আস্পদ্ধা « āspadd(h)ā » (spardhā); ইস্ত্রী « ist(i)rī », folk pronunciation of « strī ». Compound consonant groups like ঙ্ক « ṅka », স্ক « ska » etc. are pronounced in the school room as আঙ্ক « āṅkā », আস্ক « āskā » etc., following the old tradition of the prothetic vowel. The names of the three nasals ঙ, ঞ, ণ « ṅ, ñ, ṇ » have got a prothetic vowel before them, being pronounced উঙ্ঁ, ইঞ্ঁ, আণো [ũṅ, ĩñ, ãṇo]: cf. the Oṛiyā name for « ṇ »—« āṇā » or « āṇā ».

Words like তিরি « tirī », তন « tana » are MB. *stss.* without prothetic vowel (*stiri = strī; stana), which simply have dropped the « s- ». *Ts.* words with the prothetic vowel are not many in Bengali, but a number of examples are found from among foreign loan-words.

A few words in MB. have a prothetic « å-, ā- », which has no special value, except perhaps that of an intensive. The source of this « ă-, ā- » is not clear (see *Morphology*, under Formative Affixes: 'Prefixes'): *e.g.*, আকুমারী, অকুমারী « ākumārī, åkumārī » *virgin*, অমন্দ « åmåndå » *bad*, etc.

[F] Epenthesis.

184. Epenthesis of « -i- » or « -u- » is not unknown to MIA., but there it is not regular, not at all a characteristic of the language, only some sporadic instances of it being found: *e.g.*, « kēra < *kāira, *kāirĭa, *kārĭa = kārya », an old *sts.* of the MIA. period, used in Late MIA. (like « kaa<kṛta », as well as « kara, kāra ») with the genitive to strengthen it; pēranta < *pairanta, *pairĭanta, *parĭanta = paryanta »; « pōra < *paura, *paurŭa, *parŭa = parva », etc. (Cf. Pischel, § 176.) In Māgadhī Apabhraṁśa, epenthesis does not seem to have occurred. It is found only to a very limited extent in 'Bihārī'; and although it is quite a common characteristic of the Eastern Magadhan group, it cannot be said to have come into force in the Magadhan dialects or languages before the NIA. period. The OB. remains in the Caryās and in Sarvânanda, as well as the names in the inscriptions, do not give any traces of epenthesis. Forms in the Oṛiyā inscriptions of the 15th century (see *ante*, p. 107) show how epenthesis had become established in Oṛiyā by that date. In later Oṛiyā, the epenthetic habit fell into desuetude. The Sadānī form of Central and West Magadhan can be said to have epenthesis: *e.g.*, « māïrkē < māri-kē » *having beaten*, « mairkē < mari-kē » *having died*, « ghaïṭ < ghaṭi » *having lessened*, « āij, kāil < āji, kāli » *today, tomorrow*, « kaïṭ < kaṭi » *having cut*, etc. (See E. H. Whitley, 'Notes on the Gáṅwárí Dialect of Lohardaga, Chhota Nagpur,' Calcutta, 1896.) In Modern Maithilī etc., there are just traces of it, *e.g.*, in the change of a group « -ahu » to « åh » [ɒɦu > ɔ:ɦ],

and it does not look as if Old or Early Middle Maithilī, as in the 'Varṇa-ratnâkara,' had epenthesis. The same can be said of Magahī and Bhōjpuriyā.

So far as Bengali is concerned, we see a weakening of « -i, -u » after « å, ā » in the 14th century; and the beginnings of epenthesis certainly go back to that century. In the 15th century, in the works of Kṛttivāsa, Vijaya-gupta, and the rest, works which are preserved in rather late MSS., epenthesis is a noticeable thing. That the language was already anticipating the « -i-, -u- » sounds as short vowels ending diphthongs, and shifting them forwards, is evidenced from the orthography of the ŚKK.: *e.g.*, আসিহ « āsihå » = « āisihå » *you will come* (precative), beside আইস « āiså » *you come*; আসু « āsu »[1] beside আইসু « āisu » *let him come*; আসি, আসী « āsi, āsī », আসিআঁ « āsiā̃ » *having come*, আসী « āsī » *I come*, আসিব, আসিবে, আসিবেক « āsibå, -bē, -bēkå » *will come* = « āïsi, āïsiā, āïsī, āïsibå, etc. », beside আইসে « āïsē » *he comes*; পালি « pāli = pāïli » *thou hast obtained*, beside পাইল, পায়িল etc. « pāïlå, pāẏilå » *has obtained* (also পাব « pābå = pāïbå » *I shall get*); পসি, পসী « pâsi, pâsī » *having entered*, পসিআঁ, পসিঞা « pâsiā̃, pâsiñā » *ibid.*, পসিল « pâsilå » *entered*, পসু « pâsu [1] » *let him enter*, = « pâi- », beside পৈসী « pâisī » *having entered*, পৈসু « pâisu » *let him enter*, পৈসে « pâisē » *enters*; হসি « hâsi » = « hâisī » *thou art* beside হয়িআঁ « hâẏiā̃ » *having been*; etc. These spellings are entirely in the spirit of later MB. orthography for the epenthetic vowel—like বারি « bāri » for বাইর « bāir » = বাহির « bāhirå » (bahis), আলু « ālu » for আউল « āulå » *dishevelled* (ākula), চালু « cālu » for চাউল « cāulå », and even দাদু « dādu » for the Mohammedan name দাউদ « dāūd » (Dāʿūd).

Epenthesis in MB. is simply the anticipation of an « i » or « u » before the consonant after which it occurred was pronounced: *e.g.*, করিয়া « kâri(y)ā » > *কইরিয়া « *kâiri(y)ā » *having done*. In most of the dialects, the anticipatory or epenthetic vowel was retained, and the original one was dropped generally, after it had affected the character of contiguous আ « ā » by advancing it a little—*e.g.*, কইরা, কইরা « kâir(y)ā » [koĭra < *koiria], as in East Bengali. In the Standard Bengali development of vowels by

[1] Can these spellings suggest a pronunciation '*āusu, *pausu,' in which the 'i' was turned to 'u' by contamination, beside a likely 'āisu, paisu'?

Umlaut and Contraction, it seems that both the original vowel and its anticipatory form are at the basis of the modern words : *e.g.*, *কইরিয়া « *kåiriā » > ক'রে, কোরে « kōrē » [ɔi > oĭ > o, ia > ia > eæ > ɛ, e] ; so সাথ « sāthɸ », সাথুআ « sāthuā » > *সাউথুআ « *sāuthuā » > *সাইথুআ « sāithuā » (cf. Typical East Bengali সাউথা, সাইথা « sāŭtha, sāĭthā ») > Standard Colloquial সেথো « sēthō » *companion* [au > *aü > *aɯ > ai > e, ua > uɔ > ŭo > o]. Epenthetic « u » changed to « i » in most Bengali dialects. In original disyllables, ending in « -i, -u », there is no retention of the vowel in its original place any longer—at least in the modern speech—after there is epenthesis : *e.g.*, কালি « kāli » >*কাইলি « *kāili » >East Bengali কাইল, কৌল « kāil, kāĭl », Standard Colloquial কাল « kāl » [ka:l] ; but certain West Bengali dialects indicate the presence of the final « -i » in MB. by having a slightly palatalised « l »—like ল্য « -ly »—in addition to an advanced « ā » : [ka:lⁱ , ka:l]. There was no epenthesis when « -i » (as in the affix of the verb, first person, present tense) historically is the result of Vowel Contraction (see page 351) : *e.g.*, করি « kåri » *I do* (< *karīi, *kariw̃i, *karimi = *karami, karōmi) ; but MB. has an epenthetic form like ঐরি « åiri » for the *ts.* « åri » *enemy*. *Ts.* words also undergo epenthesis in Bengali.

Epenthetic vowels generally are not preserved in the Standard Colloquial and in West Bengali : they have brought in other phonetic changes. Examples : আজি « āji » > আইজ, আজ « āij, āj » (adya) ; *ts.* আদি « ādi » > আইদ, আদ « āid, ād » ; আলিপনা « ālipånā » > আইল্‌পনা, আলপনা « āilpånā, ālpånā » (ālimpana-) ; *কাটি « kāṭi » >কাইট, কাট « kāĭṭ, kāṭ » *dregs, dirt* (cf. Skt. kiṭṭa) ; কালিয়া « kāliyā » *the black one* > কাইল্যা, কেলে « kāilyā, kēlē » (*kāla+ika+ā) ; খলি « khåli » *dregs, mustard cake* > খইল, খ'ল « khåil, khōl » (MIA. khalī) ; গাঁঠি « gãṭhi » > গাঁইট, গাঁট « gãiṭ, gãṭ » (gaṇṭhi, granthi) ; চারি « cāri » > চাইর, চার « cāir, cār » (catvāri) ; *ts.* জাতি « jāti » > জাইত, জাত « jāĭt, jāt » ; তরিতে « tåritē » *to cross* > তইর্‌তে, ত'র্‌তে « tåirtē, tōrtē » (<√tṛ) ; থাকিতে « thākitē » *to remain* > থাইক্‌তে, থাক্‌তে « thāikte, thāktē » (thakk-, stabh-kṛ) ; ডালি « ḍāli » *pulses* > ডাইল, ডাল « ḍāil, ḍāl » ; *sts.* নারিকেল « nārikēla » > নাইর্‌কল, নারকল « nāirkålɸ, nārkål » ; পড়িশী « pårịśī » *পইড়্‌শী, প'ড়্‌শি « *påiṛśi, pōṛśī » (prativēśin) ; পানিতা « pānitā » *watery* >

পাইন্‌তা, পান্তা « pāintā, pāntā » (pānīya-); MB. *sts.* পুনি « puni » > পুইন্‌, পুন্‌ « puin, pun » (*puṇĭa, puṇya); ফুটিতে « phuṭitē » > ফুইট্‌তে, ফুট্‌তে « phuiṭṭē, phuṭṭē » (sphuṭ-ya-); বুঝিতে « bujhitē » *to understand* > বুইঝ্‌তে, বুঝ্‌তে « buijhtē, bujhtē » (budhy-); মুনিস, মুনিসা « munisă, munisā » > *মুইন্‌সা, মিন্‌সা « *muinsā, minsā » *fellow* (Early MIA. munisa *man*); রাতি « rāti » > রাইত, রাত « rāit, rāt » (rātri); রাখিয়া « rākhiyā » *having kept* > রাইখ্যা, রেখে « rāikhyā, rēkhē » (√rakṣ); সরিষা « sărisă » *mustard* > সইষা, স'র্ষে « săirṣā, sōrṣē » (sarṣapa-); হরি > হরিয়া « hări > hăriā » *a name* (*contemptuous*) > হইর‍্যা, হ'রে « hăiryā, hōrē »; etc., etc.

কালুয়া « kāluā » *the black one* > *কাউলুআ, *কাইলুআ, কেলো « *kāuluā, *kāiluā » (final « ā » a back sound), « kēlō » (= kāla + uka-); OB. « kāw̃arū » > MB. কাউঁর, কাঙুর « kāw̃ūr » (kāma-rūpa); OB. « khasū » > খউস, খ'স, খোস « *khăusă, khōs » (kacchu); *গোখুরুআ « gōkhuruā » *cow-hoof* (*-marked*) = *cobra, from mark on its head* > *গোউখ্‌রুআ, গোখ্‌রো « *gōukhruā, gōkhrō » (gō-kṣura-); জলুয়া « jăl-uā » *weatery* > *জউলুআ, জইলা, জ'লো « jăulā, jăilā, jōlō »; so adjectives in উয়া « -uā » like মাঠুয়া « māṭh-uā » *belonging to the field* > *মাউঠুআ, মাইঠা, মেঠো « *māuṭhuā, māiṭhā, mēṭhō »), ঝড়ুয়া « jhăr-uā » *stormy*, মাঝুয়া « māj̆h-uā » *of the middle*, বাটুয়া « bāṭuā » *of the road* (cf. Standard Colloquial বেটো ঘোড়া « bēṭō ghōṛā » *a hack*), etc.; দাদু « dādu » > দাউদ, দাদ « dāud, dād » (dadrū); মাগু, মাগু « māgū, māgu » *a woman, wife* (*in contempt*) > মাউগ, মাগ « māug, māg », মাউগ + ঈ « māug- + ī » > মাগী « māgī » *a loose woman* (mārga-); *ts.* সাধু « sādhu » > সাউধ, সাউদ, সাইধ, সাধ « sāud(h), sāidh, sādh », cf. genitive সাউধের, সাইধের, সেধের « sāudhēr, sāidhēr, sēdhēr »; etc.

It will be seen that the group « āi, āu > āi » resulting from epenthesis becomes « ē » in some cases; and epenthetic « ăur » from the group « *-ărū » becomes contracted to « -ur », as in কাঙুর « kāw̃ur » above, and বাছুর « bāchur », MB. *বাছরু « bāchărū » (cf. Oṛiyā « bāchăru », Marāṭhī « vāsrū » = vatsya-rūpa), ‡ গাভুর, গাবুর « gāb(h)ur » *youth* (< gābharū garbha-rūpa *child*), etc.

See also § 151 (i), 152 (i).

185. The semivowel য় « y » subscript ('য-ফলা' « yă-phălā »), in a consonant group in *ts.* words, behaves like ই « i », and undergoes epenthesis: আদ্য « ādya », pronounced in East Bengal as [aiddə]; so অন্য « anya » =

[ɔinnɔ], কন্যা « kanyā » = [kɔinna], কাব্য « kāvya » = [kaibbɔ], কার্য্য « kārya » = [kairʃʒɔ, kairdzɔ], সত্য « satya » = [ʃɔittɔ] (but cf. স্বত্ব « sva-tva » সত্ব « sat-tva » both = [ʃɔttɔ]), যোগ্য « yōgya » = [ʃʒóiggɔ, dzóiggɔ], সান্ধ্য « sāndhya » = [ʃaind(ɦ)ɔ], পাশ্চাত্য « pāścātya » = [paʃʧaittɔ], মিথ্যা « mithyā » = [miĭttha, mittha], etc. Sanskrit ক্ষ « kṣ » had in Bengali, Assamese and Oṛiyā the value of « khy- » initially and « -kkhy- « in the interior of a word; and Sanskrit জ্ঞ « jñ » similarly had the sounds of « gy-, -ggy- », with nasalisation of the contiguous vowels. The « -y- » element of these groups equally undergo epenthesis: *e.g.*, লক্ষ « lakṣå » [lɔikkhɔ], অক্ষ « akṣa » [ɔikkhɔ], ততক্ষণ « tátå-kṣaṇå » *by that time* [tɔtɔikkhɔn], প্রত্যক্ষ « pratyakṣa » [prottɔikkhɔ < *prɔittɔikkhɔ]; cf. ক্ষমা « kṣamā > khyåmā », pronounced [khɛma, khæma]; যজ্ঞ « yajña » = [ʃʒɔiggɔ̃, dzɔĭggɔ̃], অজ্ঞাত « ajñātå » [ɔĭggātɔ], etc.

Epenthetic « i, u » were pronounced very short or weak, and they led to the formation of diphthongs with preceding vowels; and either these diphthongs remain (as in East Bengali), or the « i, u » are entirely dropped, with resultant modification of preceding « å » to « ō » and « ā » to « ē » (as in the Standard Colloquial). Some dialects both of East and West Bengal, again, are at the intermediate stage, in which just the suggestion of the epenthetic vowel is heard: this extremely short vowel can be written as « ĭ, ŭ », or as « ⁱ ᵘ » above the line, in the Roman character: in Bengali, the symbol ◌ for ই, উ, first used for this purpose by Rai Bahadur Yogesh Chandra Vidyānidhi, is very convenient, beside the apostrophe (’). Thus কাল « kāla » *time* = from Skt. « kāla », [ka:l] in all Bengali; but MB. কালি « kāli » *tomorrow, yesterday* (Skt. kalya) occurs as কাইল, কৌল, কা’ল, কাল [kaĭl, kaⁱl, ka:ị, kaliˑ, ka:l] in the various dialects, the last being the Standard Colloquial (Calcutta) form; চলিয়া « cålіyā » *having walked* > *চইলিয়া, চইল্যা, চ’লা, চ’ল্যা, চ’লে, চল্যে, চলে, চোলে [ʧɔĭlia, ʧɔĭla, ʧɔⁱla, ʧɔlɛ, ʧole] (also [ʦ] for [ʧ] in East Bengal); সাথুয়া « sāthuā » > *সাউথুআ, সাউথা, সোথা, সেথুয়া, সেথো etc. [ʃaŭthŭa, ʃaŭtha, ʃaĭtha, ʃɛĭthŭa, ʃetho].

The vowels « i, u », even when not epenthetic, formed diphthongs with preceding vowels, « å, ā » specially, from Early MB. (See §146, pp. 295 ff.) In MB. orthography, epenthesis of « i, u » as well as their occurrence

in diphthongs was expressed in various ways. One way, which is already found in the ŚKK. (see p. 379), was not to modify the spelling in any way, when the following syllable had « i » or « u »; so that করিয়া « kåri(y)ā » would be pronounced as « kåiriā », করিল « kårilå » as « kåir(i)lå », আলিপনা « ālipånā » as « āil(i)pånā », and ডালি « ḍāli » as « ḍāil(i) ». This practice brought about the orthographic habit of writing the vowel *after* the consonant even when it was originally pronounced *before* it, and continued to be pronounced so during the MB. period: *e.g.*, through the custom of writing ফাগু *red powder* « phāgu » (=phalgu) as ফাগু even when the pronunciation ফাউগ « phāug » was established, হুউক, হোউক « håu-k, hōu-k » *let him be* was also written as হুকু « håku »; and a word like আউল « āulå » (ākula) came to be written as আলু « ālu »: cf. আলুয়াইল « āluāïlå » *let loose the hair* (past tense) (for আউলাইল « āulāïlå »), which continued to be pronounced, in spite of the spelling, with the « u » vowel, or « u > i », before the « l » (« āŭlāilå, āĭlāĭlå », whence Calcutta Bengali এলাল, -লে « elālå, -lē » [ælale]). In some stereotyped forms, like আলুথালু « ālu-thālu » *dishevelled, crumpled*, the spelling-pronunciation, however, has persisted. Epenthesis was also phonetically indicated by writing ই « i », ৈ « åi », উ « u » fully, especially it East Bengal MSS.: *e.g.*, সত্য « såtyå », pron. [ʃɔittɔ], is found as সৈত্য « såityå »; আইদ « āidå » for আদি « ādi »; ষাইট « ṣāiṭå » for ষাটি « ṣāṭi » (ṣaṣṭhi); সাউদ, সাউধ « sāud(h)å » for সাধু « sādhu »; লৈক্ষ « låikṣå » for লক্ষ « låkṣå », etc., etc. Again, because the « -y- » subscript in numerous *ts.* words as pronounced was epenthetic « i », MB. scribes, from after Early MB. times, employed the subscript « y » for indicating epenthesis in *tbh.* forms: *e.g.*, হল্য « hålyå » for হইল « håĭ-lå », খাত্যে « khātyē » for খাইতে « khāĭtē », কাল্যা « kālyā » for কালা « kāĭlā » = কালিয়া « kāliyā », রাখ্য « rākhyå » for রাইখ « rāĭkhå » < রাখিঅ, রাখিহ « rākhiå, rākhihå » = NB. Standard Coll. রেখো « rēkhō » *you will keep* (future precative), আয়্য « āyyå » for আইঅ, আইহ « āĭå, āĭhå » (avidhavā), আল্যাঙ « ālyāŋ (ŋ=w̃) » for আইলাম « āĭlām » *I came*, কর্য্য « kåryā » for কইর্য « kåĭrā » < করিয়া « kåriyā » *having done*, বস্যে « båsyē » for বইসে « båĭsē » *he dwells*, আস্যে « āsyē » for আইসে « āĭsē » *he comes*, পাক্যাল « pākyālå » for পাইকাল « pāĭkālå » *heroism, a soldier's devoir* (<পাঁইক), বাগ্যন « bāgyånḍ » for বাইগণ « bāĭgånḍ » (vātiŋgana),

and even a form like ন্যাসা for নাস্যা « nāsyā » = না আইসিয়া « nā-āisiyā » *not having come*. Another way, which is due to the carelessness of the scribe, was not to write the « i, u » at all, both epenthetic and diphthongal, even when the next syllable did not have these vowels—so that its presence could not even be implied through attraction. Thus, simply হল « hâlâ » was written for হৈল, হইল « hâĭlâ » *was*, বহারী « bâhārī = bōhārī » for বোহারী « bâubhārī » (see p. 345), পশে « pâśē » for পৈশে, পইশে « pâiśē » *enters*, আলুঁ « ālũ » for আইলুঁ « âilũ » *I came*, etc. This method, or want of method, is late, and began only when in a great many words (in West Bengal), the « i, u » vowels came to be dropped from pronunciation.

Among the NB. dialects, epenthesis still retains its force in the Vaṇga or East Bengal speeches. In Standard Colloquial Bengali, and in West Bengali generally, there has been contraction of epenthetic vowels, as well as Umlaut, which was a direct result of epenthesis in these forms of NB. (See below.) The 'Crepar Xaxtrer Orthbhed,' being in the Dacca dialect, indicates epenthesis quite regularly: *e.g.*, « coina » = কন্যা (kanyā); « xaidher » = সাধের, সাউধের, সাধুর (sādhu + ēra); « baix bia » = বাস বিয়া = বাসি বিয়া « bāsi biā » *'stale marriage,' wedding ceremonies of the second day*; « roiqha » = রক্ষা (rakṣā); « xoito » = সত্য (satya); etc., etc.

186. Diphthongs, from original contact vowels (see § 171), as well as from epenthetic vowels, remained in MB. In the NB. Standard Colloquial, there have been some contractions, which are noted below.

(i) MB. [ɔi] became [oĭ], and this was reduced into [o] when it occurred in a closed syllable: *e.g.*, কই « kâi » [koĭ] *where?* (kahi); পইতে [poĭte] < পইতা « pâi-tā » etc.; but খলি > খইল > *খোইল > খোল [khɔli > khɔil > khoĭl > kho:l] *dregs, dirt, mustard cake*; সহিতে > সইতে > *সোইতে written সইতে [ʃɔhite > ʃɔite > ʃoĭte] *to bear*, but করিতে > কইর্‌তে > কোইর্‌তে > কোর্‌তে, written ক'র্‌তে, কোর্‌তে, also কর্‌তে [kɔrite > kɔirte > koĭrte > korte]; বসিতে > বইস্‌তে > বোইস্‌তে > বোস্‌তে [bɔʃite > bɔiʃte, boĭʃte > boĭste > boste] *to sit* (here there has been a merging of the OB. root বইস « bâis < upaviś- » into the root বস্ « bâs » = Skt. « vas » *dwell*); মহিষ > মোইষ > মোষ [mɔ(ɦi)iʃɔ > moĭʃ > mo:ʃ] etc. Similarly, MB. « âū, âü », which also became « âi », was changed to « oŭ, oĭ », which has been

contracted to [o] when closed by a consonant: *e.g.*, বউ, বৌ « bâu » [bou], but *sts.* « cakṣuḥ » > চক্ষু, *চখু>চউখ, চইখ > *চোউখ, *চোইখ>চোখ [ʧokkhŭu> ʧoukh, ʧoikh > ʧoŭkh, ʧoĭkh > ʧo:kh] ; MIA. « kavuṇa, kaüṇa »>*কউন >*কোউন>কোন্ [kəuɳɒ > koun > ko:n] ; MIA. « caü + pahara » (< catur + prahara) > চউপহর > চউপর, চইপর > চৌপর, চৈপর, *চোউপর, *চোইপর > চোপর as in চোপর দিন = *all the day long* [ʧɔupɒɦiɲɒ, ʧɔupə(ɦi)ərə > ʧɔupə:rə > ʧɔŭpə:r, ʧɔĭpə:r > ʧoŭpər, ʧoĭpər > ʧopər, ʧopòr] ; MIA. « baüla » (= mukula) > MB. বউল, *বইল, বৌল, *বৈল>বোউল, *বোইল>বোল [bəulə > bəŭlə, *bəĭlə > boŭl, *boĭl > bo:l] ; MIA. « *śaüla » (= śakula) > শউল >শৌল, *শৈল>শোউল, *শোইল>শোল [ʃəulə > ʃəŭlə, ʃəĭlə > ʃoŭl, ʃoĭl >ʃo:l] ; etc., etc.

The diphthongs, with « ĭ, ŭ », or with just a suggestion of the « i, u », are found still in East Bengali dialects.

(ii) MB. « āi » remains as « āī » , except when closed by a consonant, when the « i » is dropped in the Standard Colloquial : *e.g.*, ভাই « bhāi », but আজ<আইজ « āj < āij » (adya) ; আস্‌তে>আইস্‌তে, আসিতে « āstē > āistē, āsitē » *to come* (ā-viś-) ; বার<বাইর, বাহির « bār < bā(h)ir » (bahis) ; পাক <পাইক « pāk < pāik » (MIA. pāïkka) ; গাঁট<গাঁইট « gāṭ<gāiṭ » (granthi) ; রাত<রাইত « rāt < rāit » (rātri) ; and sometimes we have forms like বাশ< বাইশ « bāś>bāïś » (dvā-viṁśati), though the « āï » group was not a diphthong in MB.

MB. « āŭ, āŭ > āĭ » is found as « āu, āi » when occurring finally in NB., and it is contracted to « ā » in West Central Bengali, when closed by a consonant. *E.g.*, লাউ « lāu » (alābu), আই « āi » (āu, āyuṣ), but মাগ « māg » <MB. মাউগ « māug » *wife, woman* ; সাধ « sādh »<সাউধ, সাইধ « sāudh, sāidh » (sādhu) ; ধাত « dhāt » <ধাউত, ধাইত « dhāut, dhāit » (dhātu = rētas) ; খাউক >খাক্ « khāuk >khāk » *let him eat* (khādatu + ka) ; etc., etc. ; cf. also মাউসী >মাসী « māusī > māsī » *mother's sister*, through influence of পিসি « pisī »< পিউসী « piusi » .

« āi, āu >āi » in the body of a word extended by an affix is found as « ē » in West Central Bengali, *e.g.*, in forms like মেসো « mēsō » *husband of mother's sister* < NB. *মাউসুআ, *মাইসুআ, « māusuā, māisuā », from *মাউসী « māusī » =NB. মাসী « māsī » (mātṛ-ṣvasṛ-) ; ধেনো « dhēnō »< MB. *ধাউনুআ, *ধাইনুআ,

ধানুআ « dhāunuā, dhāinuā, dhānuā » (*land*) *growing paddy, rice-spirit* (dhān-+uā, <dhānya); হেটো « hēṭō » < MB. *হাউটুআ, *হাইটুআ, হাটুআ « hāuṭuā, hāiṭuā, hāṭuā » *belonging to the market* (hāṭa, haṭṭa); so দেনো « dēnō » *given as a gift* (dān-uā, dāna); etc., etc.

It seems that in West Central Bengali, especially round about Calcutta, Hugli etc., just in the Late MB. period, the normal change of MB. « āi », as well as of « āi < āu », when this « āi » was not final (*i.e.*, when it was closed by a consonant or was in the middle of the word), was to an « ē ». This is closely connected with umlaut in this dialect. But influence of other dialects, and especially of the literary language, prevented a wholesale contraction of « āi » to « ē », in the speech of the upper classes at least. Thus, we have পেলে « pēlē » *obtained*, খেলে « khēlē » *ate*, এলুম also এলাম « ēlum, ēlām » *I came*, এলো « ēlō » *he came*, also এলো « ēlō » *dishevelled* etc. (respectively = Literary Bengali পাইল « pāilă », খাইল « khāilă », আইলাম or better আসিলাম « āilām, āsilām », আইল or better আসিল « āilă, āsilă », and MB. আইলা, আউলা āilā, āulā ») : these have become the accepted forms in the colloquial when it is used in writing. If we have চার « cār » *four* < চাইর « cāir », রাত « rāt » *night* < রাইত « rāit », গাঁট « gāṭ্ » *knot* < গাঁইট « gāiṭ », চাল « cāl্ » *rice* < চাইল, চাউল « cāil, cāul », সাধ « sādh্ » *honest* < সাউধ, সাইধ « sāudh, sāidh », as the ordinary forms in West Central Bengali,—in the genitive, or instrumental-locative, with the এর « -ērর্ » and এ « -ē » affixes respectively, the « ā » in these words is changed to « ē »: *e.g.*, চেরের পাঁচ « cērērর্ pācে্ » *$\frac{1}{5}$ths*; রেতের বেলা « rētērর্ bēlā » *night time*; চেলের হাঁড়ী « cēlērর্ hāṛī » *pot for rice*; গেঁটের কড়ি « gēṭērর্ kāṛi » *good money*, lit. *money that is tied in one's cloth hem*; চোরে সেধে « cōrē sēdhē » *between a thief and an honest man*; and even ভেয়ে ভেয়ে « bhēyē bhēyē » *among brothers*, from ভাই « bhāi », in Literary Bengali = ভাইয়ে ভাইয়ে « bhāiyē bhāiyē ». These forms in « ē » < MB. « āi » are historically quite correct, but they are falling into disuse among educated people speaking the Standard Colloquial as their native dialect. Still, among educated classes, we hear বের « bērর্ » < বাইর « bāirর্ », beside বার « bār »; and we have the verb বেরুনো « bērunō » *to come out* < MB. বাইরান, বাহিরান « bā(h)irāna » ; and as we have seen above, the verb forms in « ē » are the recognised ones. In the speech

of the lower classes in the West Central Bengali area, the « ē » forms have greater vogue. Thus we hear এসে « ēsē » *comes*, for the educated আসে « āsē » = MB. আইসে « āisē » (āviśati); (এসে in educated speech stands only for আসিয়া « āsi(y)ā », by umlaut); এস্‌তে « ēstē » *to come*, for educated আস্‌তে « āstē » = MB. আসিতে, *আইসিতে, আইস্‌তে « āsitē, āisitē, āistē ». « āi » before two consonants, however, is not changed to « ē »: *e.g.*, রাখ্‌তে « rākhte » *to keep* < *রাইখ্‌তে « rāikhtē », পাড়্‌তে « pāṛtē » *to bring down* < *পাইড়্‌তে « pāiṛtē », etc., not *রেখ্‌তে, *পেড়্‌তে « *rēkhte, *pēṛtē »: but রেখে « rēkhē » *having kept*, পেড়ে « pēṛē » *having brought down*, <*রাইখিয়া, *পাইড়িয়া, =রাখিয়া, পাড়িয়া « *rāikhiā, *pāiṛiā = rākhiā, pāṛiā ».

Thus in the case of the NB. dropping of the final vowels « i, u » of OB., as in কাল্‌ « kāl », খোস্‌ « khōs », etc., the intermediate epenthetic stage is commonly lost sight of: but the phonology of Middle Bengali and of the present-day dialects sufficiently demonstrates the occurrence of the epenthetic « i, u », which is quite a characteristic of Bengali.

Middle Bengali does not seem to have developed any other diphthongs, except « åĭ, åŭ, āĭ, āŭ », and « ĕā, ŏå », at least in the Early MB. period. Possibly the high vowels « i, u » formed diphthongs when following other vowels as well, as NB. (West Central) contractions would suggest: *e.g.*, NB. পিশী « piśī » > *পিউশী « piuśī » (pitṛ-ṣvasṛ); দুই « dui » *two* > দু « du » in compounds (দু'শ' « du-śå » *two hundred*, দু'টো « du-ṭō » < দুইটা « dui-ṭā » *two pieces* etc.); দিক্‌ « dik » *let him give* < দিউক « diuk » < দেউক « dēuk »; etc., etc. (See before, p. 345.)

[G] Vowel-Mutation or 'Umlaut'.

187. By Vowel-mutation, or 'Umlaut,' is meant the modification of a vowel through the influence of another vowel or semi-vowel, of a different quality, occurring in a following syllable. This phonetic change was first observed in the Germanic languages, and as illustrations of this phenomenon from Germanic one may give the following: Primitive Germanic « *harja- = harĭa- » > Old English « here » *army*; « *satjan = satĭan » > OE. « settan » *set*; « *guðini »>OE. « gyden » *goddess*; « *walx-isk-az » > OE.

« *wealh-isc, *wēal-isc > wīelisc » *foreign* etc. Changes analogous to this OE. modification of earlier « a, u, ēa » to « e, y, īe » through the influence of the following « i » are found in NB., especially in the Standard Colloquial: *e.g.*, MB. হারিয়া « hāriyā, hāriā » (still preserved in the « sādhu-bhāṣā » or literary language of prose) > NB. হেরে « hērē » *having lost*; MB. করিয়া « kåriyā, kåriā » > NB. ক'রে, কোরে « kōrē » *having done*. There was epenthesis of the vowel before this modification could take place (« *rāikhiā, *kåiriā »). This kind of epenthesis-cum-umlaut is found in a few instances in MIA. (p. 378), but it is but sporadic there. Among NIA. languages, Sinhalese shows umlaut to a very great extent (W. Geiger, 'Litteratur und Sprache der Sinhalesen,' §§ 9, 10). It is noticed also in Lahndī and Sindhī, and to some extent in 'Bihārī' and in the Kōṅkaṇī form of Marāṭhī, as well as in Gujarātī. But in none of the above, except Sinhalese, has this process been carried on to such a regularity and to such an extent as in Bengali.

In Bengali again, the change is most favoured by the Standard Colloquial. The change of ă = [ɒ, ɔ] to [o], when the next syllable has [i] or [u], the high vowels bringing in an anticipatory raising of [ɔ] to [o], is found in all the dialects of Bengali, as well as in Assamese: *e.g.*, the Assamese কলা « kålā » *black* from « kōkila- », with original « i », is pronounced [kola], whereas কলা « kålā » *plantain* from « kadala- », is pronounced [kɔla]; so মহ « måhă » *buffalo* (< mahiṣa) = [mofi], but মহ « måhă » *gnat* (< maśa-ka-) = [mɔfi], and মরা « mårā » *peacock* (< mayūra-, maüra-) = [mɔra], but মরা « mărā » *dead* (< maḍa-, maṭa- = mṛta) = [mɔra].

188. Epenthesis had become well-established in all the dialects of Bengali by the beginning of the 15th century, but it is difficult to ascertain when mutation started in the Eastern Rāḍha area, The 'Dharma-maṅgala' of Māṇika Gāṅgulī (c. 1545), as published by the VSPd., gives the full umlauted forms of NB., like হয়েছিল, « hăyēchilă » *had come*, ডেকে « ḍēkē » *having called*, এল « ēlă » *came*, থেকে « thēkē » *having been*, মেরে « mērē » *having struck*, etc. So does the Vaṅgavāsi edition of the 'Caṇḍī-kāvya' of Kavikaṅkaṇa (c. 1580). MSS. of even earlier writers show mutated forms. But umlaut could hardly have been accomplished as early as the

middle of the 16th century. These are modernisations due to the later scribes, who often altered the original un-umlauted forms which had become archaic in their time ; and modern editors have followed them in emending the language to something easily understandable. In MSS. of early and late 17th century, such as, for instance, of those of parts of Kṛttivāsa's 'Rāmâyaṇa' from which the VSPd. texts have been printed, we find plentiful evidence of epenthesis, but none of umlaut. Umlaut does not seem to have been accomplished in the Standard Colloquial area even by the first half of the 18th century. Bhārata-candra (1st half of the 18th century) has forms like খাতি, আলি « khāti, āli » = « khāĭti, āĭli » *to eat, thou hast come*, as in an early edition of the 'Annadā-maṇgala' printed in the thirties of the last century : words like the above would be emended to খেতে, এলি « khēte, ēli » in modern editions. Probably in Bhārata-candra's pronunciation, in the West Central Bengali of Burdwan and Nadiya, the words were [khaĭtì, khaĭte ; aĭli], or [khæté, æli] : and this would be about the stage (as the spelling would also suggest) in the early 18th century in the transformation of eMB. [khaĭte, aĭli] through lMB. [khaĭte, aĭli] to the 19th century NB. [khete, eli]. A typical early 19th century MS. (dated = 1804 : VSP., pp. 743 ff.) shows spellings like পেড়্যাছে « pēṛyāchē » *has brought down*, এস্যাছে « ēsyāchē » *has come*, এন্যা « ēnyā » *having brought*, এস্যা « ēsyā » *having come*, থেক্যা « thēkyā » *having been*, বেরাইল « bērāīlā » *came out*, beside খাত্যে « khātyē » *to eat*, বায়্যা « bāyyā » *having rowed*, কান্দ্যা « kāndyā » *having wept* (respectively in the literary = পাড়িয়াছে, আসিয়াছে, আনিয়া, আসিয়া, থাকিয়া, বাইরাইল or বাহিরাইল, খাইতে, বাহিয়া or বাইয়া, কান্দিয়া or কাঁদিয়া, colloquial পেড়েছে, এসেছে, এনে, এসে, থেকে, বেরোলো or বেরুল, খেতে, বেয়ে, কেঁদে). The spellings in এ (« ēnyā » etc.) are contemporary phonetic spellings, [ènɛ, enè], while those in আ (« bāyyā » etc.) are archaic and conventional —the old « ā » having undoubtedly been altered to an [e] sound by the end of the 18th century. The pronunciation of the above forms in the Standard Colloquial area (Nadiya, Calcutta) at that time was in all likelihood as follows : [pèṛɛ͡ʃhe, èʃɛ͡ʃhe, ènɛ, èʃɛ, thèkɛ, bèrolò, khète, bèĕɛ, kɛ̆de]. When the umlaut habit came in, or, rather, when there was the tendency towards contraction of epenthetic and other vowels in contact,

subscribed « -y- » before « ā, ē », ◌া, ◌ে was employed to indicate the sound of [æ] or [ɛ]. From an eMB. group like « ā+i+ā » [a+i+a], the change to NB. Standard Colloquial was somewhat along this line: [aĭ+ia] >[aĭ+ea] > [æĭ+ɛæ] > [ɛĭ+ɛ:]>[è+ɛ]>[e+è]>[e+e]. (See p. 133.) In the latter part of the 18th century, the form of Bengali along the Hugli river (which developed into the Standard Colloquial) was in the [ɛĭ+ɛ] or [ɛ+è] stage, so far as this group is concerned; and the close pronunciation seems to have come in only during the first quarter of the 19th century. Carey in his 'Bengali Dialogues' (1801), mainly on a Standard Colloquial basis, spells words like present-day Bengali ছেলে পিলে « chēlē pilē » *children* (< « chāliyā pilā ») as ছালা পিলা « chālyā pilyā »: these spellings undoubtedly are archaic for the time, but they are near enough to [c͡ʃhèlɛ pilɛ], which seem to have been the pronunciation in Calcutta over a hundred years ago. Ram-Mōhan Rāy in his Bengali grammar (1833) gives গেছো « gēchō » *belonging to a tree* (gāch-uā), মেটে « mēṭē » *earthen* (māṭiā), etc., which would indicate a pronunciation identical with the modern one in Calcutta; but it may be reasonably expected that in Rām-Mōhan Rāy's time the articulation was slightly more open than at present.

Through the influence of the Standard Colloquial, umlaut is affecting other dialects. The Typical East Bengali pronunciation [thaĭka, raĭkha] etc. are heard, but [thɛika, rɛikha] are quite common. The « sādhu-bhāṣā » is approximating more and more to the Calcutta Dialect, and many of the umlauted forms of the latter have been adopted and fully established in the literary language, *e.g.*, থেকে « thēkē » as an ablative post-position (instead of the full from « thākiyā »), বেনে « bēnē » beside a compromise বেনিয়া « bēniā » *trader* (for « bāniyā »), ছেলে « chēlē » *son*, মেয়ে « mēyē » *daughter, woman* (instead of « chāliyā » and « māïyā »), etc.

189. The current orthography of Bengali is very lax and unsystematic in representing these recent changes in vowel-quality by both Umlaut and Vowel Harmony (see p. 383). Excepting an apostrophe, ('), which is frequently used now-a-days to indicate the loss of « i » and modification of the vowel that is left, no diacritical marks are used, and there is no

established standard or usage in this matter. [e] and [o] from [a], through the influence of [ĭ, ŭ], are ordinarily represented by এ (৫) and ও (৩.৲) « ā, ō » : *e.g.*, রেখে « rēkhē » , হেটো « hēṭō » (hāṭuā). Final .্যা « -yā » for the open [ɛ] sound which was used in MB., *e.g.*, রেখ্যা, রাখ্যা, is still used in writing East Bengali dialectal pronunciation : in the Standard Colloquial, however, subscribed .্যা « -yā » is employed for the sound of [æ.] And [æ] from MB [ɛ]<OB., MIA. [e], through reasons of Vowel Harmony, is ordinarily left to be expressed by the vowel এ (৫) but at the present day some writers employ the NB. devise of .্যা « yā » : *e.g.*, [dækhe] *sees* is writen by some as দ্যাখে « dyākhē » , beside the historical দেখে « dēkhē » ; [æddin] from [æto din] *so many days, such a long time* is written য়্যাদ্দিন « yyāddin » in the ' Hutōm Pēncār Naksā ' (see p. 135). So we have ম্যালে « myālē », ক্যামন « kyāmanᵭ » etc. for spellings with এ (৫). The greatest hesitancy is felt about [o] from the mutation of « å » [ɔ]. Sometimes it is phonetically written ও (৩.৲) « ō » : occasionally the apostrophe (') serves to indicate both the dropping of the « i, u » and the modification of « å » to [o] ; and frequently there is nothing to indicate the alteration. [kəria > kore] *having done* is thus written কোরে, ক'রে, করে (the last spelling is identical with করে, pronounced [kəre],= *does*) ; [kəribõ > korbo] *I shall do*, = literary Bengali করিব « kåribå », is written কোর্‌বো, কোর্ব্ব, ক'র্‌বো, কর্‌ব, কর্‌ব, কর্ব্ব etc. ; [fiəčiĕa, fiəia > fioče, fioe] *having been* is written as হোয়ে, হ'য়ে, হয়ে ; [ʃʃolua > ʃʃolo] as জোলো, জ'লো, জলো. The spelling with ও (৩.৲) is rigidly phonetic, the one in অ wtihout the (') decidedly careless and slovenly. The spelling with the apostrophe indicating the loss of the vowel, is not wholly phonetic ; but it seeks to represent the pronunciation by the convention that « å » [ɔ] followed by (') is modified to [o] ; and, at the same time, it to a great extent embraces the dialects, and by a too lavish use of the letter ও (৩.৲) does not effect a violent break with the orthography of the standard language. The apostrophe, however, is not usually placed after the mutated « ē » from original « ā », when there is an [u] sound in question, as the change in quality in the Standard Colloquial is too marked : *e.g.*, [maʃʃiua > meʃʃo] *second*, lit. *of the middle*=মেজো, rarely মেজ,' but never মে'জো or মে'জ ;

but [khaia>kheĕe] *having eaten* is written খেয়ে, খেয়ে' খে'য়ে etc.,—with the apostrophe. The use of the symbol, (ঁ)= the top-loop of the letter ই, উ « i, u », after « ā », for the epenthetic and elided vowels, has been suggested by Rai Bahadur Yogesh Chandra Vidyānidhi (*e.g.*, জঁলা, কাঁল), but this has not caught on, as it is a new symbol; and it is not suitable for representing the entire change in quality in a form like « mējō » from « *māĭjhŭā, *māŭjhŭā, mājh-uā ».

Types of Mutation in Bengali.

(1) Mutation or Vowel-Modification by Contraction, after Epenthesis.

190. (i) অ+ই+অ [ɔ+i (ĭ)+ɔ] > ও+ও [o+o], written ও (ে.া)+ও (ে.া), অ+ও(ে.া), ও(ে.া)+অ, অ'+অ, অ+অ', অ'+ও(ে.া).

হইল > হোলো, হলো, হোল, হ'ল, হল' হ'লো [hoĭlɔ] > [holo] *was*; হইঅ, হইয় > হোয়ো, হয়ো, হ'য়ো [hoĭɔ] > [hoĕo] *you will be* (future precative); করিল, *করিলে > কোর্‌লো, কোর্‌লে, কোল্লো, কোল্লে, ক'র্‌লে, ক'ল্লে, কর্‌লে, কল্লে, etc. [kɔrilɔ, kɔrile]>[korlo, kollo; korle, kolle] *he did*; West Central Bengali করিছ>কোর্‌ছ, কোচ্ছ, ক'র্‌ছ, কচ্ছ, কর্চ্ছ etc. [kɔriʧho] > [korʧ(h)o, kocʧ(h)o] = Typical East Bengali করিতেছ, করিতে আছ [koĭrteɔ, koĭrte ɑɔ] *you are doing*; সত্য='সোত্তো' in pronunciation, [ʃoĭttɔ] > [ʃotto], East Bengali [ʃoĭttɔ]; so লক্ষ = 'লোক্‌খো' in pronunciation, [lɔĭkkhɔ > lokkho]; etc., etc.

(ii) অ+ই+আ [ɔ+i (ĭ)+ɑ]>ও+এ [o+e]: eMB. অ+.া, অ+ে.া, NB. অ+এ, অ'+এ, অ+এ', ও+এ, ও+এ', etc.

বলিয়া>বল্যা, বল্যে>ব'লে, বলে' বোলে, etc. [bɔlia > bɔĭlɛ >bole] *having said*; করিয়া > কর্‌যা কর্‌যে > ক'রে, কোরে, etc. [kɔria > koĭrɛ >kore] *having done*; রহিয়া > রয়া, রয়ে > র'য়ে, রোয়ে, etc. [rɔhia > rɔĭɛ > roĕ] *having remained*; « sādhu-bhāṣā » forms like করিতাম, বলিতাম *I used to do, I used to say*, etc. become in the Standard Colloquial pronunciation ক'রতেম, ব'লতেম [kɔritam, bɔlitam > koĭrtem, bɔĭltem > kortem, boltem]; so করিলাম, বলিলাম *I did, I said* > ক'রলেম, ব'ল্‌লেম [kɔrilam, bɔlilam>korlem, bollem]; but East Bengali has [koĭrtam, boĭltam, koĭrlam, boĭllam], etc.; *sts.* পরিষ্কার *clear* > Standard Coll. 'পোক্কের' [pɔriʃkar > *pɔĭrʃkɛr> poʃker];

করিবা > ক'রবে *you will do* [kəriba > koĭrbɛ > korbe] ; *sts.* অভ্যাস > অভোস [ɔbbʃiăʃɔ > ɔĭbbʃiɛʃ > obbʃieʃ] ; Persian « xarīdār » *buyer* > খ'দ্দের [xari:da:r > khəridar > khoĭrdɛr > khodder] ; etc.

The epenthetic stage is preserved in Typical East Bengali. In verbal noun forms in ইবা « ibā »—করিবার, চলিবার, হইবার « kăribārȧ, călibārȧ, hăibārȧ » etc.—the native speakers of the Standard Colloquial say [ɔ] rather than [o]—[kɔrbar, ʧɔlbar, fiɔbar] etc., instead of *[korbar, ʧolbar, fiobar]. This is against the rule for mutation given above. Probably here we have an influence of the verbal nouns in আ « -ā »—করা, চলা, হওয়া [kɔra, ʧɔla fiɔŏa] etc., which have [ɔ] and not [o] ; and it is also possible that the Old Bengali equivalent of this verbal noun in ইবা « ibā » was « *-aba- » or « *-ēba- », so that the « i » epenthesis and mutation were not possible here. (See under *Morphology*—'The Verb : Verbal Nouns.')

(iii) আ+ই+আ (or এ, in present participles in ইতে « -itē » of roots ending in আ « ā »)[a+i+a/e]>এ+এ [e+e], written in MB. আ(ই)+.া, আ(ই)+ে.J, in NB. এ(ে)+এ(ে), এ(ে)'+এ(ে), or এ(ে)+এ (ে)': *e.g.*, রাখিয়া> রা(ই)খ্যা, রা(ই)খ্যে>রেখে, রেখে' *having kept* [rakhia>raĭkhɛ>rekhe] ; বাছিয়া>বা(ই)ছ্যা, বা(ই)ছ্যে > বেছে *having chosen* [baʃhia > baĭʃhɛ> beʃhe] ; খাইতে>খাত্যে > খেতে *eating, to eat* [khaite > khaĭtɛ > khete] ; যাইতে > যাত্যে > যেতে *going, to go* [ʤaite > ʤaĭte > ʤete] (but *not* রাখিতে > *রেখ্‌তে, গাহিতে > গাইতে > *গেতে, where we have roots ending in consonants—« rākh, gāh »=*keep, sing*) ; পানীহাটী *a village name* > পেনেটী [panifaṭi > paĭnĭaṭi > peneṭi] (also [peniṭi] by Vowel Harmony) ; আজ্ঞা > এজ্ঞে in folk-Bengali, in response to a command or address [aggăā > aĭggɛ > eggē, ēgge] ; etc. *Ts.* words generally resist this sort of modification.

Typical East Bengali preserves the epenthesis, and does not change the final « ā » . The « sādhu-bhāṣā » forms রাখিলাম, রাখিতাম *I kept, I used to keep* etc. have their Standard Colloquial modification রাখলেম, রাখতেম [rakhilam, rakhitam > *raĭkhlɛm, *raĭkhtɛm > rakhlem, rakhtem] : compare East Bengali [raĭkhlam, raĭkhtam] : here the proper dialectal or native West Central Bengali forms like রাখিলুম, রাখিতুম > রাখলুম, রাখতুম [rakhilum, rakhitum > rakhlum, rakhtum], (which do not admit of the

epenthesis-cum-mutation scheme [a+i+a > e+e], and preserve the root-vowel « ā » unchanged), have prevented the change of রাখিলাম, রাখিতাম to *রেখলেম, *রেখতেম.

(iv) অ, আ, ই, উ, এ, ও+আই+আ > respectively ও, আ, ই, উ, ই (or এ), উ+ই+এ [ɔ, a, i, u, e, o+ai+a] > [o, a, i, u, i(e), u+i+e]. The [o] in the mutated form, when it comes from [ɔ], is written অ or ও in NB.; and the final « e »=.ɲ « -yā » in IMB., is written এ in NB. Examples: বলাইয়া>ব'লিয়ে, বোলিয়ে, বলিয়ে *having caused to say* [bɔl-a-ia>bolie]; নাচাইয়া>নাচিয়ে *having made to dance* [naʧ-a-ia>naʧie]; ডিঙ্গাইয়া > ডিঙ্গিয়ে *having stepped over (something lying on the ground)* [ḍiŋg-ai-a > ḍiŋie]; শুখাইয়া>শুকিয়ে *having dried or cured* [ʃukh-ai-a> ʃukie]; দেওয়াইয়া > দিইয়ে *having caused to give* [de(ŏ)-ai-a>diie], but দেখাইয়া> দেখিয়ে *having made to see* [dekh-ai-a> dekhie]; শোআইয়া > শুইয়ে *having made to sleep* [ʃo(ŏ)-ai-a>ʃuie]; etc.

East Bengali uses the full forms of Middle Bengali, without contraction and mutation.

(v) অ+ইআ+ই [ɔ+ia+i]>ও+এ+ই [o+e+i]—[o] written ও, অ, অ', and the [e] = IMB. .ɲ. *E.g.*, করিয়াছি > ক'রেছি *I have done* [kɔr-ia-ʧhi > koɪreʧhi>koreʧhi]; হইয়াই >হ'য়েই *immediately after having been* [fiɔ-ia-i > fioɪsi>fioĕei], by Vowel Harmony [fioii]. Epenthesis is preserved in EB.: [koirasi; fioiai, fioisi].

(vi) অ, আ etc.+অ+ইআ [ɔ, a+ɔ+ia]> ও, আ+উ+এ [o, a+u+e]: নগরিয়া>নগুরে, ন'গুরে *belonging to the city* [nɔgɔria > *nɔgoɪria>*nɔgoire > nɔgure>nogure]: কাঁদনিয়া > কাঁদুনে *prone to weeping* [kãdɔnia> *kãdoɪnia> kãdoine>kãdune]; বাদলিয়া > বাদুলে *belonging to the rainy season* [badɔlia> badule]; বাইগণিআ > বেগুনে *pertaining to brinjals, brinjal-coloured, deep purple* [baɪgɔṇia> begune]; etc. Typical East Bengali forms are [nɔgoɪra, kãndoina, badoɪla, baɪgoɪna].

(vii) অ+অই+আ [ɔ+ɔi+a] >ও+ই+এ [o+i+e]: *কহইয়া > ক'ইয়ে *a talker* [*kɔfiɔia>koie]; so *বলইয়া>ব'লিয়ে [bɔlɔia>bolie]. Cf. *নাচইয়া> নাচিয়ে *dancer* [*naʧɔia > naʧie], * গাহইয়া>গাহিয়ে, গাইয়ে *singer* [*gafiɔia > gafie, gaie], etc.

(viii) অ+উ+আ [ɔ+u+a]>ও+ও [o+o], written in NB. as অ+ও (c.f), অ'+ও (c.f), অ+ও(c.f)', ও+ও. *E.g.*, জলুআ > জ'লো *watery* [ʤɔlua>ʤolo],

পটুআ > প'টো *painter* [pəṭua > poṭo], etc. In Eastern Bengali, the epenthetic stage is found [dzoĭla, dzoŭla ; poŭṭa, poĭṭŭa].

(ix) আ+উ+আ [a̯+u+a̯] > এ+ও [e+o] : সাথুআ > সেথো *comrade* [ʃathua > ʃetho] ; গাছুআ > গেছো *arboreal* [gaʧhua > geʧho] ; মাঝুয়া > মেঝো, মেজো *of the middle, second* [maʤʱua > meʤʱo], etc. Typical East Bengali [ʃaĭtha, ʃaŭtha ; gaŭsa ; maĭza].

(2) Mutation without Epenthesis. Vowel Harmony.

191. There is one kind of vowel change in Bengali, by which the high or low quality of a vowel in a following syllable conduces to a similar modification in a preceding one. This is a kind of anticipatory Vowel Harmony. This Vowel Harmony characterises the NB. Standard Colloquial most, but there are some types of it which seem to have occurred in all the dialects of Bengali, and from a very early period in the history of the Bengali language. *E.g.*, we have in Caryā 3 « śuṇḍinī », with a pun=(i) *a female wine-dealer*, (ii) *one possessing a trunk*, where in the first sense the word is to be connected with a form like « *śoṇḍī, *śõṛī < śāuṇḍika » : the feminine form « *śoṇḍinī » would thus seem to allow a variant in OB. « śuṇḍini », in which the low vowel « o » is raised to « u » because of the following high vowel « i » ; and similarly in Caryā 11, we have « muttihāra », also with a pun, connecting the word with both (i) Skt. « mukti » and (ii) OB. « mōtī < mottia < māuktika »—in the second case there being a modification allowable, in OB. phonetics, of an « o », to « u » when followed by « i ». But on the whole, these two cases are exceptional in OB. ; and the rule that when there is a low vowel following, [e, o, a], the language prefers an [e, o] in the first syllable, or when there is a high vowel [i, u], the first syllable would have [i, u,] which is so characteristic of Bengali, and is found also in Assamese, does not seem to have been established in OB. This characteristic is absent in most other NIA. Thus in Middle Bengali we have পোথা « pōthā » *a big MS.*, but *পোথী > পুথী « *pōthī > puthī » as a diminutive (and this diminutive form only is found in NB.); Bengali দোলে « dōlē » *he swings*, but *দোলি > দুলি

« *dōli > duli » *I swing*; চোরা « cōrā » *the thieving one*, from চোর « cōrå » *thief*, but চোরণী > চুরণী « cōråṇī > curṇī » *a woman thief*; গোনে « gōnē » *he counts*, but গুনি « guni » *I count*; Skt. « rohita » *carp* = *রোহী > রুহি, রুই « *rōhī > ruhi, rui »; the *ts.* name « rohitâśva » occurs in MB. as a *sts.* রুহিদাস « ruhidāsâ ». This habit is fairly established in Early Middle Bengali, and *may* have started in the OB. period: *e.g.*, ŚKK. forms like কুয়িলী « kuyilī », feminine, from « kōkila »; গুটি « guṭī » *one piece* (*determinative*), beside গোটা « gōṭā »; চুরণী, চুরিণী « curåṇī, curiṇī », চুরী « curī » *theft*, beside চোর « cōrå » *thief*; ছুইল « chuilå » *touched*, beside ছো « chō »; ছিনারী « chinārī » *a wanton woman*, beside ছেনারী « chēnārī »; পুড়ি, পুড়িআ, পুড়িঞা « puṛi, puṛiā, puṛiã » *having burnt up*, beside পোড়ে « pōṛē » *burns*; etc. This system of alternating between high and low vowels of the same class through influence of following ones is a remarkable thing in NB. phonology, especially in West Central Bengali: *e.g.*, [e] with [a, e, o] in the next syllable is lowered to [æ]: দেখে « dēkhē » *he sees* is pronounced [dækhe], but দেখিয়া > দেখে « dēkhiā > dēkhē » *having seen* is [dekhe], the influence of the [i] preventing a lowering of [e] to [æ]; so দেখ « dēkhå » *you see* = [dækho], but দেখুক « dēkhuk » = [dekhuk], দেখি « dēkhi » *I see* = [dekhi]; এক « ēkå » *one* is [æk], একা « ēkā » *alone* is [æka], একটা « ēkåṭā » *one piece* = [ækṭa], but একটী ēkåṭī » *one little thing* is [ekṭi] and একটু « ēkåṭu » *a little* = [ekṭu].

Cases of Harmonic Vowel Mutation in Bengali.

(i) অ+ই [ɔ+i] > ও+ই [o+i]. The mutated [ɔ > o] is left unnoticed in spelling, being written অ. *E.g.*, করি « kåri » *I do*, *ts.* করী « kårī » *elephant* [kori]; ঘড়ি « ghåṛi » *gong* [gʰoṛi]; ননী « nånī > nånī » *cream of milk* [noni]; কড়ি « kåṛī > kåṛī » *cowry shell* [koṛi]; *tss.* পতি « påti » [poti], যদি « yådi » [jʱodi], সহিত « såhitå » [ʃohit], পথিক « påthikå » [pothik], etc., etc. This modification is found in foreign words as well: *e.g.*, Persian « garīb » > গরীব « gårīb » *poor* [gorib]; « barf » *ice* > বরফ « bårâph » [boroph], but « barfī » > বরফী « bårâphī » *a sweet-meat, sugar and cream ice* = [borp(h)ī]; « majlis » *an assembly* > মজলিস « måjlis » = [mojʱliʃ]; English *guernsey* > গঞ্জী « gåñjī » = [gonjʱi], *permit* > পরমিট, পোরমিট [pormiṭ], etc.

The diphthong অই « åi » becomes [oi] through this rule.

(ii) অ+উ [ɔ+u]>ও+উ [o+u] : The [o] is written as অ. *E.g.*, বউ [bou] *bride, wife* (vadhū); করুক [koruk] *let him do*; দলুই [dolui] *a surname* < « dalåï » (dalapati); *tss.* like মধু, যদু, লঘু, মনু [modhu, jôdu, logհu, monu] etc., etc.

The privative affix অ « å- » in *ts.* and *sts.* forms normally is not altered to [o],—it remains [ɔ] even when followed by [i] or [u] : *e.g.*, অধীর [ɔdhir] *impatient*, rarely [odhir]; অসুখ [ɔʃukh] *illness*, never [oʃukh].

Because অ [ɔ] followed by ই, উ [i, u] in the next syllable is pronounced ও [o], the careless habit of using অ and not ও (C.1) in spelling, in some words, which historically ought to have ও (C.1), is found: *e.g.*, মতি « måti », pron. [moti] : the genuine Bengali form মুতি « muti » occurs in MB., and মতি=মোতি is from the Hindōstānī, wrongly spelt (māuktika- > mōtī); so গরু « gåru » [goru] is for গোরু « gōru » (gō-rūpa); etc.

It is not impossible that in *ts.* and foreign words, this change of « å » [ɔ] to [o], through the occurrence of an [i, u] in a following syllable, came in train of MB. epenthesis of [i, u], resulting in [ɔĭ, ɔŭ] which was duly changed to [o] : witness a MB. spelling like ঐরি [ɔiri] for অরি [ɔri], NB. [ori]=Skt. « ari » (p. 380; see also p. 384).

(iii) ই+আ, এ, ও, অ, [i+a, e, ɔ, o] > এ+আ, এ, ও [e+a, e, ɔ, o] : গিল « √gil » *to swallow* > গেলা « gēlå » *swallowed* (*pass. part.*), গেলে « gēlē » *he swallows*, গেল, গেলো « gēlå, gēlō » *you swallow* : but গিলি « gili » *I swallow*, গিলুক « giluk » *let him swallow* : etc.

(iv) এ+আ, এ, অ, ও [e+a, e, ɔ, o] > অ্যা+আ, এ, অ, ও [æ+a, e, ɔ, o] : দেখ √[dekh] *to see* > দেখা [dækha] *seen*, দেখে [dækhe] *sees*, দেখ, দেখো [dækho] *you see*, but দেখি [dekhi] *I see*, দেখুক [dekhuk] *let him see*; etc.

(v) উ+আ, এ, অ, ও [u+a, e, ɔ, o] > ও+আ, এ, অ, ও [o+a, e, ɔ, o]; শুন্ [ʃun] *to hear* : শুনা > শোনা [ʃona] *heard*, শুনে > শোনে [ʃone] *hears*, শোন, শোনো [ʃono] *you hear*, but শুনি [ʃuni] *I hear*, শুনুক [ʃunuk] *let him hear*; etc.

(vi) ও+ই, উ [o+i, u] > উ+ই, উ [u+i, u] : শো [ʃo] *lie, sleep* > শুই [ʃui] *I lie*, শুতে=শুইতে [ʃute] *to lie down*, শুক্<*শোউক্ [ʃuk < ʃo(ŏ)ukɔ] *let him lie down* : but শোয়া [ʃoŏa] *one that has lain down*, শোয় [ʃoĕ] *he lies*

down, etc.; so *stss.* পুষ্যি [puʃʃi] *dependent, adopted* (*son*), from পোষ্য « pōṣya », জুগ্যি [ʃʃuggi] <যোগ্য « yōgya », etc.

(vii) এ+ই [e+i] > ই+ই [i+i]: this characterises the Standard Colloquial specially. দেই > দিই, দি [dei > dii, di(:)] *I give*; দেশী [deʃi] becomes দিশি [diʃi] *country-made, country-born*; so বিলাতি [bilati] > বিলেতি [bileti] (see pp. 400-401) > বিলিতি [biliti] *foreign* (= Persian « wilāyatī »); similarly গিয়াছি > গিয়েছি > গিইছি, গিছি [giaʧhi > gieʧhi > giiʧhi, giʧhi] *I have gone*, দিয়াছিল > দিয়েছিল > দিইছিল, দিছিল [diaʧhilɔ > dieʧhilɔ > diiʧhilɔ, diʧhilɔ] *he had given*, etc.; so মেশামেশি > মেশামিশি [meʃameʃi > meʃamiʃi], *association* (√miśrī-); সন্ন্যাসী > সন্নেসী > 'সন্নিসী' [ʃonnʲaʃi, ʃoinneʃi > ʃonneʃi > ʃonniʃi]; etc.

(viii) The raising of an interior « -å-, -ā- > -å- » of Early Middle Bengali, to « u », when there is a high vowel following, is a most noteworthy thing in the phonology of the NB. standard speech. This has been referred to before. This change also occurred in Early Middle Bengali: cf. ŚKK. forms এখুনি, -নী « ekhuni, -ī » *immediately*, beside এখনী « ēkhåṇī », and পহুরী « påhurī » *watchman*, beside পহরী « påhårī »; and it would seem, from a form like OB. « pākhuḍī » *petal* (Caryā 10) (pakṣa-+-ḍa-), that its beginnings go back to OB. times. This change obviously took place through an intermediate stage of [o]. *E.g.*, আটপউরে [aṭ-poure] < *আঠ-পহরিয়া « *āṭhå-påhāriā » (aṣṭa-praharika-); আঁজুলি « ãjuli » (añjali-); আজুলি « ājulī », beside আজল « ājalå » (ṛju); আগুনি « āguni » (*āgani, agni); উড়ুনি « uṛuni » (*ōḍhaṇia, avaveṣṭanikā); কুড়ুল « kuṛul » < কুড়ালি, কুড়ালি « kuṛåli, kurāli » (kuṭhārikā); কাঁকুই « kãkui » < কাঁকই « kãkåi » (kaṇkatikā); *sts.* গপুড়ে « gåpuṛē » *talkative* (galpa > gappa+ḍa+iyā); ছাউনি « chāuni » (chādanikā); জ্বলুনি « jwåluni » *burning sensation* (jvalana-); জাউলি « jīuli » *a tree* (jīva-la-); জারুল « jārul » *a tree* (jāṭali); ঠাকরুন « ṭhākrun » < ঠাকুরাণী « ṭhākurāṇī » (ṭhakkura+ānī); তেঁতুল « tẽtul » <OB. « tentali »; দেউটী « dēuṭī » >*দীঅটী « *diåṭī » (dīpa+varttikā); ধুনুরী « dhunurī » <ধুনারী « dhunārī » *cotton-carder* (dhūna-kārin); নরুণ « naruṇ » (*naha-haraṇia, *nakha-haraṇikā); নাচুনি « nācunī » (nacca-, nṛtya); পারুল « pārul », OB. « pārali » (pāṭali); পাশুলি « pāśuli » *an ornament* (pārśva-); পিঠুলি « piṭhuli » < পিঠালি « piṭhāli »

(piṣṭa-+āli); পুখুর, পুকুর « puk(h)ur », OB. « pōkhiri » (cf. puṣhariṇī); পিউলি « piuli » *yellow colour* (pīta-lā-); বিউলি « biuli » *cleaned pulse* (vidalita); বিউনি « biuni » (vyajanikā); ভারুই « bhārui » *a bird* (bharata-, bhārata-); মউনি « mâuni » *churning-stick* (mathanikā); মিছ-কউনে « michâ-kâunē » < কহনিয়া « kâhâniyā » (kathana+-ika-); মাদুলি « māduli » *drum-shaped amulet*, cf. মাদল « mādalâ » *drum* (mardala); শিউলি « śiuli » (śēphālikā); etc., etc. *Tatsama* and foreign words fare similarly: *e.g.*, নাটুকে « nāṭukē » (nāṭaka-), চন্দুরে « cândurē » = চন্দরিয়া « cândāriyā », a familiar form of the name Candra, শহুরে « śâhurē » *urban* (Pers. « śahr »), etc. There is mutation of [ɔ] to [o]: see § 190 (vi).

An original « ō » vowel is similarly changed to « u »: *e.g.*, *stss.* নিউগী নেউগী « niugī, nēugī » (niyōgī); আমুদে « āmudē » *merry* (āmōda+iyā); পুরুত « purut » > *পুরোইত « *purōitâ » (purōhita); etc.

Through the analogy and influence of the above forms, which form a numerous class, we sometimes find cases of change of interior « -ā- » > -å- » to « u », even though there is no high vowel following: *e.g.*, ঠাহরা > ঠাউরা « ṭhāhârā > ṭhāurā » *to ponder, deliberate*: cf. Hind « ṭhaharnā »; সাঁঝাড়া « sājhāṛā » *evening light* > সাঁঝুড়া « sājhuṛā ». Here, again, a change to « ō » marked the intermediate stage. In some common words, even when there is quiescent « â » following, we have also change of « å » to « u »: *e.g.*, বামুন « bāmunâ » < বামন « bāmânâ » (brāhmaṇa), বেগুন « bēgun » < বাইগণ « bāigânâ » (vātiṇgana), *sts.* বষ্টুম « bâṣṭum » [boʃṭum] < বষ্টম, *বইষ্টব « bâṣṭâm, bâiṣṭāwâ » (vāiṣṇava), etc., etc.

(ix) Change of quality from front to back, or *vice versa*, through the influence of a following vowel, is rather rare in Bengali. There are a few cases inherited from MIA.: *e.g.*, মুনিস « munisâ » *labourer*, found already in Aśōkan inscriptions (= manuṣya), whence we have NB. মিনসা « minsâ » *a fellow* (*in contempt*); cf. the *sts.* মনিষ্যি « mânisyi » [moniʃʃi] = « manuṣya »; and OB. « pōkhiri » has an analogous form in the 'Divyâvadāna' word « puṣkiriṇī ». NB. examples are সিকি « siki » < সুকি « suki » ¼*th*, *four-anna bit* (= ? sapādikā; so Platts derives Hindōstānī « sūkā, sūkī »). Cf. Oṛiyā « duhiṇkâ > dihiṇkâ » *of two*. Conversely, we have change of « i » to « u »: « bindu > *bundu > বুঁদ

bũdā », and শুশুক « śuśuka » *porpoise*, cf. Pali « suṁsumāra », Skt. « śiśumāra ».

192. The above are cases where Vowel Mutation results from the influence of a following vowel. The modification of a following vowel through the influence of a preceding one, which is the kind of Vowel Harmony that characterises the Dravidian and Ural-Altaic speeches (*e.g.*, Telugu and Turkish), is also found in NB. It is the result apparently of a strong initial stress; and those families of speech in which we have it are agglutinating in nature, in which the root syllable is the initial one and possesses the dominant stress which influences the following syllables. The Standard Colloquial is specially characterised by this kind of Vowel Harmony, and East Bengali and most other dialects resist it: naturally enough, as the Standard Colloquial is a dialect of strong initial stress.

(x) অ, আ, ও+অ [ɔ, ɑ, o+ɔ] > অ, আ, ও+ও [ɔ, ɑ, o+o]. This modification of [ɔ] to [o] may be said to be optional. The resultant [o] is often left unnoticed in spelling: *e.g.*, *stss.* রতন, গরব, যতন etc. = [rɔton, gɔrob, jñɔton]; চলন = [cʰolon]; হঅন>হওন [hiɔɔn > hioon]; similarly ভারত [bʰiarot], পালঙ্গ [palonṅ], কাঁদন [kãdon], মাদল [madol], etc.; মোহন [mohon], *ts.* গোবর [gobor], লোটন [loṭon], etc. So foreign borrowings: গজল [gɔjñol] (= Pers. « ġazal »), ডবল [ḍɔbol] (= English *double*), ডজন [ḍɔjñon] (= English *dozen*), নম্বর [nɔmbor] (English *number*), গারদ [garod] (English *guard*), বোতল [botol] (Portuguese « botelha »), মোরগ [morog] (Persian « mŏrġ, murġ ») ; etc., etc.

The group [ɔ+ɔ] is not preferred by the Standard Colloquial, the second or both must be altered to [o]. The English group [o: (oŭ)+o: (oŭ)] in *photo* [foŭtoŭ] becomes ফটো [phɔṭo]; cf. *otto* = অটো [ɔṭo].

(xi) আ+ও [ɑ+o] > আ+আ [ɑ+ɑ] is found in the colloquial তাহালে [tɑhɑle] < তা'হলে [tɑhole] < তাহা হইলে « tābā hâilē » *then, that being so.*

(xii) ই+আ [i+ɑ] > ই+এ [i+e]: very common, in *tbh.*, as well as *ts.* and foreign forms. ইচ্ছে [icʃe] (icchā); MB. বিনে [bine] (vinā); মিশেল [miʃel] (miśāla *mixed* < miśra-); মিথ্যে [mitthe] (mithyā); ভিক্ষে [bʰikkhe] (bhikṣā); ছিলেম, দিলেম, ক'রতেম, যেতেম, etc., etc. [cʰilem dilem, kortem, jñetem], Standard Coll. pronunciations of « chilām, dilām, kâritām,

jāitām », etc. = *I was, I gave, I used to do, I used to go*; so তুমি ক'রবে [korbe] *you will do* < « kåribā »; dialectally also করবের, দিবের [korber, diber], etc. = *for doing, for giving* < « kåribārꝺ, dibārꝺ »; চাইনে [ʧaine] *I don't want*, করিনে [korine] *I don't do* < চাইনা « cāinā », করিনা « kårinā »; চাইনি [ʧaini] *I did not want* < *চাইনেই, চাহিনাহি « cāinēi, cāhināhi »; so বলিস্‌নে [boliʃne] *thou won't say* = বলিস্ না « bålisꝺ nā », বলিস্‌নি [boliʃni] = *বলিস্‌নেই, বলিসনাহি « bålis nēi, -nāhi », etc.; নীলে [nile], folk-Bengali for লীলা « līlā »; পিতেম [pitemo], folk-Bengali for পিতামহ « pitāmåhå »; বিশ্বাস, নিঃশ্বাস « biśwāsꝺ, niḥśwāsꝺ », etc., commonly become [biʃʃeʃ, niʃʃeʃ], and all similar forms; হিসেব [hiʃeb] *accounts* (Perso-Arabic « ḥisāb »); বিলেত [bilet] *foreign land, Europe* (Perso-Arabic « wilāyat »); ফিতে [phite] *ribbon* (Portuguese « fita »). Also in forms like একটা [ekṭa] *one piece*, আটটা [aṭṭa] *eight pieces*, but তিনটে [tinṭe] *three pieces*, MB. তিনিটা « tini-ṭā », চারটে [ʧarṭe] *four pieces* = MB. চারিটা « cāri-ṭā » = East Bengali [tsaĭrṭa, tsairṭa].

(xiii) উ+আ [u+a] > উ+ও [u+o]. This modification is also very common both in *tbhs.* and *tss.*: পূজো [puʃʃo] (pūjā); মূলো [mulo] *radish* (mūlā < mūla-); খুড়ো [khuṛo] *uncle* (khuṛā < kṣudra + tāta); ধূলো [ɖʱulo] (dhūlā < dhūla-); উঠোন, উঠন [uṭhon] *court-yard*; (uṭhānꝺ = ut-sthāpana-); চূড়ো [ʧuṛo] (cūḍā); মুড়ো [muṛo] (muṛā < muṇḍa-); দুওর [duor] (*duāra = dwāra); শুখো [ʃuk(h)o] *dry* = শুখা « śukhā » (śuṣka-); etc., etc. Cf. Perso-Arabic « ḥuqqah » > হুঁকা « hūkā » > হুঁকো [hũko] *hookah*.

Also উ+অ [u+o] > উ+ও [u+o]: শুওর [ʃuor] (śuårå < sū-kara); etc. See p. 398.

(xiv) এ+আ+এ [e+a+e] > এ+এ+এ [e+e+e]: as in এখেনে [ekhene] < এখানে « ēkhānē » *here*; so সেখেনে [ʃekhene] *there*, যেখেনে [ʤekhene] *where*.

This Vowel Harmony habit of Bengali asserts itself exceedingly in the speech of women, and of the uneducated classes generally, and it works havoc with the *tss.* imported from Sanskrit: to give some remarkable examples, we have নিলিমিষ্যি [nilimiʃʃi] in women's speech = « nirāmiṣya »; পিত্তিমে, পিতিমে [pit(t)ime] = « pratimā » (see p. 357 for change of « pra- » to « pi- »); উচ্ছুগ্‌গু [ucʃʃuggu] *any offering before a deity* = « utsarga »;

দুর্জ্যুগ [duɟɟug] *bad weather* = « duryōga » ; নিরিবিলি [niribili] *quiet* (*place*) = « nirābila » ; ফট্‌কিরি, ফিট্‌কিরি [phoṭkiri, phiṭkiri] *alum* = « sphaṭika + āra- » ; বিতিকিচ্ছি [bitikicchi] *ugly* = « vicikitsa- » ; etc., etc. In changing the *ts.* words into colloquial Bengali forms similar to those given above, the cultural factor, communal as well as personal, decides how far they are to stray from the Sanskrit standard. But it is remarkable how great an importance the principle of Vowel Harmony has with the least cultured classes ; and, as the ordinary colloquial transformation of the *tbh.* and of the naturalised *ts.* and foreign words would show, with the best-cultured speakers of Bengali as well.

[H] Origin of the New Bengali Vowels.

193. The general line of development of OIA. vowels into Bengali has been indicated above. The sources of the NB. vowels are now indicated origin below. The vowels of the Standard Colloquial are seven [i, e, æ, a, ɔ, o, u] ; with the rare [ʌ] in foreign words, they are eight. They are taken below in the order of the Bengali Alphabet, *viz.*, [ɔ, a, i, u, e, æ, o]. For [ʌ], [æ, a, ɔ] are normally substituted : and it will not be necessary to speak further about [ʌ].

New Bengali [ɔ, ɔ:], written অ, ্র.

194. Bengali [ɔ] occurs both as long and as short, as in জল [ɟɟɔ:l] *water* and জলা [ɟɟɔla] *marsh* respectively. In popular notion, অ [ɔ] is generally called the short of আ [a], but the difference in quality between the two vowels is instinctively recognised by all Bengali speakers, and this is shown by the fact that when a Bengali child begins to learn the alphabet, he is taught to name the vowel letters as follows—অ = « svārē å » [ʃɔre ɔ:] *among the vowels, a* ; আ = « svarē ā » [ʃɔre a:] *among the vowels, ā* ; ই = « hrâsvâ i » [ɦrɔɟɟɔ i:] *short i* ; ঈ = « dīrghâ ī » *long ī* ; so উ = « hrâsvâ u », ঊ = « dīrgha ū », ঋ = « ri », ৠ = « dīrghâ rī », ঌ = « li », ৡ = « dīrgha li », এ « ē », ঐ « åi » [oi], ও « ō », ঔ « åu » [ou], অং « åṅ » [ɔŋ], অঃ « åḥ » [ɔh] : অ, আ are *not* called « hrâsvâ å, dīrghâ ā ». Bengali অ, আ do not inter-

change now, but they did, up to the end of the eMB. period, when অ was a lower and an opener sound than at present (see pp. 260, 263). Bengali [ɔ] commonly represents OIA. short [a], through MIA. OB., eMB. [ɒ]. Middle Bengali [ɒ>ɔ] normally becomes [o] in the MB. Standard Colloquial when followed by [i, u]: see *ante*, pp. 396, 397.

The sources of the NB. [ɔ]:

(i) OIA. short «ă»=[a]: করাত «[kərat] (karapatra); কয় [kɔĕ] (kahēi, kathayati); চলে [ʧɔle] (calati); জল [ʤɔ:l] (jala); etc., etc.

(ii) OIA. long «ā»=[a:], in a few cases through absence of stress in OB. and Early MB.: পগার [pɔgar] (prākāra), বনারসী [bɔnarɔʃi] (vārāṇasīya), etc.; see p. 321. Cf. also করোলা [kərola], করেলা [kərela] (kāravēlla); থই [thɔi > thoi] *depth, bottom* (*stāghikā); etc. Post-consonantal [wa:] of Skt. in initial syllables became [ɔ:] in Early Middle Bengali, in a few *tss.* and is found as [ɔ] in NB. (see p. 260): *e.g.*, স্বদ [ʃɔ:d] = স্বাদ «svāda»; ‡ স্বমী [ʃɔmi], a folk-pronunciation of স্বামী «svāmī»; সঙ্ [ʃɔ:ŋ] *imitation, mimicry, dramatic caricature*, < স্বাঙ্গ «svānga»: cf. Hind. «swāng»; cf. also ‡ দত্ [dɔ:t], a folk pronunciation of দোয়াৎ [doat] from the Perso-Arabic «dawāt» *ink-pot*.

In *ts.* compounds like «jalâñjali, siddhânna, paramânna, pāyasânna madhyâhna», etc., the [a:] is frequently turned into [ɔ, ɔ>o] in folk-pronunciation—*e.g.* [ʤɔlonʤoli, ʃiddhɔnno, pɔrmɔnno, pɑĕʃɔnno, moddhɔnno]. Conversely, «mūrdhânyâ ṇâ», the name of the latter ণ, commonly becomes [moddhanno no, modhanno].

(iii) OIA. [i:, i]: বয়ড়া [bɔĕṛa] (MIA. bahēḍaa, OIA. vibhītaka); তরশু [tɔrɔʃu > torʃu] *day before yesterday, day after tomorrow* (tiraḥ-śvaḥ); পরখ [pɔrɔkh] (parīkṣā); etc.

(iv) OIA. [u] > eMB. [ɒ], altered to [o] in NB.: MB. মউড় «mâüṛâ» (mukuṭa); cf. বলে [bɔle] (MIA. bollaï, OIA. bravīti, √brū).

(v) OIA. [ṛ]: মড়া [mɔṛa] (mṛta-); etc.: see pp. 354, 355.

(vi) OIA. [e:]: করলা [kɔrɔla, kərola] (kāravēlla); *stss.* সন্দ [ʃɔndə] (sandēha), নারকল [nɑrkɔl, -kol] (nārikēla), etc.

(vii) OIA. [o:]: Calcutta Bengali গয়লা [gɔĕla] (gōpāla-), through influence of ময়রা [mɔĕra] (maḍaka-), and similar words with the group

[ɔŏ+a]; so কয়লা [kɔĕla] *charcoal* (« kōkila- », *cuckoo-coloured*; cf. Hind. kōïlā); cf. ময়লা [mɔĕla] *dirty* (MIA. maïlla-), see p. 334. See also under [ɔe].

(viii) OIA. short [a]+consonant (stop, aspirate, or sibilant)+short [a] > OB. [ɒwɒ, ɒfiɒ] > eMB. [ɔ:, ɔfiɔ] > NB.[ɔ] : see pp. 346-348.

For loss of interior [ɔ], see *ante*, pp. 330, 331.

[ɔ] forms diphthongs with [ĕ, ŏ] following : see below under [ɔe, ɔo].

[ɔ] in foreign words is noted later.

Bengali [a, a:], written আ, য়া.

195. Sources of Bengali [a] :

(i) OIA. « ā » [a:] initial, and before one consonant : পাড়ে [paṛe] (pātayati) ; চালায় [c͡ʃalaĕ] (*cālāpayati, cālayati) ; মা [ma:] (mātā) ; সায়র [ʃaĕr] (sāgara) ; শিয়াল [ʃial] (śṛgāla), etc. See pp. 320-321.

(ii) OIA. « ă » initial, through stress in eMB. : see p. 314.

(iii) OIA. « ă, ā » [a, a:] before two consonants : see pp. 316-317, 321.

(iv) From « ă, ā+ă, ā » in contact in Late MIA.=OIA. « ă, ā »+ consonant+« ă, ā » : see pp. 349-350.

(v) From OIA. « ṛ » initial, through an earlier stage of « ă » : see pp. 354-355.

Post-consonantal « -yā » in *ts.* words is changed to [æ] in NB., for which see under [æ]; see also p. 260. The change of [a] to [æ] in Bengali, in connection with a nasal, when the following syllable also has [a], has been noticed at p. 322. See also under [æ].

Modification of [a] to [e, o] and [o>u] by Vowel Harmony : see pp. 400-401, 398; also dropping of [a] through loss of stress, see pp. 331-332.

196. In some *tbh.* forms, there is alternation between [a] and [i] : ছাল [c͡ʃha:l] and ছিলকা [c͡ʃhilka > c͡ʃhilke] *skin of fruit* (cf. Skt. challi) ; √সাঁধ [ʃã:dh] *enter* and সিঁধ [ʃi:dh] *a passage through a wall* (sandhi) ; √চাব [c͡ʃa:b] and √চিব [c͡ʃi:b] *chew* (√carv) ; √চাপ [c͡ʃa:p] and √চিপ [c͡ʃi:p] *press* (cf. Apabhraṅśa √camp) ; পাছ [pa:c͡ʃh] and পিছ [pi:c͡ʃh] *behind* (Cf. J. Beames,

'Comp. Grammar of the Modern Aryan Languages of India,' II, p. 297) ; etc. This alternation is as old as MIA. Also alternation between [a] and [o, u] is found in some groups of words, mostly *dēśī* : *e.g.*, ডাগর [ḍagər] *big*, also, dialectally ডাকর [ḍakər], beside ডোকরা, ডোকলা [ḍokra, ḍokla] *lout, clumsy fellow, spendthrift, huge and ungainly*, ডেকরা [ḍekra] *fool, ugly one* ; and ডাঙ্গা [ḍaŋa, ḍæŋa] *high land*, beside টেঙ্গরা [ṭæŋra] *high land*, Hindōstānī « ḍuṇgar, ḍōṇgar » *hill* ; জাবড়া, জোবড়া [ʃʃabṛa, ʃʃobṛa] *splash, blotch* ; জাড় [ʃʃaːṛ] *cold* (Skt. jāḍya, MIA. jaḍḍā) beside জুড়া [ʃʃuṛa] *get cool* ; ফাক [phāːk] *empty space*, beside ফোঁকর [phõkər] *hole, slit*, probably connected with ফাঁপ [phāːp] *swelling*, ফোঁপরা [phõpra] *hollow*, ফোঁপল [phõpol] *empty* (cf. √sphā) ; ডাবর [ḍabor] *a capacious pot (of metal)*, ডাব [ḍaːb] *green coco-nut*, beside ডোবা [ḍoba] *puddle, small tank* ; হামা [ɦama] *crawl on fours* (cf. « hammati » *walks* in the ancient speech of Surāṣṭra), beside হুমড়ি [ɦumṛi] *a fall on one's face* ; etc. Compare কাঁদ [kãːd] *cry, weep* and কোঁদল [kõdol] *women's noisy quarrel* (=kanda-la-, √krand). The reasons of the above types of interchange of vowels are not clear.

The [a] in নিরানব্বই, নিরানই [niranobbui, niranoi], also changed to [e] by Vowel Harmony, [nirenobbui, nirenoi], is unusual. It is found in other NIA., together with the euphonic (?) « r » : *e. g.*, Hind. « ninānawai, nawānawai », Panjābī « niṇānawē », etc., and it probably comes from the MIA. stage. So also in some words like নয়ান [nɔĕan] (nayana), বয়ান [bɔĕan] (vadana) ; cf. MB. পড়া [pɔṛa] (paṭaha) ; NB. *sls.* slang পেল্লায় [pellaĕ] *awful, excessive, thundering, huge* (pralaya), etc. : see p. 336.

[a] in foreign words : see below.

New Bengali [i, iː], written ই, ঈ, য়ি, য়ী.

197. Bengali [i] is not a very close sound, and it easily passes into [e]. Thus, in the Calcutta Colloquial, words like ভিতর « bhitar্ɦ », ছিল « chil্ɦ » are ordinarily pronounced [bɦetor, ʧʰelo]. The interchange of [i] and [e] is found in MB.

(i) OIA., MIA. [i, iː] : see pp. 308, 323-324, 336-337.

(ii) OIA. [ṛ] > MIA. [i] : see p. 355. Also from Skt. [ṛ] to [ri, ir] in *tss.* and *slss.*, pp. 356-357.

(iii) OIA. « ă, ā » [ɑ, ɑ:] : see p. 335 ; cf. also পিছে [pic͡ʃhe] (=paścāt), সিঁধ [ʃi:d(h)] (=sandhi) ; বি- [bi-] (=dvā-) in compounds—বিয়াল্লিস [biɑlliʃ] (=dvā-catvāriṅśat), etc. ; ছি [c͡ʃhi-] (=ṣaṭ), as in ছিয়াল্লিস [c͡ʃhiɑlliʃ] (=ṣaṭ-catvāriṅśat), etc. ; *dēśī* খিড়কী [khiṛki] *window, back-door* (khaḍakkī) ; *sts.* ফিট্‌কিরি [phiṭkiri] *alum* (sphaṭika-), etc.

The OIA. affix « -ant- » gave « -it- » in Bengali : see also p. 335.

(iv) OIA. « -yă » [ɪɑ] after consonants : ভিতর [bʱitər] (abhyantara), বিজনী [biʤni] (vyajanikā) ; নেই, নাই [nei, nɑi] *argument* (nyāya). OIA. « -yă » for the indeclinable conjunctive=OB. « -iă, -iā », MB, ই,ঈ, ইয়া, ইয়াঁ « -i, -I, -iā, -iã », has been assimilated to এ « ē » in NB. Also from earlier MB. « -yu- » in the *sts.* খিদে [khide] (khyudhā, kṣudhā).

In *stss.*, « -yă- » after a consonant becomes [i], with the preceding consonant doubled : *e.g.*, সত্য « sâtyă » > সত্যি [ʃotti], so আচার্য্য « ācāryă » > আচায্যি [ɑc͡ʃɑɟʤi], পথ্য « pathyă » > পথ্যি [potthi], মধ্য « mâdhyă » > মধ্যি [moddhi], সাধ্য « sādhyă » > সাধ্যি [ʃɑddhi], অকথ্য « âkathyă » > [ɔkotthi], ভোজ্য « bhōjya » > ভুজ্যি [bʱuʤʤi] *uncooked rice, pulses, vegetables, butter etc., in religious offering*, etc. Similarly with ক্ষ « kṣ = khy » and জ্ঞ « jñ = gy » : *e.g.*, সাক্ষ্য « sākṣyă » > সাক্ষ্যি [ʃɑkkhi], যক্ষ « yâkṣă = jâkhyă » > যক্ষি [ʤokkhi], যজ্ঞ « yâjñă = jâgyă » > যজ্ঞি [ʤõggɪ], দৈবজ্ঞ « daibâjña » > দৈবজ্ঞি [doiboggɪ , etc. The eMB. pronunciation was [ɑc͡ʃɑɟʤĭɲ, pɒtthĭɲ, mɒddʱĭɲ, ʃɑkkhĭɲ, ʤɒkkhĭɲ, ʤɒggĭɲ], etc. : it is the [ĭɲ] which has resulted in the contracted [i] in NB., like « -iă » of Apabhraṅśa to « i » in Bengali : see pp. 302, 303, 307, 352.

(v) OIA. [u] : মিনসা, মিনসে [minʃɑ, minʃe] (manuṣya) ; সিকি [ʃiki] *fourth*, for সুকি [ʃuki]. Early MB. [u] became [i] when epenthetic : examples have been given above, see p. 385 ; cf. আই [ɑi] (āu, āyuṣ), বাই [bɑi] (bāu, vāyu) ; etc.

For interchange between [i] and [u] in *dēśī* and *tbh.* forms, see under [u], p. 408.

(vi) OIA. [ɑ:i, e:], MIA. [e:, e] : cf. MB. পড়িশী [pɒṛiʃi] (prativēśin) ; NB. ঠাঁই [ʈhãi] (*ṭhāmē, sthāman) ; দুই [dui] (duvē, dvi) ; নেই [nei] *indulgence* (*nēhi, *ṇēhē, snēha) ; etc.

তিলি [tili] < তেলি « tēli » (tāilika) ; গিরিমাটি [girimaṭi] <গেরি- « gēri- » (gāirika-mṛttikā) ; দিই [dii] / *give* (*dēmi = dadāmi) : etc., by Vowel Harmony.

(vii) Through contraction of MIA. contact vowels in OB. : see pp. 350, 351, 352.

(viii) In certain class dialects in the Standard Colloquial area, final « āi » is contracted to [i]: *e.g.*, জেঠি [ʤeṭhi] < জেঠাই « jēṭhāi » (jyeṣṭha-tāta+ikā) ; মিঠি [miṭhi] < মেঠাই, মিঠাই « mēṭhāi, mi- » *sweetmeat* (miṣṭa-) ; সানি [ʃani] < সানাই « sānāi » (Pers. « šah-nāī »), etc.

The epenthetic « -i, -u > -i », and the formation of diphthongs with « -i », have been discussed before.

For [i] in foreign words : see below.

Bengali [u, u:], written উ, ঊ, ু, ূ.

198. Bengali [u], like [i], is not a close, high sound, but rather low, approaching [o]. It is drawn down to the [o] position through influence of a following low vowel. In Calcutta, and elsewhere in Bengal, we have pronunciations like [opor, ʃondor] = উপর, সুন্দর « upårɤ, sundårɤ » etc.

Sources of [u] :

(i) OIA. [u:, u] > MIA. [u, u:] : See pp. 310, 311, 325, 326, 337.

(ii) OIA. [ṛ] > MIA. [u] : p. 355.

(iii) OIA. [ɑ, ɑ:] : in the interior of a word, when flanked by high vowels, we have change to [u] in NB. : see pp. 394, 398.

In initial syllables, through influence of a preceding labial, in a few cases in MB. and NB. : *e.g.*, MB. বুহিত [buhito] (vahitra) ; বুহিনি [buhini (bhagini) ; etc. The intermediate stage was [o]. See pp. 319, 320 ; cf. মহাশয় « måhāśåyɤ » *sir* > মশায়, মশাই [moʃɑĕ, moʃai], East Bengali মুশয় [muʃoĕ].

(iv) OIA. [ŭɑ] after consonants > MIA. [-uw̆-] : সুর [ʃu:r] (*suvara, svara) ; পরশু [porʃu] (*paraśuva, paraśvaḥ) ; শুষ [ʃu:ʃ] (*śuvaśa, śvas) ; শু, সু [ʃu] (suvav-, svap), etc. See pp. 329, 330, 352.

(v) OIA. [i] : বুঁদ [bũ:d] (bindu) ; হলুদ [holud] (haridrā) ; গেরুআ [geruɑ] (gāirika, *gāiruka) ; শুশুক [ʃuʃuk] (cf. Skt. śiśumāra, Pali suṁsumāra).

(vi) OIA. [a:u, o:] >MIA. [o:, o] : through influence of a high vowel mainly. See pp. 398, 399. পুকুর [pukur] (MIA. pokkhara-, puṣkariṇī) ; ভীমরুল [bhimrul] (*bhṛṇga-rōlikā) ; উড়ে [uṛe] (Ōṛiyā, Oḍḍiaa-, Āṇḍrīyaka), etc., etc.

(vii) Through contraction of MIA. contact vowels : see pp. 350, 352. Also cf. (iv) above. Cf. জ্বলুনি [ʤoluni] *burning sensation* <*jàlāuni, *jàlāẁanī (*jwalāpanikā), etc.

For [u] in foreign words, see below.

199. [i] and [u] as high vowels interchange in some *tbh.* and *dēśī* forms (including onomatopoetics). This is apart from change of epenthetic [u] to [i], and from the cases of isolated modification of [u] to [i], and *vice versa*. *E.g.*, গুমট [gumoṭ] *stuffiness* beside MIA. « gimha » (grīṣma) ; তিক্ষি [tikkhi] *sharp* and তুখড় [tukhaṛ] *clever* (tīkṣṇa) ; নিঝুম [niʤhum] *silent, asleep*, also ঘুম [gʱum] *sleep*, beside ঝিম [ʤʱim] *doze*—a *dēśī* form, cf. Marāṭhī « jhōpṇẽ » *sleep* ; টিকলি [ṭikli] and টুক্‌রা [ṭukra] *a piece, bit, fragment ;* ডিঙ্গা [diŋga] beside ডোঙ্গা < *ডুঙ্গা [doŋa] *a canoe, a boat* ; ছিল্‌কা [ʧʰilka] *skin of fruit*, beside ছুলা [ʧʰula, ʧʰola] *to skin*, ছুলি [ʧʰuli] *skin-disease*, also ছাল [ʧʰa:l] *skin* ; চিপ্‌সা, চুপ্‌সা [ʧip̣ʃa, ʧupʃa] *be dried up, contract*, beside চাপ [ʧa:p] *press* ; উকুন [ukun] *louse* (*utkuṇa), beside ‡ ইকুন [ikun] ; শিকনি [ʃikni] *exudation from nose* (√śiṇgh), beside শুঁক, শোঁক [ʃũ:k, ʃõ:k] *smell, sniff* (√*śuṇgh) ; cf. NIA. [u:kh, i:kh, a:kh] (=ikṣu). As can be easily seen, these alternances go back to the Early MIA. stage, and are probably earlier. The *dēśī* forms probably are based on dialectal variations in the original non-Aryan languages from which OIA. or MIA. borrowed the words. The IA. vowel alternance—« guṇa » and « vṛddhi », and Early MIA. change of « ṛ » to « i, u », *e.g.*, [ghũṭ, gʱĩṭ, gʱĩāṭ] from « ghṛṣṭa », in the same dialect, made the alternances in the *dēśī* and *tbh.* forms appear quite natural, and in conformity with the spirit of IA.

Bengali [e, e:] = এ, য়ে.

200. (i) OIA. [e:] > MIA. [e:, e] : also in *dēśī* words : see pp. 327-328, 337.

(ii) OIA. [a:i] > MIA. [e:, e] : pp. 328, 337.

(iii) OIA. [ɾ] : দেখ [de:kh] (√dɾk-ṣ-) ; see p. 356. Also in *stss.* : p. 357.

(iv) OIA. [a, a:] : through influence of following [i, ĭ] = MIA. [e] : শেল [ʃe:l] (śalya, sĕlla) ; শেজ [ʃe:ʒʒ] (śayyā, sejja) ; সেঁজারু [ʃæ̃ʒʒaru > ʃæ̃ʒʒaru], in South-eastern Bengali হেঁজা [hæ̃za], beside সাঁজারু [ʃãʒʒaru] (śalyaka, sayyaka, sejjaa + rūpa) ; এর [er] (kēra < kārya) ; etc. In সতের [ʃoterɔ], পনের [ponerɔ] beside সতর, পনর [ʃoterɔ, ponerɔ], we have change of OIA. [a] to [e] in NB. (saptadaśa, pañcadaśa) ; also in the honorific verb forms in এন [en] (-anti) : *e.g.*, চলেন [ʧolen] (calanti).

(v) OIA. [i], through a MIA. change to [e] : see p. 327. Also finally, in verb forms : খায় [khaĕ] (khāi, khādati), etc.

(vi) OIA. [u:] : নেউর [neur] (nūpura).

(vii) By contraction, in MIA., OB. and eMB. times, from various groups of OIA., with [a] : see pp. 343, 344, 350, 351, 352. নেউল [neul] (nakula) ; MB. নেয়ালি [neali] (*nayamallia, navamallikā) ; চলে [ʧole] (calati) ; ঘরে [ghore] (gharahi, gɾha + dhi) ; etc.

OB. *stss.*, with [ĭɒ] < post-consonantal Skt. « -yă » [ĭa], as much as [ĭɒ] in *tbh.* words, is contracted to [e, ɛ] in MB. > [æ] in NB. : see p. 351 : also examples like বেঙ, ব্যাঙ [bæŋ] (*biaŋga, vyaŋga), বেঙ্গমা [bæŋgoma] (*biaŋgamā, vihaŋgama-), জ্যান্ত [ʤɛntɔ, ʤæntɔ] (jianta, jĭvant-), etc.

Early MB. final ইয়া, ঈআ, etc. = [ia, ia] becomes [e] in NB. : *e.g.*, eMB. *চাটুরজীআ > lMB. চাটুর্জ্যা > NB. চাটুর্জে, চাটুজ্জে, চাড়ুজ্জে [ʧaṭurʤia > ʧaṭurʤɛ > ʧaṭurʤe, ʧaṭuʤʤe, ʧaɾuʤʤe] *a Brahman surname = the long-lived one, or son* (jĭva) *of* (*the village of*) Cāṭu (*or* Caṭṭa ; cf. the equivalent চাটুতি « cāṭuti » = « caṭṭa + putra »), Anglicised into *Chatterji* etc., Sanskritised into « câṭṭôpâdhyāya » ; so MB. মুখুর্জ্যা > মুকুজ্জে [mukhurʤɛ > mukurʤe, mukuʤʤe] *Mukherji* ; উত্তরিয়া > উত্তুরে [uttoria > utture] *northern* ; করিয়া > ক'রে [koria > kore] *having done*, etc., etc. : see pp. 393, 394.

(viii) By contraction from MB. epenthetic [ai, au > ai] < OIA. [a: + i, u] : see pp. 385, 386, 389.

(ix) By Vowel Harmony, from MB. [i] and MB. [a] : see pp. 400-401.

In *tss.* of NB., subscript « -yă » of Skt. gives [e], and this [e] remains when followed by a high vowel: otherwise the [e] becomes [æ]: *e.g.*, ব্যক্তি [bekti] (vyakti), but ব্যক্ত [bæktɔ] (vyakta); so ব্যথার ব্যথী [bæthar bethi] *a sympathiser in sorrow* (vyathā, vyathin); ব্যষ্টি [beʃʈi] (vyaṣṭi); ব্যতীত [betitɔ] (vyatīta); etc.

For [e] in foreign words: see *infra*.

Bengali [æ, æ:]

201. [æ] is a comparatively recent sound in the NB. Standard Colloquial, and it originated from MB. [ɛ] and groups like [ɛa, ɛa, ea], not earlier than towards the very end of the MB. period. In East Bengal dialects, [æ] is rare or unknown, and [ɛ] and [a, a] are used for it. Long [e:] and [æ:] of the Standard Colloquial commonly occur in Typical East Bengali as [ɛ:]; persons speaking East Bengali dialects find it difficult to distinguish between English [æ] and [ɛ]—the latter, in the ordinary West Bengali pronunciation of English, becomes [e] (together with English [ə], which is a sound not found in Bengali). Thus, *admiral, appreciate, acquaintance* [ædmərəl, əpri:ʃieɪt, əkweɪntəns], in West Bengali pronunciation [ædmiræl, æpri:ʃie:ʈ, ækŏenʈens], become [ɛdmirɛl, ɛpri:ʃiɛ:ʈ, ɛkŏenʈɛns] in East Bengali; and the following spellings of English words from examination scripts submitted by East Bengal students, are typical of East Bengali pronunciation: « *ma*tropolice, h*e*ndi-work, tend*a*ncy, per*i*ch*o*ner (= parishioner), comm*e*nder, int*a*ntionally, *e*ngels, harressed, m*a*rriment, *e*dvice, *e*mity, *a*minence, *a*nemy, ori*a*nt*e*l, m*a*nny (= many) », etc.

Bengali [æ], when it comes from [e], is written as ◌্যা. The subscribed « -y- » followed by « -ā » —'আ', 'য়া' .া, is otherwise employed. In *stss.*, post-consonantal « -yā » of Skt., which became [ɛa] in MB., is written as « -yā »; also post consonantal « -yă » in initial syllables. The tendency in writing the NB. Standard Colloquial now is to employ lavishly the য-ফলা + আ—« -yā » = ◌্যা: *e.g.*, দ্যাখে « dyākhē » for দেখে dēkhē » = [dækhe] = MB. [dɛkhe], MIA. [dekkhɒi].

Origin of [æ].

(i) In *tbhs.* [æ] is found in initial syllables for a Late MIA. [e:, e], which is derived from various sources in OIA.—[e:, a:i, r̥] and [a+consonant +a, i+consonant+a], etc. In eMB., if not in OB., the pronunciation certainly was [ɛ]. See pp. 327-328, 343, 351, 409.

[æ:] is found in *tbh.* monosyllables when they are closed by ক, খ « k(h) », চ « c », ড় « ṛ », or a nasal, or by য় « y » from earlier এ « ĕ »: *e.g.*, এক [æ:k], MB. [ɛ:k, ɛkɔ], MIA. « ekka »; *ts.* লেখ্ [læ:kh] *write thou* (in the old pronunciation in the Standard Colloquial, now through Skt. influence changed to [le:kh]); দেখ্ [dæ:kh] *look thou*, MB. [dɛkhɔ]; পেঁচ [pæ̃:ʧ] *twist*; ছেঁচ [ʧhæ̃:ʧ] *pound thou*; নেড় [næ:ṛ] *hard stools*; ফেন [phæ:n] *froth*; বেঙ [bæ:ŋ] *frog*; দেন [dæ:n] *he gives, they give* (honorific) (MIA. *denti); সেন [ʃæ:n] *a surname*; দেয়, নেয় [dæĕ, næĕ] *gives, takes*, etc. In other cases, we have [e:]: *e.g.*, নেত [ne:t], an archaic word = *fine cloth* (nētra); হেঁট [hĕ:t] *stooping, low* (hĕṭṭha, *adhiṣṭāt), etc. Cf. *tss.* দেশ, বেশ, কেশ, মেঘ, প্রেত, শ্বেত, দেব etc. [de:ʃ, be:ʃ, ke:ʃ, me:gh, pre:t, ʃe:t, de:b]; etc.

Onomatopoetics have the [æ] pronunciation, irrespective of the consonant which follows: *e.g.*, পেট [pe:ṭ] *belly*, but পেট্‌পেট্, পাট্‌প্যাট্ [pæṭ pæṭ]; খেত [khe:t] *field* (kṣetra), but খ্যাৎ খ্যাৎ [khæ̃t khæ̃t], etc. Here East Bengali will employ [ɛ] in all cases.

In disyllables (and polysyllables), when the second syllable is closed by a vowel other than [i] or [u], [æ] for [e] is the rule. *Ts.* words, however, sometimes resist the tendency to change to the opener sound. *E.g.*, একা [æka] *alone*; দেখ [dækho] *see you*, MB. [dɛkhɔ:, dɛkhɒfiɒ]; মেলে [mæle] *opens up (eyes), spreads*; পেঁচা [pæ̃ʧa] *owl*; হেলা [hæla]; বেলা [bæla]; তের [tæro] *thirteen*, MB. [tɛrɔ:, tɛrɒhɒ]; গেল [gælo] *went*; ফেনা [phæna]; দেখে [dækhe] *sees*; ফেলে [phæle] *throws*, MB. [pɛle, phɛle, pɛlɒi] (prērayati?); বেটা [bæṭa] *son*; দেওর [dæor] (dēvara); নেওটা, নেওটো [næoṭa>næoṭo] *affectionate* (snēha-vṛtta-), beside নেই [nei] *indulgence* (=snēha); কেওট [kæoṭ] *a caste* (kēvaṭṭa, kāivarta); সেবা [ʃeba], beside, in recent pronunciation, through Skt influence [ʃeba]; দেবা [dæba] as in the phrase যেমন দেবা তেমনি দেবী [ʃæmon dæba temni debi] *as is the god, so the goddess=like husband, like wife*; etc., etc.; এমন, যেমন, তেমন, কেমন [æmon,

ʃʒæmon, tæmon, kæmon], adjectives or adverbs of manner, respectively from এ, যে, তে, কে [e:, ʃʒe:, te:, ke:] *this, who, that, who?*; but in যেথা, সেথা [ʃʒetha, ʃetha] *where, there*, curiously enough, the [æ] sound is resisted, and also in হেথা [ɦetha] *here* = এথা [etha] in OB. (cf. MIA. ettha = OIA. itthā).

Where, however, the Bengali root has [i], derived forms with [a, e, o] vowels in the next syllable do not change the [i > e] of the root (through Vowel Harmony, see p. 397) to [æ] : *e. g.*, মিলে > মেলে [mele] *is obtained*, but মেলে [mæle] *spreads closes* (mēlay-); ফিরে > ফেরে [phere] *turns*, but ঘেরে [gɦære] *encloses, surrounds* (cf. Hindōstānī phirnā, ghērnā); etc.

(ii) [æ] occurs in onomatopoetic words which are reduplicated. In the earlier stages of the language, the sound was probably an [ɛ] or [e] : *e.g.*, গ্যাঁ গ্যাঁ [gæ̃ gæ̃], চ্যাঁ চ্যাঁ [c͡ʃæ̃ c͡ʃæ̃], ফ্যাচ্ ফ্যাচ [phæc͡ʃ phæc͡ʃ], etc., etc.

(iii) [æ̃, æ] comes from earlier [ã] when the next syllable has [a] : see p. 322.

(iv) [æ] is derived from eMB. groups like [iɒ] and [ia > ie] by Vowel-Harmony : *e.g.*, জ্যান্ত [ʃʒænto] *living* = eMB. জীয়ন্ত [ʃʒiɒntɒ]; গেছে [gæc͡ʃhe] *has gone*, from [giac͡ʃhe > giec͡ʃhe]. See pp. 351, 400.

(v) MB. এহা, এয়া [ɛɦa, ɛa, ɛa] became [æ]; also এহ, এঅ [ɛɦɒ, ɛɒ] became [æe, æo] in NB. The [e, o] in [æe, æo] is an after-glide, which is optionally omitted. *E.g.*, শেওলা [ʃ̇æola], MB. *শেঅলা [ʃ̇ɛ̆ɒla], besides শেয়ালা, শেহালা [ʃ̇ɛ̆ala] (*śāivăla-, śāivāla); বেয়াই [beai, bæi], MB. বেহাই [bɛ̆ɦai] (vāivāhika); 'দেয়লা' [dæela], MB. দেহালা, দেহলা, দেআলা, দেঅলা [dɛ(ɦ)ala, dɛ(ɦ)ɒla] *a baby's smile in sleep* (dēva + ?); স্যায়না [ʃ̇æena] *clever*, MB. সেয়ানা [ʃ̇ɛana] (cf. Hind. syānā).

Foreign words with [ɛa] in lMB. similarly change this group to [æ] or [æe] : *e.g.*, Persian « pyālā » *cup* > [pɛala] > প্যালা [pæla], also [pæela]; « ziyādah » *much, excessive* > [ʃʒɛada] > জেয়াদা, জ্যাদা, জ্যায়দা [ʃʒæda, ʃʒæeda] : Portuguese « viola » *violin* > বেয়ালা [bɛala] > ব্যালা, ব্যায়লা [bæla, bæela]; « pèra » *pear* > পেয়ারা [pɛara] > প্যায়রা [pæera] : English « bearer » > বেয়ারা, ব্যায়রা [bɛara > bæera], also [beara]; etc., etc.

(vi) In *tss.* : « -yă- » after a consonant in initial syllables, when the following syllable does not have an [i] or [u], becomes [æ]. In MB. the intermediate stage was [ɛ]. See p. 410.

(vii) Post-consonantal « -yā » in *tss.* have become [æ]. One MB. stage was that of a low [ɐ] *plus* a fronted [a]. See page 260. কল্যাণ [kollæn] ; পরিত্যাগ [porittæg] ; হত্যা [ɦottæ] ; etc. ক্ষা « kṣā > (k)khyā » and জ্ঞা « jñā > (g)gyã » similarly gave [æ] : *e.g.*, রক্ষা [rokkhæ], also [rokkhe, < rokkhĭa] ; জ্ঞান [gæ̃:n] ; অবজ্ঞা [ɔboggæ̃] ; etc.

Bengali [o, o:], written অ, য়, ও, ো.

202. All final [ɔ] tends to become [o] in the Standard Colloquial. The more important sources of [o] are :

(i) OIA. [o:] : see pp. 329, 337.

(ii) OIA. [u, u:] etc. > MIA. [o, o:] : pp. 327, 329.

(iii) OIA. [ṛ] : pp. 356, 357. Cf. also গোছা [goʃʃha] (guccha, *goccha, OIA. *gṛpsa).

(iv) (a) OIA. « ă » [ɑ], through influence of preceding labial : ভোমরা [bhomrɑ] (bhaw̃ara-, bhamara-) ; see pp. 319-320.

(b) Change of eMB. « å » to [o] through Epenthesis, Umlaut and Vowel Harmony has been discussed before. This MB. « å » comes from OIA. [ɑ, ɑ:]

(v) Through contraction of various groups in OIA. and MIA. : OIA. « ăvă, ămă, ă + stop + ă, ă + stop + u, uv(ă)-, » etc., etc. See pp. 344, 346, 347, 350, 352, 353. *E.g.*, মো-, তো- [mo, to] (« mama, tava » : this change of « aw̃a, ava » to « ō » is pre-Bengali) ; নোতুন [notun] (nava-) ; ওলা [olɑ] *descend*, as in ওলাউঠা *cholera* (avalabh + ut-sthā) ; সোদো [ʃodo] as in সোদো ভাসানো [ʃodo bhɑʃɑno] *'launching on sea,' the boat festival* (= ? *saw̃udduā, samudra + uka-) ; etc., etc.

(vi) (a) Through Vowel Harmony, from eMB. [u] from various sources in OIA. : বোঝা [boʒʒ(ɦ)ɑ] *to understand* (budhy-) ; সোজা [ʃoʒʒɑ] *straight, easy, clear* (śudhy-) ; etc. See p. 397.

(b) From MB. উ + আ [u + ɑ] > উ + ও [u + o], we have NB. [o] by Vowel Harmony. See under [uɑ, uo] below. শোর [ʃo:r] (śūāra, sūkara) ; কো [ko:] (kūā, kūpa-) ; জো [ʒo:] (jūā, dyūta-) ; etc.

For [o] in foreign words, see below.

Interchange between [i] and [e], and between [u] and [o] in Bengali.

203. This interchange characterises NB. phonology, and it originated in the following ways.

(i) In some words, the interchange is the result of Primitive Indo-European Vowel Alternance (Ablaut), as it had been modified in the OIA., « i : āi, ē » and « u: āu, ō » : *e.g.*, লিপ [lip] *smear*, লেওয়া [leŏa] *a smearing* (lip-ya-, lēpa-); টুট [ṭuṭ] *be broken*, তোড় [toṛ] *break* (truṭ-ya, trōṭ-aya-); etc. This is paralleled out by the alternance between [ɔ] and [a] in চলে [cʃɔle] *walks* and চালে [cʃale] *moves* (calati, cālayati), etc. In Bengali, the laws of Vowel Harmony have obscured to a very great extent the real nature of these alternances between [i] and [e], and [u] and [o] when they are of ablaut orgin in OIA. The original ablaut relation has lost its significance, and it has become quite subsidiary to NB. phonetic habits. Thus, for instance, the root দুল [dul] *to swing* has [u], but the verbal noun by « guṇa » in OIA. has [o]—দোল [do:l] *a swing*,—also the causative দোলাই [dolai] *I cause to swing*; but দুলে « dulē » *he swings* (<*dulati) becomes দোলে [dole], original [u] becoming [o] through influence of the following [e]; and « *dolāpanikā » *the act of swinging* becomes, through the stages *দোলাঅনী, *দোলাওনি *দোলাউনী « *dōlāẘanī, *dōlāōnī, *dōlāuni », দুলুনি [duluni], beside দোলানি [dolani]; and « dōlikā > *dōlia » *palanquin, litter* gives ডুলী [ḍuli]. The original scheme of [u] for the active, and [o] for the causative and for noun formations, is in this way destroyed. So ছুট [cʃhuṭ] *run* and its causative derivative ছোঁড় [cʃhōṛ] *throw, toss* give ছুটে > ছোটে [cʃhoṭe] *he runs* and ছোঁড়ি > ছুঁড়ি [cʃhūṛi] *I throw*, beside ছুটি [cʃhuṭi] *I run* and ছোঁড়ে [cʃhōṛe] *he throws*, rendering the original [u, o] alternance ineffective for the purpose of distinguishing the causative form.

There is the MIA. change of OIA. [i:, u:, i, u] to [e, o], which gave Bengali [e, o]. (See Pischel, §§119, 125, 127, 212 : *ante*, p. 327.) This of course is not a case of interchange so far as Bengali is concerned. In such alternations in MIA., there was probably the influence of the ablaut relations between « i : ē » and « u : ō », which MIA. inherited from OIA.

(ii) Alternances of [i] and [u] with [e] and [o] through Vowel-Harmony is a most important thing in New Bengali phonology, and

this has been discussed before. This is due partly to the low position of the Bengali [i] and [u] vowels. Cf. MB. তেঁহ [tehɔ̃, tẽhiɔ̃, tẽhiə], *he* (*honorific*) (= *tenha), NB. তেনার [tenar] *his* (*honorific*) (= *tenha +-ara: *tenha = tēhā, tēhaṁ = tēsaṁ < tēṣām), but NB. nominative তিনি [tini] *he* (*honorific*) (= *tēn-i = *tēṇa, tēṇaṁ+i); *ts.* কোপ [ko:p] *anger*, but কুপিল [kupilo] *he angered;* ওড়না [oṛna] *veil* (oḍḍhaṇa-, ava-vēṣṭana-), but উড়ুনী [uṛuni] *sheet worn as cloak* (oḍḍhaṇia, *oḍḍhāẁania, = *avavēṣṭanika, *avaveṣṭāpanikā); etc., etc.

Bengali Diphthongs.

204. Of Bengali diphthongs, only two have special letters for them, namely [oi] = ঐ, and [ou] = ঔ. In the NB. Standard Colloquial, as many as 25 vowel combinations and diphthongs are found: [ie, ia, io, iu; ei, ea, eo, eu; æe, æo; ai, ae, ao, au; əe, əa, əo; oi, oe, oa, ou; ui, ue, ua, uo] (see 'Brief Sketch of Bengali Phonetics,' §49). In OB., [ɒi] and [ɒu], sources partly of the NB. [oi, ou], were the only diphthongs. Early MB. probably developed some new combinations, [ĭɒ, ĭu, ĭa, ɛa, ɛa] etc. and [ŭɒ, ŏa] etc. from subscribed «y, v»+«ă, ā» etc. in *ts.* words; and some fresh diphthongs, with the high vowels [i, u] forming the second element, accompanied epenthesis in MB. (See *ante*, p. 387). MB. diphthongs or vowel combinations have mostly been monophthongised in NB. in the Standard Colloquial: *e.g.*, [ɛa] has given [æ], [ŏa] has resulted in [ə] in some cases, and [ɒi > əi, ɒu > əu, əi] have resulted in [o], and [ai], [au > ai] in [e] (see *ante*, p. 386). NB. diphthongs are in the main recent creations. Many of them have not as yet entirely passed through the stage between two syllables and a diphthongal monosyllable, especially when the group ends in the low vowel [a]. When the syllable is closed with a consonant, the disyllabic character is often retained: *e.g.*, ধোয়া *to wash, washed* (*pass. part.*) is [dhoa = dhŏa], almost riming with French «dois, doit» [dwa]; but ধোয়াট *wash-out, scourings,* is often more like [dhoŏaṭ] than [dhoaṭ = dhŏaṭ]; so ভাই *brother* is [bhai = bhaĭ], but বাইশ [baiś] *twenty-two* is [baĕiś, ba-iś]; and হয় *is, are* = [hoe, hoĕ], but

বয়স [bɔeʃ̣,] *age* is found as [bɔĕeʃ̣, bɔ-eʃ̣], besides [bɔĕoʃ̣]. But the tendency to pronounce these groups as one syllable is no less strong, and in cases like the above, where we have [ɑi, ɔe] etc., closed by a consonant, there is frequently simplification or contraction of the diphthong to a monophthong: *e.g.*, বাইস, বয়স occur as বা'স, ব'স, with a suggestion of the [i] in a fronted [a]—[ba:ʃ̣], and of the [e] in a little hesitation before the [ʃ̣], [bɔ·ʃ̣]; and হয়েন, সহেন [fiɔĕen, ʃɔ(fi)en] *he becomes, he is*; *he suffers* (*honorific*) have been regularly transformed into [fiɔ:n, ʃɔ:n] in the Colloquial Speech.

NB. diphthongs are generally the result of the loss of intervocal «-h-» of MB., of Epenthesis and Vowel Modification, and of Vowel Harmony. And above all, there is the influence of the strong initial stress which reduces two syllables into one. Brief notes on the origin of the NB. diphthongs are given below. They are taken in the order given in the preceding page.

205. Bengali [ie], in the Colloquial, written ইয়ে, is derived from ইয়া «-iẏā» of MB. (preserved in the literary language): দিয়ে [die] *having given* < দিয়া «diyā»; বিয়ে [bie] *marriage* < বিয়া «biẏā» (vivāha); etc. Where the [i] in [ie] was anticipated by epenthesis, as in আনিয়া «āniā, āniyā» *having brought* > *আইনিয়া, আন্যা «*āniyā, āĭnẏā» > এন্যে [ɐnɐ] > এনে [ene], contraction took place generally during the transition from MB. to NB.; but a dialectal form like [ɐnĭe] is still heard. So রাখিয়া «rākhiyā» *having kept* > রেখে [rekhe], beside রেখ্যে [rɐkhĭe], etc. The tendency to shorten [ie] to [e] is quite a marked one in the Calcutta Colloquial: so that we have even forms like দে [de] *having given, with* (=*instrumental post-position*) beside [die]; টে as in 'টেপাখী' *parrot* [ṭe, ṭepakhi], beside টিয়ে [ṭie] < টিয়া [ṭia]; বে [be] *marriage* beside [bie] < [bia]; গেছে [geʧ̣(h)e, gæʧ̣(h)e] *has gone* beside গিয়েছে [gieʧ̣(h)e] < গিয়াছে [giaʧ̣he], দেশলাই [deʃ̣lai] *matches* beside দিয়েশলাই [dieʃ̣(ɔ)lai] and দিয়াশ(ট)লাই [diaʃ̣(a)lai, diaʃ̣olai] (dīpa+śalākā-); etc., etc.

[ie] also comes from contraction of আইয়া «āiyā» of the causative conjunctive indeclinable: *e.g.*, রাখিয়ে [rakhie] *having caused to keep* < রাখাইয়া «rākhāïyā». It is found also in contracted noun-forms: *e.g.*, গাইয়ে [gaie] *singer*. See p. 394.

In a case like কিয়ে [kie], from কিহে [ki fie] *what, O!=hallo*, we have [ie] from dropping of « -h- ».

In some archaic forms like পিয়ে [pie] *drinks*, MB. পিএ [pie, piĕe], (pibati), জীয়ে [ʤie] *lives*, MB. জীএ [ʤi(ĕ)e] (jīvati), we have original MB. [ie], with optional in-glide, derived from contraction of OB. and MIA. contact vowels. So in ঝীয়ে [ʤʱie] *by the daughter*, as in মায়ে ঝীয়ে [mae ʤʱie] *mother and daughter together*, we have an OB. combination (jhī+-ē̃= dhītā, duhitṛ+-ēna).

206. Bengali [ia], written ইয়া, occurs mainly in *tbh.* forms, and is rather archaic, so far as the Standard Colloquial is concerned: *e.g.*, রাখিয়া [rakhia], করাইয়া [kɔraia], নগরিয়া [nɔgɔria], বিনোদিয়া [binodia], উড়িয়া [uria], etc., etc.; also শিয়াল [ʃial], হিয়া [hia], পিয়াল [pial], বিয়াল্লিস [bialliʃ], ছিয়াত্তর [ʧʰiattɔr], etc., which give instances of the [ia] group in the « sādhu-bhāṣā ». [ia] in verb forms is contracted to [e], with epenthesis, in NB.; and also [ia] in adjectives and nouns. In initial syllables, it frequently becomes [æ]: *e.g.*, [ʃæl] < শিয়াল [ʃial], also [ʃeal], by vowel harmony; বিয়াল্লিস [bialliʃ] becomes [bealliʃ, bælliʃ]; but ছিয়াত্তর [ʧʰiattɔr] does not alter in the Standard Colloquial.

Some of the more important sources of [ia] may be noted.

In the conjunctive indeclinable, it comes apparently from an OB. strengthening of the MIA. affix « -iă » by the syllable « ā »: করিয়া [kɔria, koria] < MIA. « kăriă+ā ». (See under *Morphology*: the Verb: 'Conjunctive Indeclinables.')

The adjectival,—agentive, intensive, pejorative—affix [ia] is from OIA. « -ika, -īya » *plus* the affix « ā ». NB. has the [ia] forms only as archaic words, *e.g.*, পূরবিয়া [purɔbia] or পূবিয়া [pubia] *eastern*: Standard Colloquial forms would be পুরুবে and পুবে [purube, pube]; দখিনিয়া [dɔkhinia] > দখিনে, দ'খ্‌নে [dokhine>dokhne] *southern*; কহনিয়া [kɔhɔnia] *talker*>কউনে [koune]; কালিয়া [kalia] *the black one* > কেলে [kele]; etc., etc.

In other cases, [ia] represents MIA. « udvṛtta » vowels—the [a] = « ā » often representing cases of contraction of « udvṛtta » « ă, ā+ă, ā » of MIA. The [ia] was preserved by means of the « y̆ » glide in OB., and Early MB., and contraction came in only in the NB.,—the

earlier full [ia], however, is quite a familiar group through influence of literature.

[ia] is found in foreign words: *e.g.*, ইয়ার [iar] *friend, boon-companion* < Persian « yār »; দুনিয়া [dunia] *world* < Perso-Arabic « dunyā »; এশিয়া [eʃia] = English *Asia*; রুষিয়া [ruʃia] = *Russia*, etc.; but cf. a naturalised Portuguese word like « toalha » *towel* > তোয়ালিয়া, তোয়ালে [toalia > toale].

207. Bengali [io], written ইও, ইয়ো, ইয়, ঈয়. In MB., this diphthong, in *thbs.*, was [iio, iĕo]. It is found in *tbh.* forms like শিয়র [ʃior] (*śihara, śikhara); তিয়র [tior] *a caste* (tīvara); জীঅন [ʤion] as in জীঅন-কাঠি মরণ-কাঠি « jiaṇḍ-kāṭhi māraṇḍ-kāṭhi » *wand of life and wand of death* (jīvana); the OIA. source is thus « i, ī » + consonant which has dropped off + « ă ».

In the future precative 2nd person of the verb, [io] represents OB., MB. « ihå » [iio:] = OIA. « -iṣyatha »: *e.g.*, চলিও [ʧolio] (calihå, *calihaha, calişyatha). In the Colloquial, this is reduced to [o]: *e.g.*, চ'লো [ʧolo], রেখো [rekho] (= rākhihå, *rākhihaha, rakṣisyatha) etc., except where contraction is not possible—*e.g.*, দিও [dio] (dihå, *dihaha = dāsyatha); পিও, জীও [pio, ʤio] are both ordinary imperative future or precative.

[io] occurs in the Standard Colloquial causative precative or imperative future, as a contraction of MB. « -āiå, -āihå » = « *-āpayiṣyatha » of OIA.: *e.g.*, রাখিও [rakhio] (rākhāio, rākhāi(h)å, *rakkhāvaïhaha = *rakṣāpayiṣyatha), etc.

Causative passive participles, or verbal nouns, in « -ānå », of roots in « -i » in the Standard Colloquial show the [io] groups by mutation through Vowel Harmony: *e. g.*, জীওনো [ʤiono] (i) *kept alive*, (ii) *bringing back to life* (MB. জীয়ান « jīānå » = (i) « √jīv- » + « māna- », (ii) « *jīvāpana- »); মিয়োনো [miono] *become cold or weak* (MB. মিয়ান « miyānå »: OIA. « √mī »); etc.

In *ts.* words, Skt. « iyō, iyă » become [io] in Bengali: বিয়োগ [biog] (viyōga); নিয়োগ [niog] (« niōga »: but নিয়োগী > নেউগী [niogi > neugi], [io > eu] through influence of [i] following); নিয়ম [niom] (niyama); etc.

Some peculiar forms also show [io]: *e.g.*, অবিয়ত [ɔbioto] *unmarried* (= *ābiāutā- < a- + vivāha + -vanta ?); ঘিওর [gʃiɔr] *a sweetmeat* (Hind. ghēwar < ghṛta-); হেঁইও [hĕio] *exclamation in pulling something.*

[io] is found in foreign (European) names: ইয়োরোপ [iorop] *Europe*, ইয়োর্ক [iork] *York*, etc.

208. Bengali [iu], written ইউ, ইূ, comes from the following: MB. « iu, ēu » in the imperative 3rd person of roots in « -i, -ē » = « -atu, -antu » of OIA.: *e.g.*, জীউক [ʤiuk] (jīvatu + ka); দিউন [diun] (*diyantu); দিউক [diuk] (MB. দেউ « dēu » = « *dētu »). In NB., this [iu] is normally reduced to [i]: জীক্ (rare), দিন্, দিক্, etc. = [ʤik, din, dik], etc.

[iu] also comes from OB., MB. « -iā-, -ihā-, -iā- > -io- » through the influence of a following [i]: see p. 398. জীউলী [ʤiuli] *a tree* (jiva-la-); বিউনী [biuni] (*vyajanikā); শিউলি [ʃiuli] (MB. śihāli < śēphālika); etc.

[iu] occurs in onomatopoetics: মিউমিউ [miu miu] *mewing;* কিঁউকিঁউ [kĩu kĩu] *whine of a dog*; etc.

It is found in some Hindī loan-words with a restricted use: *e.g.*, পিউ [piu] (priya), জীউ [ʤiu] (jīva).

Foreign words also show this vowel-group: ইউনিভার্সিটী [iunibʰarsiṭi] *University*, ইউনাইটেড ষ্টেট্‌স্ [iunaiṭeḍ sṭeṭs] *United States*, etc.

209. Bengali [ei], written এই, এয়ি, এয়ী.

[ei] comes from OB., MB. « ēi, ēhi, ē hi, -ē̃-hi »: *e.g.*, দেই [dei] *I give*, more usually দিই [dii] (*dēmi); তেঁই [tẽi] *therefore*, a poetic word (tē̃ hi, tēna hi); যেই, সেই [ʤei, ʃei] *whoever, he indeed* (MB. jē-hi, sē-hi); ঘরেই [gʰɔrei] *in the house indeed* (gharē hi); তেইস [teiʃ] (trayōviṅśati); also নেই [nei] *indulgence* (OB. *nēhi, nēha = snēha); খেই [khei], beside খে [khe:] *cue* (OB. *khēẁi, khēẁa = kṣēpa); লেই [lei] *gum-paste* (lēpa); etc.

From « āi » of earlier Bengali: *e.g.*, নেই [nei] *does not exist* < নাই « nāi »; নেই-আঁকুড়ে [nei-ākuṛe] *argumentative* (MB. *নিয়াই-আঁকড়িয়া « niyāi-ākāṛiā » < « nyāya »); জেই [ʤei] *immediately, as soon as* < জাই, যাই « jāi » (yadā hi). This sort of change of « āi » to [ei] is rather exceptional. In a few words we have [ei] through Vowel-Harmony: *e.g.*,

দিয়েই [diei] *immediately on giving* < দিয়াই « diāi » (diā+[h]i); বেই [bei] *father of son-in-law or daughter-in-law* < ব্যাই [bæi], both occurring side by side with বেয়াই [beai] < বেহাই [beɦai] (vāivāhika); etc.

In some onomatopoetics: ধেইধেই [dʰei dʰei]=*sound of wild romping.* In foreign words, occasionally the English [eĭ] is represented by [ei], rather than the normal [e]: *e.g.*, চেইন [ʧein] *chain*, ট্রেইন [ʈrein] *train*, but more commonly in the Standard Colloquial [ʧe:n, ʈre:n], etc.

210. Bengali [ea], written এয়া, from MB. [ea, eă̆a, eʃa]: বেয়াই [beai] (vāivāhika), কেয়া [kea] (kētaka-), etc.

Also from [ia], through lowering of the [i] to [e]: *e.g.*, নেয়াই [neai] (*nidhāpikā).

MB. [eă̆a] optionally becomes [ea] in NB.: নেয়া [nea] = নেওয়া [neă̆a] *to take*; খেয়া [khea] *ferry* (kṣēpa-); etc.

The [e] in [ea] is, so far as the *tbh.* forms are concerned, essentially a glide sound. Skt. « -yā- » in the middle of a word, when not after a consonant, becomes [ă̆a] *e.g.*, দয়া [dă̆a], মায়া [mă̆a], ছায়া [ʧʰă̆a]; etc.

[ea] is found in foreign words also: পেঁয়াজ [pẽaʤ] *onion* < Persian « pyāz »; চেয়ার [ʧear] = English *chair*, etc.

211. Bengali [eo] written এও, এয়ো. This is a recent diphthong, mostly through contraction of MB. « āi(h)å, āuā » by Umlaut: *e.g.*, এও [eo] *a woman whose husband is living* (āihå, avidhavā); যেও [ʤeo] *you will go* (jāihå); ঘেও [gʱeo] (ghā-uā *mangy, with wounds* = ghā < ghāta+uā); গেঁও [gẽo] (gā̆-uā) *rustic*; etc.

212. Bengali [eu] = এউ, এয়ু.

From OB. « -ewu-, -ēhu- »: দেউল [deul] (dēvakula); নেউল [neul] (nakula): নেউর [neur] (nūpura); *dēśī* ঢেউ [ɖʱeu]; কেউ [keu] *any one, some one* (*kēvi? = kaḥ+api; or kēhu < *kē khu = kaḥ khalu?); etc.

From OB. « ēwa, ēhå », with following [i] vowel, through Vowel-Harmony: দেউড়ী [deuɽi] (cf. Skt. dēhali); Cf. রেউড়ী [reuɽi] *a sweet-meat* < Hind. « rēwṛī »; সেউ [ʃeu] *apple* < Hind. « sēw ».

From OB. « iwa »: ‡তেউড়ী [teuɽi] *oven* (tri-vṛt-); দেউটী [deuṭi] (dīpa-varttikā); etc.

In খেউড় [kheuṛ] *poetical 'flitting' > abuse* (MB. খেড়ু khēṛu < khēla?), বেউড় [beuṛ] *a thin bamboo* (cf. MIA. vēḷu, Skt. vēṇu), we have probably instances of [eu] in NB. through epenthesis.

Sts. নেউগী [neugi] (< niyōgī) *a surname*, is through lowering of [i] to [e] through influence of [o], and the [o] itself later became [u] through the presence of [i] in the following syllable.

[eu] is found in onomatopoetic forms: ঘেউ ঘেউ [gheu gheu] *bow-wow*, কেঁউ কেঁউ [kẽu kẽu] *whining of a dog*, ফেউ [pheu] *jungle dog* (cf. Late Skt. « phēru »: loss of « -r- » in Bengali?), হেউ [heu] *sound of belching*, etc.

213. Bengali [æe], written এয়, অ্যায়, ্যায়.

From OB. « ēi>ey », through Vowel-Harmony: দেয় [dæe] (dēi), নেয় [næe] (nēi).

From OB. [ĭae] > MB. [ɛaĕ], in *ts.* roots: ধ্যায় [dhæe], lMB. ধেয়ায় [dhɛaĕ], OB. *[dhĭae] (dhyāyati).

From MB. « ēā, ēhā »: see p. 412, under [æ].

Hindōstānī « ai »=[ɛ:, æ, æĕ, aĕ] becomes [æ, æe] in NB., in borrowed forms: *e.g.*, য্যায়সা কে ত্যায়সা [jæesa ke tæesa] (=jaisā kē taisā).

214. Bengali [æo], written এও, occasionally ্যাও, comes from eMB. [eŏɒ, efiɒ] followed by [ɒ, a] in the next syllable: *e.g.*, তেওড়া [tæoṛa], MB. [teŏɒṛa] *crumpled* (*tēvaḍa-, trivṛta-); কেওড়া [kæoṛa] (kēvaḍa-, kētaka+ḍa); শেওলা [ʃæola] (*śēvāla, śāivāla); বেওরা [bæora] *affair* (*bēvāra-, *viāvāra-, vyāpāra); নেওটো [næoṭo], MB. [neʃiɔ:ṭa] (snēha-vṛtta-); etc. MB. দেহ, নেহ « dēhă, nēhă » *give, take* become in NB. দেও, নেও [dæo, næo], which are frequently heard, beside the more common দাও, নাও [dao, nao] through influence of খাও, যাও [khao, ʃao] etc.

[æo] is found in onomatopoetics: ম্যাও [mæo] *mew of a tom-cat*.

215. Bengali [ai], written আই, আয়ি, আয়ী, য়াই, etc.

From OIA. group of « ā » or « ă »+consonant+« ī, ṛ, -ikā- -atī » etc. > lMIA. « āï, -āïa, -āmi, āẅi, -āhia » etc. > OB., MB. « āi, ăi, āẅi, āhi, āhī », etc. See pp. 308, 309, 310. *E.g.*, আই, আয়ী [ai] *grandmother* (ayyia, āryikā); ভাই [bhai] (bhrātṛ); গাই [gai] (gāvī); কাঁসাই [kãʃai] *name of a river* (Kaṁsāvatī); MB. চাঁপাই [cʃãpai] *name of a city* (Campāvatī); পাই [pai] *pice, fourth of an anna* (pādikā); রাই [rai], eMB. রাহী [rahi]

(rādhikā); ‡বাইর [bair], beside বার, বের [ba:r, be:r] (MIA. bāhiraṁ, OIA. bahiṣ); নাই [nai] (nābhi); রাই [rai] (rājikā); সাঁই [ʃ͡ʃãi] (svāmī); শাঁই [ʃ͡ʃãi] (*śāmika, śamī); গাঁই [gãi] (grāmika); কাঁই [kãi] *tamarind* (? : cf. Oṛiyā kåyã *green tamarind*); etc. The suffix আই [ai], as in বড়াই [bɔṛai] *boast* < বড় [bɔṛɔ] *great*, যাচাই [ʃ͡ʃac͡ʃai] *enquiry* < যাচ [ʃ͡ʃa:c͡ʃ] *demand*, will come under this: see below, *Morphology*: 'Formative Affixes.' So [ai] as the affix for the verb first person present tense: খাই [khai] (khādāmi), যাই [ʃ͡ʃai] (yāmi), পাই [pai] (*prāpāmi=prāpnōmi), চলাই [c͡ʃɔlai] (*calāpayāmi), খাওয়াই [khaŏai] (*khādāpayāmi), etc. In a few cases, NB. [ai] probably represents the Māgadhī Ap. nominative forms in « -i » < Māgadhī Prakrit « -ē » < OIA. « -aḥ, -am »: *e.g.*, ঠাঁই [ṭhãi] (*ṭhāẅi, *ṭhāmē, sthāman); ছাই [c͡ʃhai] (*« chāri, *chārē, kṣāraḥ », with loss of « -r- » in Bengali?).

[ai] also comes from OB. « āu » in train of MB. epenthesis: *e.g.*, বাই [bai] *fad*, '*humor*' (vāyu); *sts.* অপ্পাই [ɔppai] (alpâyuṣ); আইবুড় [aibuṛɔ] *bachelor, maid* < *young person who will live long* (āyur+vṛddha); etc. It is possibly found in the affix আই [ai] in names = « āyuṣ »: *e.g.*, বলাই [bɔlai] for বলরাম « bâlârāmṡ », দনাই [dɔnai] for জনার্দ্দন « jànârdànṡ », নিমাই [nimai] < নিম « nimṡ », *bitter as neem* (*name to avoid the evil eye*); etc.

In onomatopoetics: সাঁইসাঁই [ʃ͡ʃãi ʃ͡ʃãi] *whistling sound as of wind*, পাঁইপাঁই [pãi pãi] *rushing sound as of a swift runner*, বাঁইবাঁই [bãi bãi] *sound as of a top or wheel*, etc.

[ai] is found in foreign words as well: see later.

216. Bengali [ae], written আয়, আয়ে.

[ae] in verb forms is derived from OB. « āi », 3rd person present of verbs in « -ā »: *e.g.*, খায় [khae], যায় [ʃ͡ʃae], ধায় [dhae] (dhāvati), MB. বায় [bae] *plays* (vādayati), etc.; from OB. « āẅaï », 3rd person present of causatives: করায় [kɔrae] (*karāẅaï, *kă/ārāpayati), etc.; and also from OB. « -āhaï », MB. আহে « -āhē »: বায় [bae] (bāhē, vāhayati), গায় [gae] (gāhē, *gāthayati < gāthā); etc.

It occurs in the instrumental-locative of nouns in « -ā » = OB. « -ā-ẽ »: ঘোড়ায় [ghoṛae] = OB. « *ghōṛāẽ » (ghōṭaka+-ēna); পায় [pae] (pādēna); ঘায় as in এক ঘায় [ɛk ghae] *with one blow* (ghāta); নায়, নায়ে [nae] *by boat* (nāvēna); etc., etc.

In a few words, OB. « āẏa » gives [ɑe] in NB., through change of the euphonic « ẏ » + « ă » to « e »: বায় [bɑe] *wind, breeze* (vāta); সায়ের [ʃɑer] (sāẏara, sāgara), etc. (see p. 342). Cf. সায় [ʃɑe] *end* (? OIA. = sāyam *end of the day, evening*); cf. also মশায় [moʃɑe] *Sir* (mahâśaya > *māāśayḍ, måśāyḍ); etc.

217. Bengali [ɑo], written আও.

[ɑo] originates from OIA. « ā + consonant + ă » (lMIA. ā > a) », resulting in OB. « āhå, āẘa »: *e.g.*, imperative forms খাও, যাও, গাও [khɑo, ʃʒɑo, gɑo] (khāhå, jāhå, gāhaha = khādat(h)a, yāt(h)a, *gāthayat(h)a); MB. বাও, মাও, গাও, ছাও [bɑo, mɑo, gɑo, ʧhɑo] (vāta, mātā, gātra, śāba); NB. বাওলা [bɑola] *to fan, to winnow* (vāta-); থাওকা > থাওকো [thɑoka > -ko] *detached amount, lump sum, cash* (*sthāẘakka- < *sthāpa-); আওড়া [ɑoṛa] *repeat* (ā-vṛt); আওটা [ɑoṭa] *stir milk etc.*) (āvarta-); etc.

In দাও নাও [dɑo, nɑo], imperative forms, eMB. দেহ, নেহ « dēhå, nēhå », we have change from MIA. « ēhå » through [æo] to [ɑo]. See § 214. So কাওড়া [kɑoṛa] *a caste* from « kēvaṭṭa »: cf. কেওট [kæoṭ].

In the Calcutta 'Cockney' ছাওরা [ʧhɑoṛa] (chāyā + -ḍa-), we have [ɑo] from the euphonic glide.

218. Bengali [ɑu], written আউ.

From OB. « āẘu » < MIA. « āu » < OIA. « ā + consonant + u- »; বাউল [bɑul] (vātula, vyākula); ঝাউ [ʃʒhɑu] (jhābuka); লাউ [lɑu] (alābu); MB. আউলা [ɑula] (ākula-); MB. বাউ [bɑu] (vāyu); cf. যাউক, খাউক [ʃʒɑuk, khɑuk] (yātu, khādatu), etc.

In eMB., this group, when not epenthetic, probably was pronounced as two syllables, with euphonic « ẘ » in between see pp. 310, 342, 345.

From OB. « āwa, āẘa » by Vowel-Harmony, through influence of following « i »: ছাউনি [ʧhɑuni] (chādana + ikā), etc., etc.: see p. 398; আঁউনী বাঁউনী [ãuni bãuni] < *আমনী বাঁধনী « *āmånī (āẘanī) bădhånī » *harvest festival in the month of Pauṣa, when an earthen pot filled with new rice* (« āmånḍ = Skt. āmânna », wrongly connected with « hēmanta » *autumn*, to mean *autumn rice*) *is covered and tied up with rope of new straw* (« bădhanī, bădhunī » < « bandhanī », changed to « bãuni » through contamination); etc., etc.

MB. [ɑu] by epenthesis is changed to [ɑ, e] in NB.: see pp. 385-386. [ɑu] occurs in onomatopoetic doublets; হাউ হাউ [fiɑu fiɑu], হাঁউমাউ [fiãu mɑu], etc. But cf. দাউ দাউ [dɑu dɑu] *the noise of a raging fire* (*dāẇa dāẇa, < dāva, dāvânala).

In foreign words: see below.

219. Bengali [ɔe], written অয়, অএ, অয়ে.

OB. « -aẇaï, ahaï » in verbs > MB. « åē, åhē » > NB. [ɔe]: হয় [fiɔe] *is* (*ahaï, *as-a-ti); সয় [ʃɔe] (*sahati = sahatē); কয় [kɔe] (kathayati); বয় [bɔe] (vahati). In MB., OB. « -aï » optionally occurs as « åē » = [ɔe]: করএ, করয়ে, করয় [kɔrɔe] (karaï, karōti); cf. নয় < নহয়, নহয়ে, নহএ [nɔe < nɔfiɔe] *is not* (na + *ahaï). MB. medial « å(h)ē » becomes the diphthong [ɔe]; *e.g.*, *ts.* name মহেশ [mofieʃ], in contempt ময়শা [mɔeʃɑ]; বয়ড়া [bɔeɽɑ] (MIA. bahēḍaa = vibhītaka).

OB. « aï, ahi » in some words is found as [ɔe]: ময়লা [mɔelɑ] (MIA. maïlla-); পয়লা [pɔelɑ] (pahila-, MIA. pahilla); সয়লা [ʃɔelɑ] *friend* (*among girls or women*) (sahī < sakhī + illa); ভয়সা, ভঁয়সা [bfiɔeʃɑ, bfiõeʃɑ] *belonging to a buffalo, or buffalo's milk* (*mhaïñsa mahiñsa, mahiṣa); পয়সা [pɔeʃɑ] (païsā, pāda-); খয়রা [khɔerɑ] *catechu-coloured* (khaïra-, khadira-); etc.

From MIA. « aya, añña > aña » through « samprasāraṇa »: ছয় [cʃhɔe] *six* (chaẏa = Early MIA. *cha + ka); নয় [nɔe] *nine* (naẏa-, naa, nava); পঁয় [põe] as in the numerals for *35, 45, 65* (pañca-, pañña-, pañca-); ময়রা [mɔerɑ] *confectioner* (madaka-ra-), etc.

OB. « õï » becomes [ɔe] in কয়লা [kɔelɑ] *coal* (< kōkila- *cuckoo*). In গয়লা [gɔelɑ] *milkman*, as in the Calcutta dialect, we have these stages presumably: « gōpāla- » > « gōāla », « *gōăla, *gōy'la » > [gɔelɑ]: there was also the influence of forms like কয়লা, ময়লা and ময়রা.

Skt. « ăyă » in *tss.* becomes [ɔe]: জয় [ʤɔe], ভয় [bfiɔe], আলয় [ɑlɔe], বয়স [bɔeɔʃ, bɔeʃ], etc.

In the Standard Colloquial, [ɔe] generally is contracted to [ɔ], in original disyllables with [ɔ] + [e] + consonant in the second syllable: *e.g.*, the honorific verb forms in « -en »: লয়েন > ল'ন [lɔen > lɔ:n], হয়েন > হন [fiɔen > fiɔ:n]; বয়স = বএস > *ব'স [bɔeʃ > bɔ'ʃ]; etc.

[ɔe] is found in foreign loan words: see later.

220. Bengali [ɔa] is found through loss of glide [ŏ, ĕ], or [fi] : *e.g.*, কহা, কওয়া>কআ [kɔfia, kɔŏa > kɔa] *spoken*; হওয়া, হআ [fiɔŏa > fiɔa] *been*; rarely গয়ালী > গআলী [gɔĕali > gɔali] *Brāhman from Gayā*; etc.

221. Bengali [ɔo], written অও, occasionally অহ, অহো, comes mainly from OB. « -awa, -aha » : *e.g.*, হও [hɔo] *you be* (hàhå, *as-a-tha) ; নও [nɔo] *you are not* (nâhå, na + *as-a-tha) ; কও [kɔo] (kàhàhå, kathayatha) ; নওলা [nɔola] *card of nine* (nawa-la-) ; দওলা [dɔola] *card of ten* (daha-lā, daśa-la) ; চওড়া [cʃɔoɽa] *broad* (*cawaḍā < catur *four*) ; মহড়া, মওড়া [mɔoɽa] *brunt of attack* (mahaṛā = muha-ḍa-) ; etc.

In Persian loan-words, [ɔo] is sometimes found : see below.

222. Bengali [oi], written ঐ, অই, ওই, অয়ি, অয়ী.

[oi] comes mainly from MB. « âi » [ɒi, ɔi], MB. « åi, âhi » < OB. « aẏi, ahi » < MIA. « aï, ahi » < OIA. « a » + consonant + « i » : পইতে < পইতা [poite < poita] (pavitra-) ; ছই [cʃhoi] (chadis) ; দই [doi] (dadhi) ; সই [ʃoi] (sakhi-) ; etc. See pp. 308, 509, 384-389.

From OB. « awai, awaī » > MB. « åï, -åī » : কই [koi] *a fish* (kavayī) ; চই [cʃoi] (cavayī) : see pp. 347 ff. So OB. « *-ahī < *-ahiw̃ī, *-ahami » gives the NB. [oi] : সই [ʃoi] (*sahimi = sahāmi) ; বই [boi] (*bahimi = vahāmi), হই [fioi] (*ahiw̃i < *ahami = *as-ā-mi = as-mi), etc. See. p. 351.

OB. « awu », ultimately from OIA. « a » + consonant + « u », or from Skt. « āu » in *ts.* words, became « åi » in MB., after epenthesis. This « åi » of MB. is normally contracted to [o] in the NB. Standard Colloquial, but we have instances of [oi] as well : *e.g.*, চৈপর দিন [cʃoipor din] *all the day long* (see p. 385) ; etc.

In *ts.* words, ঐ « āi » becomes [oi] : তৈল [toilɔ], দৈন্য [doinnɔ], বৈরী [boiri], চৈতন্য [cʃoitonno], *sts.* চৈতন [cʃoitɔn], etc. Old *stss.* like তইল, শইল are sometimes pronounced as disyllabics, [to-il, ʃo-il], the second syllable being emphasised by the final consonant ; but the diphthongal monosyllabic [toĭl, ʃoĭl] are heard, beside the *sts.* [toilɔ, ʃoilɔ], etc.

Sanskrit অয়ি, অয়ী « åyi, åyī », especially in final positions, are pronounced [oi], and written occasionally as ঐ, অই : *e.g.*, দয়াময়ী [dɔĕamoi], occasionally found as দয়ামই ; কৈকেয়ী [koikei] is vulgarly pronounced as [koikoi] ; and there are cases of Skt. « āu » being changed to « āi » = [oi] in some *tss.*,

following the analogy of change of epenthetic « åu » to « åi » in MB.: *e.g.*, in folk-Bengali we have সৈরভ [ʃoirɔb(fi)], জৈবন [ʤoibɔn], and even দৈবারিক [doibɑrik] = « sāurabha, yāuvana, dāuvārika ».

[oi] is found in onomatopoetics; চৈচৈ [c͡ʃoi c͡ʃoi], used in calling ducks to feed them; পইপই [poi poi] in the sense of repeatedly (= < padē padē?); হৈ হৈ [hoi hoi] *shout and noise*, etc.

[oi] occurs in foreign words: *e.g.*, সই [ʃoi] *signature, genuine* (Perso-Arabic « saḥīḥ », Persian [sahi:h] < Arabic [saḥi:ḥ-]). See *infra*.

223. Bengali [oe], written ওয়, ওয়ে, অয়, অয়ে, অ'য়ে, etc., is derived primarily from MB. « ōē, ōhē », as well as MB. « uhē, uē » by Vowel Harmony, as in verb forms of the 3rd person: *e.g.*, দোয় < দোহে < দুহে < দুইই [doe < dohe < duhe < duiɲi] (*duhati = dōgdhi); শোয় < শোএ [ʃoe < ʃoĕe] (suvaï, svapīti); রোয় [roe] (rōpayati); ছোঁয় [c͡ʃhõe] (chuvaï = spṛśati), etc.

It is also derived from an earlier MB. group « åïā, åhiā »; *e.g.*, হ'য়ে [hoe] (< [hoĭɛ, hɔĕiĕa, hɔia]) *having been*; so স'য়ে [ʃoe] *having suffered* < সহিয়া « såhiā »; etc.

In an extremely lax pronunciation in Calcutta, পনের [ponero] *15* becomes [põero] (and even [põõro]).

[oe] is found in foreign words, mainly English: see below.

224. Bengali [oa], written ওয়া, ওহা, comes from OB. groups like « awā, ōwā, uwā, ōhā », going back to various OIA. combinations with an intervocal consonant. The [oa] diphthong is frequently contracted to [ɑ] in the NB. speech. The [o] in this group is essentially a glide sound so far as NB. is concerned, and [oa] of course is not much different from « wā » [wa], only that the quality of the first element is very open. Examples: eMB. রাখোআল [rakhoŏalɒ] > NB. রাখাল [rakhal] *herdsman* (rakṣāpāla); কোটোয়াল, কোটাল [kotoal, kotal] (kotṭa-pāla); জোয়াল [ʤoal] *yoke* (yōga + āla); ওয়ার [oar] *damage, destroy* (apakāra); ওয়াড় [oaṛ] *pillow-case* (*ōhāṛha, ōhaḍha = avavēṣṭa); গোয়ালা [goala] (gōpāla-); গোহাল > গোয়াল [gohal > goal] (gōśālā); বারোয়ারী [baroari] (« bārā » = *court, gate* + « uārī » *pavilion, public festival in a decorated bamboo pavilion*—wrongly derived

from Indian বার « bārá » *12* + ইয়ার « iyārṛ » *friend* < Pers. « yār »); পোয়া [poa] *a quarter* (MIA. *pōa-, *pāẇa-=pāda-); খোয়া [khoa] *brick-bat, broken bit* (< kṣaya- ?); মোয়া [moa] (mōdaka-); etc.

In দেওয়া, নেওয়া > দোয়া, নোয়া [deŏa, neŏa > doa, noa] *to give, to take*, we have change of [eŏa], to [oa] through [*æoa, *aoa]. See pp. 421, 423.

In some old *ts.* and *sts.* words in MB., Skt. « -vă, -vā » after a vowel or a consonant appeared as [oa], which is preserved in NB.: MB. আওয়াস [aoaʃ] (āvāsa); আশোয়াস [aʃoaʃ] (āśvāsa); সোয়াথ, সোয়াস্তি [ʃoath, ʃoasti] (svasti), besides [ʃŏosti, ʃosti]; সোয়ামী [ʃoami] (svāmī); দোয়াদশ, -শী [doadəʃ, doadoʃi] (dvādaśa, -śī), etc. This [ŏa] also has become [ɔ] in NB.: see p. 403.

[oa] occurs in foreign words, for « wā ».

225. Bengali [ou], written ঔ, অউ, ওউ, অঁউ, অঁঊ, etc. This diphthong originates from MB. « âu, â-u, âhu » < OB. « au, aẇu, ahu » < MIA. « aü, ahu » < OIA. « ă » + consonant + « u »: চৌ [ʧou] (catur-); জৌ [ʤou] (jatu); etc. See pp. 310, 344.

OB. « ahaü, aẇaü » gave in MB. [ou], which is commonly contracted to [o] in NB.: ক'ক্, কোক্ [kok] *let him talk* < কউক্, কহুক্ « kâuk, kâhuk »; ব'ক্ [bo:k] < বউক্, বহুক্ « bâuk, bâhuk » *let him bear*; etc.

In পৌনে [poune] *less by one-fourth, ¾ths*, from « pādōna », we have [ou] from OB. « *aẇō », MIA. « aō », through influence of a following « i » (pādōna- < pāōṇa, paōṇa-; păōṇ-iā > pâunē). In দৌড় [douṛ], MB. কৌড়ী [kouṛi], we have [ou] from MIA. [ava]: see p. 348.

« āu » of Sanskrit becomes [ou] in *tss.*: ঔষধ [ouʃod(ɦi)], সৌরভ [ʃourəb(ɦi)], যৌবন [ʤoubən], গৌরব [gourəb], etc. In OB., ঔ « āu » became অউ « a-ü » [ŏou] in *stss.*, *e.g.*, গউড়, মউন « gâuṛâ, mâunâ ». These sometimes retain a disyllabic character in NB. [go-uṛ, mo-un], but a monosyllabic pronunciation [goŭṛ, moŭn] is heard as well. (See the parallel case of [oi] from « āi ».)

In the *sts.* মউর [mour], we have [ou] from Skt. « -ayū- » (mayūra).

[ou] occurs in Persian and other borrowings, and is also found in early 19th century borrowings from English: *e.g.*, কৌঁসুলি [kŏuʃuli] = *counsel*. See later, under 'Foreign Elements.'

226. Bengali [ui], written উই, উয়ি, etc.

It comes from OB. « uẇi, uẇī, uhi, uhī, ūhī », in verb forms, and in nouns, representing contractions and modifications of various OIA. groups: *e.g.*, দুই [dui] (*duẇi, duvē, dvē); দুই [dui] *I milk* (*duhī, *duhiī, *duhiẇi, *duhami, duhāmi); জুঁই [ʤũi] (jūhī, yūthikā); পুঁই [pũi] (pūtikā); etc. সুই [ʃui], dialectal, seems to be from Hindōstānī « sūī » (sūcī, sūcikā).

From OB. « ōw̃i, ōhi », coming from various OIA. groups, through influence of the following « i »: *e.g.*, ধুই [dʱui] *I wash* (√dhō); রুই [rui] *I plant* (rōpayāmi); রুই [rui] *carp-fish* (rōhita); ‡ জুঁই [ʤũi] *fire* (jyōtiṣ, *jōi); নুই [nui] *I bend* (*nōw̃i, namāmi); etc. লুই [lui] *woollen stuff* is from Hind. « lōī » (< lōma + ikā ?).

OB. « aẏi, aẏī, aẇi aẇī » gave « oi » > [ui] in NB.; see under Vowel-Harmony, p. 398. Similar in nature is the change of « *tvay-ēna, *may-ēna » > OB. « taī, maī » > NB. তুই, মুই [tui, mui].

[ui] occurs in foreign words, mostly English. Cf. also রুইতন [ruiton] *diamonds* (*in cards*) < Dutch « ruiten ».

227. Bengali [ue], written উয়ে. This has not wholly passed into the monosyllabic stage. It commonly originates through vowel mutation from « uiā, ōiā » of MB.: শুইয়া « śuiā » (from *শোইয়া « śōiā ») gives শুয়ে [ʃue] *having lain down*; ধুইয়া « dhuiā » (< *dhōiā) becomes ধুয়ে [dʱue] *having washed*.

MB. « uhē » gives [ue]: মুয়ে [mue] *in the face* (muhē < muha, mukha).

In rapid speech, original (MB.) « uiē » becomes [ue]: দুইয়ে « duiē » *with two* becomes দুয়ে [due]. Standard Colloquial [uie] from earlier Bengali « u + āi + ā » in causatives (see p. 394) does not, however, contract to [ue].

228. Bengali [uɑ], written উআ, উয়া, is a diphthong properly belonging to the literary language, that is, to MB. It is found in East Bengali to some extent. In the Standard Colloquial, it is normally mutated to [o], through the stage [uo] resulting from Vowel-Harmony: *e.g.*, শূআর [ʃuɑr] > শূওর, শোর [ʃuor, ʃo:r] (sūkara); জলুআ [ʤɒluɑ] > জ'লো [ʤolo]. See *ante*, p. 413.

[ua] frequently changes to [oa]: চুহাড়, চুয়াড় [ʧuɦaṛ, ʧuaṛ] > চোহাড়, চোয়াড় [ʧo(ɦ)aṛ] *a ruffian* (see p. 71); দোহার দোয়ার [do(ɦ)ar] *singer in chorus* (< dhrūva-kāra); etc. See p. 401, *supra*.

[ua] figures in onomatopoetics: হুয়া হুয়া [ɦua ɦua] *the cry of the jackal*.

229. Bengali [uo], written উও, উয়ো, is a NB. formation from [ua] above by Vowel-Harmony; and [uo], as noted before, tends to become [o] in the Standard Colloquial: *e.g.*, জুও, জুয়ো, জো [ʤuo, ʤo:] < জুআ, জুয়া [ʤua] (dyūta-); কুও, কুয়ো, কো [kuo, ko:] < কুয়া, কুআ [kua] (kūpa-); ধুও, ধুয়ো, ধো [dɦuo, dɦo:] < ধুয়া [dɦua] *refrain* (dhrūva-); দুওর, দুয়োর, দোর [duor, do:r] < দুয়ার [duar] (*duvāra, dvāra); ধুয়োক [dɦuok] < ধুয়াক্ [dɦuak] < ধুয়াউক « dhuāuk » *let him cause to wash*; etc.

230. The double vowels ইই [ii], এএ [ee], আআ [aa], ওও [oo] and উউ [uu], the second occurrence being pronounced as a distinct syllable, are found in New Bengali, and are the results of a similar dropping of intervening « h » or glide, and of Mutation and Vowel-Harmony: *e.g.*, দিই [dii], also in a simplified form দি [di] *I give*; খেয়ে, pronounced [khee] also [kheĕe] *having eaten*; খাআ [khaa] beside খাওয়া [khaŏa] *eaten, to eat*; ধোও [dɦoo, dɦoŏ] *you wash* < MB. ধোঅ [dɦoo:] (dhāvata); [uu] is rather rare: an example is in the onomatopoetic কুউ [kuu] *the cry of the cuckoo*, which is found side by side with কুহু [kuɦu].

231. The following triphthongal and tetraphthongal groups are found in the NB. Standard Colloquial: [iei, ieo, iae, eie, eio, eao, eoi, euo, æei, æoi, aie, aio, aei, aoi, aui, oei, ooi, oeo, oie, oei, oeo, oai, oae, oui, uie, uio, uei, ueo, uae, uao, uoe] and [eoai, eoue, aoai, aoae, oaio]. The « sādhu-bhāṣā » has the groups [ooaio, aoaio], which are really three syllables [oŏ-aĭ-o, aŏ-aĭ-o]. They can be traced to three or more syllables in MB. and OB., separated by « -h- » or « ẏ, ẇ ». In all cases their derivation is clear, and they need not be taken up for detailed study.

[I] Vowels in Sanskrit Words.

232. Enough has been said incidentally about the way in which Skt. vowels are pronounced in Bengali. These always conform to the speech

habits of the various Bengali dialects. In the Standard Colloquial area they take up the following sounds, even in reading or chanting a Sanskrit passage:

« ă » is pronounced as [ɔ], and as [o] when the next syllable has « i » or « u », or has « y » preceded by a consonant.

« ā, i, ī, u, ū » remain; « ṛ, ṝ, ḷ » become [ri, ri:, li]. « ē, ō » remain as in Sanskrit, i.e., as [e:, o:]; and initial [e:] as a rule is not pronounced as [æ].

« āi, āu » became [oi, ou].

The [æ] sound is given to post-consonantal « -yā », and often to « -yă ». In East Bengali pronunciation, there is epenthesis in connection with post-consonantal « -y- ».

The vowels are nasalised when they are preceded by a post-consonantal « -m- ».

Below are given transcriptions, of the first two verses of the 'Mēghadūta,' (i) in the current pronunciation of the Standard Colloquial area and (ii) in a sort of Typical or Common East Bengali articulation.

(i) [koʃ͡ʧit kan:tɑ:birəɦiəguruna: ʃ:ɑ:dɦika:rəp:romət:əh
ʃɑ:pe:na:stəŋgomitəmoɦima: bərʃəbɦiog:e:nə bɦiortuh (vortuh) |
ʃʒok:həʃ͡ʧək:re: ʃʒənəkətənəă:snɑ:nəpun:o:dəke:ʃu
snigdɦiəc:ʃ͡hɑčɑ:toruʃu bəʃotiŋ rɑ:məgirʃʒæs:rəme:ʃu || 1 ||

toʃ:ɪn:əd:rou kotiʧ͡ɦidəbəla: bip:roʃʒuktəʃ:ə kɑ:mi:
nit:ɑ: mɑ:ʃɑ:n kənəkəbələăb:firəŋʃəriktəp:roko:ʈ̣ɦəh |
ɑ:ʃɑ:ṛɦioʃ:ə p:rothəmədibəʃe: me:gɦiəmas:liʃ̣ʈəʃɑ:nuŋ
bəp:rək:ri:ṛɑ: porinətəgəʃʒəp:rek:həni:əŋ dədərʃə || 2 ||]

(ii) [kəʃ͡ʧsit kan:ta:birəɦiəguruna ʃ:a:d(ɦi)ika:rəp:rəmət:əh
ʃa:pe:na:stəŋgəmitəməɦima: bərʃəb(ɦi)oĭg:enə b(ɦi)ərtuh |
dzoĭk:həʃ͡ tsək:re: dz͡ənəkətənəă: sna:nəpuĭn:o:dəke:ʃu
snigd(ɦi)əs:a:ă: təruʃu bəʃotiŋ ra:məgirdz͡as:rəme:ʃu || 1 ||

tɔʃ:in: ɔd:rou kɔtitsidɔbɔla: bip:rɔdzuktɔʃ:ɔ ka:mi:
nit:a: ma:ʃa:n kɔnɔkɔbɔlɔĕɔb:(ɦ)ɔrɔŋʃɔriktɔp:rɔkoʃṭhɔh |
a:ʃa:r(ɦ)oĭʃ:ɔ p:rɔthɔmɔdibɔʃe: me:g(ɦ)ɔmas:liʃṭɔʃa:nuŋ
bɔp:rɔk:ri:ra:porinɔtɔgɔdzɔp:reĭ:k:hɔni:ɔŋ dɔdɔrʃɔ ॥ 2 ॥]

233. The vernacular Bengali habits of mutation and vowel harmony, bimorism and anaptyxis, haplology and metathesis, and dropping and assimilation of consonants strive to have their way with *ts.* importations, and in the speech of the women and children and the uneducated, they refuse to be restrained by the influence of the classical tongue. The result is that in Bengali, in addition to the more correct approximations to the Sanskrit (according to the Bengali standard), there are folk-forms or *semi-tatsamas* widely aberrated from the Sanskrit. These *semi-tatsamas* often require to be spelt phonetically, so far they are removed from the Sanskrit; and with the present-day insistence on verisimilitude in literature, they are being recognised once more (as they always were in Middle Bengali times), and are being employed more and more in the novel and the drama. Some examples of folk forms have been given above, pp. 381, 382, 406. Some more are given below, but it is not worth while to illustrate the line of development from eMB. pronunciation of *tss.*: ব্যাগত্তা [bægotta] *eager prayer* (*beāgårtā = vyāgratā); সোমত্ত [ʃomotto] *grown-up* (samartha); চরামেত্ত, -মের্ত্ত [cʃɔnnametto, -merto] *holy water off an idol* (caraṇâmṛta); বাজ্জংশ [baɟɟʒɔŋʃɔ] *hobby* (vāyvaṅśa); পাদোকজল [pɑdokɟʒɔl] *washings of the feet of a revered person, treated as holy water* (pādôdaka-jala); স্বস্তেন [ʃosten] *an expiatory and benedictory ceremony* (svastayana); মাগ্‌গি [mɑggi] *costly* (*mâārghiă, mahârghya); অঘ্রাণ, অগ্‌ঘাণ [ɔgghrɑn, ɔgghɑn] (agrahāyaṇa); জষ্টি [ɟʒoʃṭi] (jyāiṣṭha); ছুরিত্তির [cʃhurittir] (śrōtriya); হনুমান্ [ɦunumɑn] (hanūmān); চক্কত্তী [cʃokkotti] *a surname* (cakravarti); বোস [bo:ʃ] *a surname* (vasu); মঞ্জুরী [monɟʒuri] (mañjarī); অঞ্জুলি [onɟʒuli] (añjali); অপ্‌রাজিতে [ɔprɑɟʒite] *a flower* (aparājitā); 'হ্রস্ব-দীগ্‌ঘি' [ɦoʃʃidiggɦi] *sense of propriety* (hrasva-dīrgha); ভট্চায্যি [bɦoṭcʃaɟɟʒi] (bhaṭṭâcārya); কেত্তন [ketton] (kīrttana);

নেত্য [netto] (nṛtya) ; কদ্‌র্য্য [koduj͡jʒi] (kadarya) ; মোচ্ছব [mocc͡ʃhob] (mahôtsava) ; etc., etc.

234. The general lines of development of the vowels in Bengali on the basis of the Standard Colloquial have been sought to be traced above. A study of the phonology of the different dialects of Bengali has not been possible. Only some general remarks have been made—*e.g.*, about the East Bengali and North Bengali dialects being conservative in their vowel system, preserving a great deal of the MB. conditions of epenthesis and absence of mutation. For a thorough and detailed study of the development of Bengali, it will be necessary to compare the dialects. A survey of the phonetics and phonology of each special variation of Bengali will be the material indispensable for such a study. Intimate personal acquaintance with the dialects concerned, joined to a scientific training, is the qualification necessary for such work. But that is wanting at the present day. The specimens in the LSI. are invaluble, and articles in the VSPdP. and other Bengali journals on the dialects of Bengali are also very valuable material : but these have their limitations, specially from point of view of phonetics and phonology. The historical study of the Bengali dialects in their *ensemble* is therefore to be left for the future.

CHAPTER V

PHONOLOGY OF THE NATIVE ELEMENT: CONSONANTS

[A] OIA. Consonants: General Lines of Change to Bengali.

235. The history of the consonant sounds of IA. in its general outline has been given in Chapter I. The main points in the development of the OIA. consonants into those of (Old) Bengali may be recapitulated: examples will be found under each sound in indicating the origins of the Bengali consonants, *infra*.

[I] Single Consonants.

(1) Single *initial* consonants have generally remained unchanged. There have been, however, some cases of aspiration and desaspiration of stops, of change of a sibilant to a palatal « c(h) », and of « bh- » to « h- » (see *infra*, under 'Aspiration', and under Bengali [c͡ʃh] and [ɦ] respectively); OIA. « y- » and « v- » have changed to « j- » and « b- », and « r- » is found as « l, l>n » and also as « r ».

(2) Single *intervocal* consonants:

[a] the stops « -k-, -g-, -t-, -d-, -p-, -b-, -y-, -v- » have been dropped; « -ṭ-, -ḍ- » have been reduced to « -ṛ- ; and in a number of Māgadhī inheritances, « -ṛt- (-rt-) » have resulted in « ṛ (ṭ) » as well ; intervocal « -c-, -j- » both remain as « -c-, -j- » (in original Māgadhī words), or are dropped (in non-Māgadhī forms).

[b] the aspirates « -kh-, -gh-, -th-, -dh-, -ph-, -bh- » have been reduced to « -h- »; « -ṭh-, -ḍh- » occur as « -ṛh- », in IMB. and NB. deaspirated to « -ṛ- ».

[c] « -m- » has become a mere nasalisation of contiguous vowels, through an intermediate stage of « -w̃- »; « -ṇ-, -n- » probably both occurred as the cerebral « -ṇ- », to be changed to the dental « -n- » in MB.

[d] an intervocal sibilant has transformed itself to « -h- », in some cases, besides normally occurring as « ś ».

[e] « -r-, -l- » interchange a little; « -h- » remained in OB., generally, to be lost in NB. (whether original OIA., or MIA. « -h- » derived from OIA. aspirates).

[II] Consonantal Groups.

These, initial or medial, have been reduced to a single consonant in Bengali, after having undergone assimilation in the Early MIA. stage. The following were the main lines of treatment.

(1) [a] Stop+stop became a single stop; stop+aspirate became a single aspirate. Where the first of these sounds differed in its point of articulation from the second, the first assimilated itself to the second in the MIA. (kt > tt, gdh > ddh, tk > kk, etc.) This kind of consonant nexus occurred medially only.

[b] Stop+nasal: « -kn-, -tn- » became « -k-, -t- »; « -gn- » became « -g-, -ŋ(g)- »; « -jñ- » became « -n- »; « dn » had already become « nn » in OIA., and this gave « -n- » in Bengali; « -tm- » in « ātman » gave « -p- » (আপন « āpaṇa »—a non-Māgadhī form), and « -dm- » seems to have become « -d- ».

[c] Stop or aspirate+« y ».

(i) Gutturals, palatals, cerebrals and labials+« -y- »: the « -y- » was assimilated to the preceding consonant, which was doubled medially, in MIA. (but the genuine Māgadhī change seems to have been to « kiy-, ḍiy- », etc.). Bengali preserves a single stop or aspirate.

(ii) Dentals+« y »: the group became « -cc(h)-, -jj(h)- » medially, and « c-, (ch-), j-, jh- » initially. Bengali preserves a single « c(h), j(h) ». [This palatalisation of «t(h), d(h)+y» seems not to have been characteristic of Old Māgadhī, which changed « ty, dy, dhy » to « tiy-, -yy- (diy ?), -dhiy- »: the palatalised forms, evidently from other dialects in Second or Late MIA., seem to have overwhelmed Māgadhī.]

[d] Stop or aspirate+« r ». The « r » was assimilated to the preceding sound, which was doubled in a medial position, in MIA. Bengali has one stop or aspirate. The group « -dr- » probably became « *-dl- » in the

OIA. source dialect of Māgadhī, whence we have « -ll- > -l- » in a few words in NIA.

[e] Stop or aspirate + « l » : assimilation of « l ».

[f] Stop or aspirate + « v » : assimilation of « v ». (In the groups « -tv-, -dv-, -dhv- », the resultant form in some cases is « -p-, -b-, -bh- » in NB., as in other MIA. : this labialisation is non-Māgadhī : see *infra*, under the Labials.)

[g] Stop + sibilant :

(i) « kṣ » gives « kh » (through the Māgadhī), « ch » (through extra-Māgadhī MIA. forms).

(ii) « ts, ps » became « cch » in MIA., whence « ch » in Bengali.

(2) [a] Nasal + stop or aspirate : for treatment in Bengali, see §177, pp. 362-367, *supra*.

[b] Nasal + nasal : the OIA. groups were « -ṇṇ-, -nn- » and « -mm- » : « -ṇṇ-, -nn- » occur as « n », and « -mm- » as « -m- » in Bengali.

[c] Nasal (anusvāra) + « y, (r, l), v, ś, (ṣ), s, h » : see above, §177.

(3) « -yy- » gave « j » in Bengali.

(4) [a] « r » + stop or aspirate :

(i) « r » before a guttural, palatal, or labial : the latter was doubled and the « r » was assimilated. In Bengali, these assimilated groups result in a single guttural, palatal or labial stop or aspirate.

(ii) « r » + dental stop or aspirate of OIA. show a two-fold treatment : the « r » cerebralised and doubled the dental, and was so assimilated, or it simply doubled the dental without cerebralising it. The former is the proper Māgadhī treatment : the latter non-Māgadhī. Bengali has « -ṭ(h)-, -ṛ(h)- » in Māgadhī inheritances, and « -t(h)-, -d(h)- » in apparently non-Māgadhī forms.

[b] « r » + nasal : « -rṇ-, -rn- » were assimilated to « -ṇṇ- » in MIA., which gave « -n- » in Bengali, and « -rm- » gave « -mm- » > « -m- ».

[c] « -ry- » : the Early MIA. (non-Māgadhī) assimilation was to « -yy- », which gave Second MIA. « -jj- », whence Bengali « -j- ». Cases of « -ry- » > « -yy- » > « -y- » are known in Old Bengali. The genuine

Māgadhī change was to « -liy- », which is not preserved in Bengali, but « -ry- » also occurs as « -l- » in Bengali (through a stage « -ly- > -ll- »).

[d] « -rl- » > MIA. « -ll- » > Bengali « -l- ».

[e] « -rv- » is found as « -bb- » > « -b- ».

[f] « r »+sibilant: assimilation with the sibilant, which is doubled (-śś-, -ss- — -śś- in Māgadhī), and is reduced to a single sibilant pronounced « ś » in Bengali.

[g] « -rh- » became « -lh- » in Māgadhī, whence « l » in NB.

(5) [a] « -l- »+stop: assimilation of « l », leading to single stop in Bengali.

[b] « -lm- », gave through MIA. « -mm- », « -m- » in Bengali.

[c] « -ly- » became « -yy- » in Old Māgadhī, whence ultimately « -j- » in Bengali. Examples showing the non-Māgadhī change of « -ly- > -ll- > -l- » also occur.

[d] « -ll- » > MIA. « -ll- » > Bengali « -l- ».

[e] « -lv- » > MIA. « -ll- » > Bengali « -l- ».

(6) « -vy- » > MIA. « -vv-, -bb- » > Bengali « -b- ». This is a non-Māgadhī change: the original Māgadhī alteration of « -vy- » was to « -viy- », which is lost, and « -vy- > -vv-, -bb- » forms have become established.

(7) [a] Groups with sibilant+stop or aspirate: « śc, ṣk, ṣṭ(h), sp, sk(h), st(h), sp(h) » became initially an aspirate, medially a stop+its aspirate, in MIA. In Bengali we have a single aspirate.

[b] Sibilant+nasal:

« ṣṇ > MIA. ṇh > OB. ṇh > MB., NB. n »;

« sn > MIA. nh > OB. n, nh (?) > NB. n »;

« śm, ṣm, sm > MIA. ss (śś Māgadhī), mh > OB. s, mh(m) > NB. s, m ».

[c] Sibilant+« y »: normally, assimilated to double sibilant in MIA., whence Bengali single sibilant. There are cases of modification of this assimilated double sibilant to « h », which are found in Bengali.

[d] Sibilant+« r, l, v »—assimilation of « r, l, v, », resulting in double sibilant > single sibilant pronounced « ś » in Bengali.

(8) « h »+nasal (hṇ, hn, hm): this group underwent metathesis in MIA. (ṇh, nh, mh), and in Bengali, they have resulted in a simple nasal.

« hy » probably became « *-hiy- » in Old Māgadhī. In other MIA. it became « -jjh- ». It is not represented in Bengali.

(9) « Visarga » + consonant simply doubled the latter, and Bengali has a single consonant representing the OIA. group.

Groups of more than two consonants (like « rdhv, rtm, tsy, ṣṭr, ṅṣṭr, ndhy » etc., do not require any special remarks: it is the semivowels, liquids or sibilants in them that were assimilated, and then they behaved in MIA. like OIA. groups of two consonants. A post-consonantal « v » or « y » sometimes labialised or palatalised a preceding dental: *e.g.*, উভা « ubhā » (MIA. ubbha- < *udhba, *uddhva = ūrdhva), বাইচ « bāiċ্ছ » *boat race* (MIA. *vāhicca < ? *vāhitrya < vahitra), etc.

Phonological changes of a more general character are discussed below.

[B] Aspiration and Deaspiration.

236. The aspirates are a prominent class of sounds in IA., and they were passed on to all NIA., except Sinhalese, which quite early in its history (before the Ēḷu stage: see p. 15) deaspirated them. Deaspiration of aspirates inherited from OIA. also occurs in NB.: this is discussed below (§§239 ff.). All NIA. languages possess some words in which there is aspiration, but their Sanskrit counterparts show absence of it. These words have aspiration in MIA.; and in certain cases the MIA. forms owe the aspiration conditions obtaining in OIA. itself.

Where it is a case of initial aspiration of an unvoiced stop, a possible explanation is to be sought in OIA. (and perhaps IE.) omission of « s- » before « k, c, t, p, n » at the head of the word (see Jules Bloch, 'Langue Marathe,' § 84; Pischel, §§ 205 ff.; cf. also Wackernagel, 'Altindische Grammatik,' I, § 230). OIA. groups of « sp, st, sk, śc » occurred without the « s- » as well: *e.g.*, « paśyati: spaśaḥ; candraḥ: -ścandraḥ; tārā: stṛ », etc.; OIA. « *skarpara », after loss of sibilant in pre-MIA. times, gave Skt. « karpara », and « *skarpara » (with the « s- ») in MIA. times would give « khappara », whence Bengali খাপরা « khāp্ছrā » *sherd, tile*. Later, « khappara » itself was Sanskritised as « kharpara ». So « skandha » > MIA.

« khandha » would be expected to give a Bengali *খাঁধ « *khãdhʌ » ; but the Bengali form is কাঁধ « kãdhʌ », which seems to go back to an OIA. « *kandha ».[1] (The Bengali কন্ধ in কন্ধকাটা « kåndhå-kāṭā » *head-less (ghost)* is a late *sts.* from the Sanskrit « kabandha ».) But it is possible to explain only a few words showing alternation of initial voiceless stops and aspirates in OIA. and MIA. in this way. In most cases, however, the aspiration remains obscure : especially where we have aspiration of sonant stops, not attested in Sanskrit. Following Jacobi, Jules Bloch sees some connexion of an « s » or « r » in aspirating a stop (Bloch, *op. cit.*, §86) : but although in MIA. and NIA., forms in aspirated stops occur in certain words with « s » or « r », as, *e.g.*, ভুসি « bhusi » (busa-) ; Hindī « bhēs » (*bēṣa < vēṣa) ; ঝষ « jhåṣʌ » *fish* (OIA. « jhaṣa » beside « jaṣa ») ; ফাঁস « phãsʌ » (pāśa) ; খিচড়ী > খিচুড়ী « khicâṛī > khicuṛī » *mess of rice and pulses with butter* (cf. Skt. kṛśara < kṛsara) ; ঝাঁজর « jhãjårʌ » *sieve* (? jarjara) ; ঝুনা « jhunā » *old, experienced, dried up* (*as a coco-nut*) (jūrṇa- ?), etc. ; cf. also Skt. « sṛṇkā » *chain* (?) beside « śṛṇkhala »,—this is not a satisfactory explanation, as Bloch himself admits. It seems that contamination with other forms, *plus* a vague sense of onomatopoeia, which is so very strong as an indirect influence in Indian speech, had more to do in aspirating stops than the presence of any particular sound ; especially in initial aspiration. The Dravidian articulation of the stops, in Tamil-Malayalam, in Kannada, in Telugu, is slightly aspirated : can the cases of initial aspiration in MIA. and NIA. be partly due to a Dravidian influence ? Other instances of initial aspiration in Bengali (apart from cases of transferred aspiration, noted below, and besides those given above) are the following : খিল « khilʌ » (Skt. kīla, MIA. khīla) ; খাবল « khābålʌ » *a handful, mouthful* (? kabala) ; খেল « khēlʌ » (Skt. khēla : √krīḍ) ; ঘুড়ী « ghuṛī » *paper kite* (cf. Hindī guḍḍī) ; ঝাঁপান « jhãpānʌ » (*jappāṇa, yāpya-yāna) ; ফেলে « phēlē », beside MB. পেলে « pēlē » *throws* (? prērayati, MIA. pĕllaï) ; MB. ফুকরে « phukårē » *shouts* (cf. Hindī pukār *shout* = phutkāra ?) ; ফড়িং « phåṛiṇ » *grasshopper* (paṭaṇga) ; etc.

[1] কাঁধ does not seem to be due to deaspiration of খ 'kh' from an earlier *খাঁধ : Bengali is prone to drop the aspiration in a non-initial rather than in an initial aspirate.

(See under the various aspirates, *infra.*) Some *dēśī* and *tbh.* words seem to show alternation of aspirated and unaspirated forms : *e.g.*, গোড় « gōṛ্ʃ » *foot, heel,* but ঘোড়তোলা « ghōṛ্ʃ-tōlā » *high-heeled* (*boot*), ঘুটি, ঘুন্টি « ghuṭi, ghuṇṭi » *heel* ; ঝাল « jhāl্ʃ » *hot to taste,* connected with জ্বালা « jwālā » *burning sensation* (?) ; so ঝল « jhal্ʃ » *sparkle,* cf. জ্বল « jwal » *to burn* ; ঝোল « jhōl্ʃ », *watery mass, soup, saliva,* beside জোল, জুলী « jōl্ʃ, julī » *channel, river*(*-bed*), see pp. 65, 66 ; ঠেঙ « ṭhēŋ » [ṭhæŋ] *shin, leg,* beside টাঙ « ṭāŋ » ; ঢেলা « ḍhēlā » *clod, piece of stone* beside ডেলা « ḍēlā » *clod, lump* ; ঢেঙ্গা « ḍhēŋ(g)ā » *tall,* beside ডাগর « ḍāgâ-r্ʃ » *big, huge* ; ঢেঁকী « ḍhēkī » *pounding or husking machine,* beside ডাঙ্গস « dāŋg-âs্ʃ » *goad* ; ঢামালী, ধামালী, « ḍhāmālī, dhāmālī » *orgy, riotousness,* besides ডামাডোল « ḍāmāḍōl্ʃ » *hubbub, hullaboo* ; ঢোল « ḍhōl্ʃ » *drum,* beside ডোল « ḍōl্ʃ » *vessel shaped like a drum* ; ঝুঁটী « jhũṭī » *forelock, crest,* beside জুঁটী, চুঁটী « jũṭī, cũṭī (cōṭī) » *queue,* connected with চুল « cul্ʃ » *hair,* Skt. চূড়া « cūḍā » (?) ; ঝট্ « jhâṭ » *quickly,* also ঝাট « jhāṭ্ʃ », cf. Skt. « jhaṭiti », beside চট্ « câṭ » *quick* (« jhaṭ-iti » connected with « √jhar » by Wackernagel, I, § 141) ; etc., etc.

237. Aspiration in the interior of words is also found, and it is still more obscure. The Sanskrit pleonastic « -ka » is represented by « -h- » in Second MIA. (see Pischel, § 206). Is this « -h- » due to aspiration of OIA. « -k- » to « -kh- » ? Cf. Pali « sunakha », Second MIA. « suṇaha » (= Skt. « śuna-ka »,—otherwise explained as being « su + nakha », and not as a case of « -kha < -ka »). Cases of aspiration of intervocal stops, however, are found in MIA. and in NIA. : *e.g.*, Aśōkan Prakrit (Dhauli) « akhakhasē » (akarkaśa), « kichi (= kiñchi ?) » (kiñcid) ; Hathigumpha Inscription « Bharadha- (= Bhāradha) » = Second MIA. « Bhāraha » (< *Bhāratha = Bhārata) ; Hind. « -hār » (-kāra : or ? < Skt. hāra, √hṛ) ; Kaśmīrī and Panjābī « Vihath » (Vitastā) = *Jhelam River* ; Bengali বিঘৎ from *বিহৎ « bighât্ʃ < *bihât্ʃ » *span* (= vitasti ? : possibly a case of transference of aspiration) (see also E. Müller, 'Pali Grammar,' p. 25). Aspiration of a voiced stop seems to have been favoured in some cases through the influence of a preceding nasal. Cases of alternation of « -mb- » and « -mbh- » occurred in OIA. (Bloch, *op. cit.*, p. 100 ; Wackernagel, I.,

p. 129.) Bengali instances are—আন্ধ, beside আন্দু « ândhu, = ãdhu, ãdu » (anduka); MB. জামীর, জাম্বীর, জাম্ভীর « jāmīrā, jāmbīrā, jāmbhirā » (jāmbīra); MB. সামায় « sāmāē » *enters* (? samāyāti), beside সাম্বায়, সাম্ভায় « sāmbāe, sāmbhāe » (? through contamination with « sambhālayati » > সাম্ভালে, সামালে « sām[bh]ālē » *bears, holds, supports*); হামীর, হাম্বীর, হাম্ভীর « Hām(bh)īrā » (Perso-Arabic « amīr »); eMB. (ŚKK.) খন্ধ « khândhā » *grain, corn* (Persian « xand »); সিন্দুক, সিন্ধুক « sind(h)uk৵ » *chest, box* (Perso-Arabic « sinduq- »); etc. In lMB., কাণ্ডারী « kāṇḍārī » (kāṇḍâgārin) and কাণ্ঢারী « kāṇḍhārī » (karṇa-dhāra-), meaning *helmsman*, seemed to have occurred side by side, and were doubtless regarded as the same word. Bengali নিভা « nibhā », beside নিবা « nibā » *to put out* (*a light*) (nir-vā-) probably takes its aspiration from « √bhā » (nir+bhā); and MB. সভ « sâbhâ » for সব « sâbâ » (sabba, sarva) is probably through contamination with « sabhā » (see p. 319).

238. Aspiration through metathesis of « h » is found in IA. from Late OIA. times. This kind of aspiration by transposition of the « h » in some cases was naturally accompanied by deaspiration within the same word. *E.g.*, NB. *sts.* অঙ্খার « aṅkhār৵ » (ahaṅkāra) ; খোস « khōs৵ », OB. « khasu » (kacchū<?); ঘর « *ghâr৵ » (ghara = *garha < gṛha); OIA. √ « ghaṭ » = « gaṭh » = « grath »: cf. « ghaṭa- » > ঘড়া « ghâṛā » *water-jar*, « gaṭh » > MB. গঢ় « gâṛh », NB. গড় « gâr » *to build*; MB. *tbh.* আঘন, আগন « āghânâ, āgâna৵ », NB. *sts.* অঘ্রান « âghrāna৵ » (*aggahaṇa, agrahāyaṇa); MB. পঢ়া « pâṛhā » (paṭaha-); গাধা « gādhā » (gaddaha-, gardabha); *sts.* ফন্দি « phândi » *scheme, stratagem* (*prabandhikā : cf. phãda৵, p. 366); ফুঁপি « phũpi » *edge of dhōtī with hanging threads like tassels, often gathered together in a bunch* (*phumpia, *phuppia = pupphia, puṣpikā); ভয়ষা, ভঁইষা « bhâyaṣ৵ā, bhãiṣ৵ā » *belonging to buffaloes* (*mhaïñsa-, mahiñsa, mahiṣa); ভেড়া, ভেঁড়া « bhēṛā, bhẽṛ৵ā » (*mhēḍa-, *mhēā-ḍa-, *mēha-ḍa- < mēṣa-); ভুখ « bhukh৵ » (*buhukkha < bubhukṣā); ভাপ « bhāp৵ » (bhappa, *bappha<bāṣpa); MB. *sts.* বিভা « bibhā » (*bibāhâ = vivāha: cf. *tbh.* বিয়া « biyā, biā » < « *biāha »); MB. *sts.* বেভার « bēbhārâ » (*biabahāra = vyavahāra: cf. MB. *tbh.* বোহারী « bâuhārī », p. 345); etc. As examples of entire deaspiration, through transference of aspiration, may be given বোন্, ‡ বুন, † বুইন « bōn৵,

bunʃ, buinʃ » =« bahiṇī, bhaginī », and দোহার, দোয়ার « dōhārʃ, dōārʃ » (*dhuāra, dhruva-kāra).

239. The aspirates, initial and intervocal, which Bengali inherited from OIA., were preserved intact in the OB., and to a very large extent in the eMB. period. But even from the eMB. period, from the latter part of the 15th century it would seem, (judging from the orthography of Early Bengali MSS., and from NB. history of the aspirates), the aspirates as well as « -h- » grew rather feeble in an intervocal position—and also finally—although they do not suffer from any lax articulation initially. In Modern Bengali there has been entire loss of aspiration in final and intervocal aspirates in a very large number of cases ; and where aspiration is found in writing, it is not always faithfully representative of the pronunciation, especially in the Standard Colloquial. The dialects of Western Rāḍha are rather conservative in the matter of retaining aspiration intervocally and finally. Some forms of East Bengali also preserve an intervocal unvoiced aspirate, *e.g.*, in words like আঠা « āṭhā » *gum-paste*, পাখা « pākhā » *fan*, মাথা « māthā » *head*, where the Standard Colloquial will normally use a « ṭ, k, t ». Similarly, there has been a very wide loss of intervocal « -h- » in New Bengali, leading to fresh groups of contact vowels which have been diphthongised : and final « -h », representing earlier Bengali « -hå », may be said to be lost in Bengali. But aspirates are not ordinarily disturbed when they occur initially in the Standard Colloquial and in West Bengali generally ; although in most forms of East Bengali, initial voiced aspirates are either wholly deaspirated, or the aspiration becomes very weak. As has been said before, tendency to drop aspiration manifested itself towards the end of the 14th century, when intervocal « h » is found frequently to be dropped, leading to the assimilation of a group « åhå » to « å » : *e.g.*, ŚKK. বার « bārå » beside বারহ « bārahå » *12*, খাঅ « khāå » beside খাহ « khāhå » *you eat*, গোআর « gōārå » beside গোহারী « gōārī » *petition*, etc. (see p. 296). But aspirated stops as a rule, judging from the printed edition of the ŚKK., remained intact ; although « mh, nh » seem to have been deaspirated, inspite of their being retained in writing. Absence of dated MSS. makes it difficult to determine when aspiration ceased to be a regular

thing in MB. It seems in the early 16th century, voiced aspirated forms like পঢ় « paṛh- » *read* (paṭh), কাঢ় « kāṛh » *snatch away* (kaḍḍha, kṛṣṭa), নাঢ়া « nāṛhā » *shaven-head*=New Bengali নাড়া, নেড়া [næṛa], বাঢ়ে « bāṛhe » *increases* (vṛdh), বুঢ়া « buṛhā » (vṛddha) still obtained, although it is likely that the aspiration had become feeble. The voiced aspirates seem to have preserved the aspiration (in the West Central dialect) longer than the unvoiced ones, in both final and intervocal positions. Words like হাত « hāt্ত » (hasta), হাতী « hātī » (hastin), আট « āṭ্ট » (aṣṭa), কাট « kāṭ্ট », MB. জাটা « jāṭā » (yaṣṭi), for OB. and eMB. « hāthā, hāthī, āṭhā, kāṭhā, jāṭhā » etc., seem to have been established by the 16th century even though « -ṛh-, -dh-, -bh-, -gh- » retained the aspiration. The use of unaspirated stops is common in most MB. MSS. (excepting the ŚKK.).

240. Conditions in the present day Standard Colloquial are in the main the following (see ' Brief Sketch of Bengali Phonetics,' §§ 26, 26a):—

(1) Initial aspirates remain, whether voiced or unvoiced (excepting in the case of « ph, bh », for which see below).

(2) Final aspirates are deaspirated : but *ts.* forms tend to preserve them, though not so strongly as when initial.

(3) Pre-consonantal aspirates are normally deaspirated.

(4) Intervocal aspirates as a rule are deaspirated, but it is not uncommon to find aspiration in some cases. In formal discourse, and in singing, as well as in careful speech, the aspirates are retained; but they are deaspirated in quick conversation. No hard and fast rule can be laid down in this matter, but it seems that in less common words and forms, and in *tss.* where they are susceptible to the influence of the spelling, the aspiration commonly comes in.

Final aspiration, if uttered not strongly, can be tolerated in NB., as well as pre-consonantal aspiration, especially if it is of an unvoiced stop. So also intervocal aspiration. Intervocal « (c)ch » in verb forms commonly loses the aspiration, but a suggestion of aspiration is also heard.

In the pronunciation of the aspirates in NB., there is one point to consider, about ফ, ভ « ph bh ». Within recent times, not much beyond half a century from now (i.e. the end of the first quarter of the 20th century),

these have developed spirant values, either bilabial [ꜰ, ʋ] or denti-labial [f, v]. Bengali transcriptions of foreign names and words (Portuguese and English), using ব « b » for the sound of the denti-labial « v » in the latter languages (and not ভ « bh » = [ʋ, v] as at present) right down to the middle of the 19th century, and later, show that this spirant pronunciation is a post-19th century affair. These are commonly substituted for the [ph, bɦ] aspirates, but the aspirates have not been entirely ousted. (See 'Brief Sketch of Bengali Phonetics,' §30.) No other set of aspirates has developed a similar spirant pronunciation (in the Standard Bengali: the spirants [x, ɣ] for « k, kh » are found in dialectal East Bengali.)

241. Where loss of aspiration has become well-established from Late MB., the Bengali spelling frankly recognised it in some cases by using stops, *e.g.*, হাত « hāt̪ɦ », মেজো « mējō » (< mājhɦ, madhya), পড় « pɔ̀r » *read* (< pɔ̀rh < paṭh), হেঁট « hɔ̃ṭɦ » (*adhiṣṭāt), গাঁট « gɔ̃ṭɦ (granthi), আব্ছা « ābchā » *hazy* (abhra-), etc. But generally, the historical spelling obtains as the standard one, and this is helped by the absence of entire loss of aspiration: *e.g.*, মাঠ « māṭ(h)ɦ » *field*, মাছ « māc(h)ɦ » *fish*, কাঠ « kāṭ(h)ɦ » *wood*, বাঘ « bāg(h)ɦ » *tiger*, বাঁধ « bɔ̃d(h)ɦ » *bund*, রাখ « rāk(h) » *to keep*, দেখ « dēk(h) » *to see*, শিখ « śik(h) » *to learn*, লিখ « lik(h) » *to write*, পথ « pɔ̀t(h)ɦ » *way*, গোঁফ beside গোঁপ « gɔ̃p(h)ɦ » *moustache*, লাঠি, লাটি « lāṭ(h)i » *stick*, মাঝি « māj(h)i » *helmsman*, etc., etc. Purely phonetic spellings we find in Persian loan-words like শেক, সেক « śēk » (šayx), beside শেখ « śēkh », হপ্তা « hɔ̀ptā » *week*, for *হফ্তা « *haphtā » (haftah), তক্তা « tɔ̀ktā » *plank*, for *তখ্তা « takhtā » (taxtah), etc. In the spelling of Bengalis not caring for the established orthography, and in the present-day works of drama and fiction, as well as in journalese employing the colloquial, the use of stops for aspirates is quite noteworthy: *e.g.*, দেক্তে « dēktē » for দেখ্তে « dēkhtē » <দেখিতে « dēkhitē » *to see*, বুজ্তে « bujtē » *to understand* < বুঝিতে « bujhitē », আদলা « ādla » for আধলা « ādhɦlā » *half-piece*, সাদখাঁ « sādkhā̃ » for সাধুখান « sādhukhān » *a surname*, মাগ্গি « māggi » = « mahārghya », হচ্চে « hōccē » *is*, *is becoming* = হইতেছে « hɔ̀itēchē », বদনা « bɔ̀dnā » *water-pot with spout* < বধনা « badhɦnā », etc., etc. The spellings with চ, চ্চ « c-, -cc- » for ছ, চ্ছ « ch, cch, » in the progressive and perfect verb forms (√আছ « āch »),

found in the 'Hutōm Pēcār Naksā' (see p. 135), have obtained acceptance in the hands of a writer like Rabīndra-nāth: *e.g.*, দিয়েচে « diēcē » *has given*, দিচ্চে « diccē » *is giving*, ক'রেচি « kōrēci » *I have done*, ক'চ্চি « kōcci » *I am doing*, বেরুচ্চে « bēruccē » *is coming out*, etc., etc. (but rarely in the case of আছে « āche », and never in the case of past perfect forms in ছিল « -chilă » etc.). Colloquial Oṛiyā agrees with the Bengali Standard Colloquial in changing the « -ch- » of verb forms to « -c- ».

242. Bengali in the matter of aspiration differs remarkably from its sisters and cousins of the West—from Maithilī-Magahī, Bhōjpuriyā, Eastern Hindī and Western Hindī, and also from Panjābī (in the last, in the Eastern and North Central Panjābī region at least, however, the sonant aspirates become surd stops, with low tone marking loss of aspiration). The Northern Indian languages of the plains, from the Panjab to the borders of Bengal, in the main preserve aspiration as well as intervocal « -h- »: especially in the Gangetic plain. The weakening of final intervocal aspirates characterises Marāṭhī almost as much as it does Bengali (cf. Jules Bloch, 'Langue Marathe,' §§87 ff.). Gujarātī final and intervocal aspiration also is weak, and is dropped in many cases, as well as intervocal « -h- ». R. L. Turner has observed that in Nēpālī (Khaskurā) pre-consonantal aspirates become deaspirated, and intervocal « -h- » is entirely lost there ('Gujarati Phonology,' JRAS., 1921, pp. 509-510).

243. Loss of aspiration occurred in MIA. as well. (See W. Geiger, Pali Grammar, §40; Pischel, §§ 213, 214.) All NIA. obtained some of these deaspirated forms from MIA. Examples in Bengali are: উট, উঁট « uṭă, ũṭă », cf. Hind. « ũṭ » (uṭṭa, *uṇṭa < *uṭṭha = uṣṭra); so ইট, ইঁট « iṭă, ĩṭă », cf. Hind. « īṭ, ĩṭā » (iṭṭa-, *iṇṭa- = iṣṭa-); চিট « ḍhiṭă » (dhṛṣṭa); শিকল « śikălă », OB. (Sarvânanda) « siṅkala » (śṛṅkhala: but cf. Sanskrit « sṛṅkā » = *chain* ?); পালট « pālăṭă » (pallaṭṭa, paryasta); and probably a few more. Sanskrit « visarga » in the middle of a word is changed to « ś, ṣ, s » according as the consonant (stop or aspirate) following is a palatal, guttural or dental (« visarga » after « i, u » changing itself to « ṣ », which also cerebralises a following « t »). But it seems that in MIA. the « visarga » did not turn to a sibilant, but simply assimilated itself

to the following stop. In such cases, we have in NIA. a normal simplification of the resultant double stop to a single stop, and not aspirate, which normally results from « ṣk, śc, ṣṭ »: *e.g.*, « niḥ+karma, Skt. niṣkarma- », MIA. « *nikkamma », whence Bengali নিকাম « nikāmঌ », beside *sts.* নিষ্কর্ম্মা « niṣkâmmā » ; « niḥ+kāśa-, Skt. niṣ-kāśa » > MIA. « *nikkāśa » > নিকাশ « nikāśঌ » *clearing, finishing* ; so « niḥ+kālayati, Skt. niṣkāl- » > নিকালে « nikālē » *drives out*, নিকলে « nikâlē » *comes out* ; « niḥ-cala, Skt. niścala » > MB. নিচল « nicâlâ » ; so « niḥ-caya, niścaya » > MB. নিচয় « nicâẏâ » ; « catur+ka=catuḥka, catuṣka > চক, চৌক « câkঌ, câukঌ ». The forms with geminated stops, without aspiration, occur in MIA. (Pali and 'Prakrit'): see Pischel, § 329 : cf. Pali forms like « niccala, nikkantō », Aśōkan « dukara (=dukkara) », etc. In the development of the NIA. forms there seems to have been but slight influence of Sanskrit in this matter. A MB. form like নট « nâṭâ », besides নঠ « nâṭhâ » (=naṣṭa) as in the ŚKK., is a *sts.*; the genuine *ṭh.* is found in the NB. নাট « nāṭঌ » < নাঠ « nāṭhâ » *crumpled.*

[C] Interchange among Consonants.

Voicing and Unvoicing.

244. In addition to interchange of aspirates and non-aspirates, voicing of unvoiced consonants, and the reverse process, as well as changes in the place of articulation, occur in Bengali. In some cases, the changes are quite normal, and in others, they are uncommon, and can be explained as being due to contamination with a form similar in sound or meaning, or to dialectal admixture, or again to the workings of folk-etymology.

Voicing of [k] to [g] is common enough, though not the rule, being found in some *sts.* words in the Standard Colloquial. Intervocal [k > g > ɡ] was the normal change in Transitional and Second MIA. This tendency to turn a voiceless stop to its voiced spirant form has continued down to the present day in NB. (see 'Brief Sketch of Bengali Phonetics,' § 31). Examples of NB. forms with the [g] developed out of the [k] are: কাগ « kāgঌ » (kāka), বগ « bâgঌ » (baka), শাগ « śāgঌ » (śāka),

গুলা, গুলো « -gulā, -gulō » (-kula-), আদিগ, দিগ « -(ā)digå » (-ādi-ka); MB. মগর « mågårå » (makara); NB. ছগড়, ছগড়া, ছেগড়া « chågåṛ, chågåṛā, chēgåṛā » (śakaṭa); East Bengali ‡ হগল « hågål » (sakala); etc. Unvoicing of [g] to [k] is rather uncommon, although it is found: *e.g.*, পাকড়ী « pākåṛī » for পাগড়ী « pāgåṛī » *turban* (cf. « pragraha »: influence of পাক « pāk » *a twist*); ঝকড়া « jhåkåṛā » beside ঝগড়া « jhågåṛā » *quarrel*; কুঁচ « kũc » *a red berry* (guñjā).

Interchange of [c͡ʃ, ɟʒ] are found: *e.g.*, বিচি « bici » (bīja: or < vṛtya-?); পাঁচন বাড়ী « pãcañ-bāṛī » *a cowherd's stick* (prājana); পাঁজী « pãjī » *almanac* (pañjikā, pañcikā); cf. কুলচী, কুলুচী beside কুলজী, কুলুজী « kulåcī, kulucī: kulåjī, kulujī » *family annals* (kula-pañjikā); কুঁচ « kũc » (guñjā); etc.

Interchange of [ṭ] and [ḍ > ṛ] occurs to some extent. Also of [t, d]: ছুত « chut » < ছুধ « chudha » *unclean* (chuddha; kṣubdha); বেসাদ « bēsād » < বেসাতি « bēsāti » *trade* (*bēśå-, vāiśya-); ভায়াদ « bhāyād » < *ভাইয়াতি « bhāiyāti » *kinship, kin* (bhāi-); MB. সগল্লাদ « sågållād » < সকলাত « såkålāt » *a costly stuff* (Perso-arabic « saqalāt »); etc.

[b], medial and final, is found as [p] in some cases: *e.g.*, পাপড়ী < পাবড়ী « pāpåṛī < pābåṛī » *petal* (pabba-, parva); আদোপে « ādōpē » < আদোবে « ādōbē » *at all, in the least* (Skt. locative « ādāu » + Bengali locative affix « -ē » < « *ādōẘē »). Persian words in some cases show [p] for [b]: *e.g.*, « xarāb » > খারাপ « khārāp » *bad*, « mihrāb » > মেরাপ « mērāp » [mærap] *awning*: cf. Assamese কিতাপ « kitāp » *book* < « kitāb ». [p] also becomes [b]: বাপু > বাবু « bāpu > bābu »; থাবড়, থাবড়া < থাপড়, থাপ্পড়, থাপড়া « thāpåṛå, thāppåṛå, thāpṛā > thābåṛå, thābåṛā » *slap*; দাপ > দাবড়ী « dāpå > dābåṛī » *vaunting, intimidation* (darpa > dappa), beside দাপট « dāpåṭå » *might, prowess.*

Change in Point of Articulation.

245. The more important changes which occur in Bengali are of « ś » [ʃ] to « c, ch » [c͡ʃ, c͡ʃh], of [l] to [n], and *vice-versa*, in initial positions, and final and preconsonantal [w̃] to [m]. These are discussed later, while treating the above sounds. Shifting of articulation from one point

to another is also found. The most important item in this connection is the cerebralisation of OIA. dentals—a change which Bengali has inherited from Māgadhī. The absence of cerebralisation in Bengali is perhaps due to the influence of non-Māgadhī dialects. This is discussed below, under the Cerebrals. Interchange between gutturals and palatals as well as cerebrals and palatals seems to characterise some groups of *dēśī* words: see under Palatals. Change of OIA. dental stops and aspirates before « y » to palatal affricates is a phonological alteration which is derived from MIA.

« j » [ʃʒ] becomes « z » in a few cases in the Standard Colloquial (where the « z » sound is not the rule, unlike Eastern and Northern Bengali dialects, which normally alter IA. « j » to « d͡z, z »). Foreign « z » normally becomes « j » in Bengali.

Some other changes in articulation, which are the result of assimilation in MIA., are treated below.

Besides the above, there are sporadic cases of other interchange, *e.g.*, between a guttural and a labial, which are not characteristic, and which will be noted at their proper places.

[D] Doubling of Consonants.

246. Consonants in Bengali are doubled, or rather, lengthened, in *ts.* words, when they occur before « r, l, y, v »: *e.g.*, চক্র [cʃ͡ɔk:rɔ = cʃ͡ɔkkrɔ], শুক্ল [ʃukklɔ = ʃuk:lɔ], দিব্য, দিব্যি [dib:ɔ = dibbɔ, dib:i = dibbi], অদ্য [od:o = oddo], বীরত্ব [birɔt:ɔ = birɔttɔ], etc. Doubling is found in Hindōstānī and other loan-words: *e.g.*, পাত্তা [pat:a, patta] *address*, সাচ্চা [ʃ͡ac:ʃa, ʃ͡acʃ͡a], etc. Through loss of intevening vowel, and through consequent assimilation as well, NB. has developed double consonants: *e.g.*, আট্টা [aṭṭa, aṭ:a] *eight pieces* > « āṭ(h)à + -ṭā »; পাত্‌তে [patte] < পাতিতে « pātitē » *to spread*; মাত্তে [matte] < মারতে, মারিতে « mārtē, māritē » *to beat*; 'যাগ্‌গে' [ʃʒagge] <যাক্‌গে, যাউক গিয়া « jāk gē, jāuk৯ giyā » *let it go!*; etc., etc.

In the above instances, doubling or lengthening is historical, or merely phonological. But there is another kind of lengthening in New Bengali

which is semantic. With a desire to emphasise, or to modify the idea in other ways, a consonant is frequently doubled in NB. (This has been noticed in the 'Brief Sketch of Bengali Phonetics,' § 53.) Thus, একেবারে [ækebare] *at once, for good, entirely* : একেবারে [ækkebare] *for all time, entirely (without hope of any alteration)* ; গোঁপ [gõ:p] *moustache*: চৌগোঁপ্পা [cʃougõppa] *whiskers*; হাত [fia:t] *hand* : হাত্তা [fiatta] *handful, with full hand, right and left, line or thread drawn by the hand* ; ধাক্কা [dfiakka] *push* : ধকল [dfiokol] *strain*, and MB. ঢেকা [ḍfiɛka] *push* ; থাপড় [thapoṛ] *slap* : থাপ্পড় [thappoṛ] *generally = slaps in quick succession* ; চোর [cʃo:r] *thief* : জোচ্চোর [ʃʒoccʃor] from জুয়াচোর [ʃʒuacʃor] *cheat* < *cheat at dice* ; ছেকড়া [cʃhækṛa], beside ছক্কড় [cʃokkoṛ] *a ramshackle carriage* (śakaṭa) ; etc. This kind of doubling for emphasis seems to have been due to stress —the consonant following the stressed vowel being lengthened through accession in force of the whole syllable. It originated in Bengali possibly during the OB. period.

[E] Changes of Consonants in Contact: Assimilation.

247. The behaviour of Bengali vowels under mutual influence with in a word, in separation and in contact, has been described under Epenthesis and Vowel-Mutation, etc. Contraction has taken place largely in lMB. and NB., by which vowels have been dropped, and consonants which were separated in OB. and eMB. have been brought together. New consonant groups have thus developed in NB. (see p. 251). These have in the main retained there original character, in preserving their point of articulation, but in the matter of breath or voice, there has been assimilation in most cases.

[r] tends to be dropped within a word or sense group before palatals, cerebrals and dentals : *e.g.*, তার জন্য « tārɨ jànyà » *for him* generally becomes [taʃʒonno], কার্য্য « kāryà » becomes [kaʃʒo], গায়ের জ্বালা « gāērɨ jwālā » *heat of the body* > *anger* becomes [gaeʃʒala], মূর্চ্ছা « mūrchā » > [mucʃcha], জলের টব « jàlērɨ ṭàbɨ » *water tub* becomes [ʃʒoleṭṭob], পাখীর ডানা « pākhīrɨ ḍānā » *bird's wing* > [pakhiḍḍana], কার তরে « kārɨ tārē » *for whose sake*

> [kattəre], সর্দার « sårdār » *chief*, from the Persian « sardār » > [ʃəddar], etc. Also [r] is dropped before gutturals and labials, in *tss.*, *e.g.*, স্বর্গ > স্বগ্গ « swårgå » > [ʃəggo], তর্ক > তক্ক « tårkå » > [təkko], সর্প > সপ্প « sårpå » > [ʃəppo], গর্ব্ব > গব্ব « gårbå » > [gəbbo], ধর্ম্ম > ধম্ম « dhårmå » > [dɦəmmo], but not in *tbh.* or foreign words and sense-groups: *e.g.*, তার কাছে « tarɨ̀ kāche » *with him*, চরখা, চরকা « cårk(h)ā » *spinning wheel* < Pers. « carxah », বরগা « bårɨ̀gā » *rafter* < Portuguese « verga », করবার < করিবার « kårbārɨ̀ < kåribārɨ̀ » *to do*, etc.: see under [r], *infra*.

In the NB. dissimilar groups like « kt(h), tk(h), pt(h), tp(h), kṭ(h), ṭk(h), ṭt(h), tṭ(h), ṭp(h), pṭ(h), gb(h), bg(h), gd(h), dg(h), bḍ > br, ḍb > ṛb » etc., the stops (and the flap sound of « ṛ ») are fully exploded. In such groups, where we have breathed stop + breathed stop or aspirate, or voiced stop + voiced stop or aspirate, there is no modification: *e.g.*, থাক্‌তে [thakte] *to remain*, শুকতারা [ʃuktara] *the planet Venus*, আঁতকে [ãtke] *having sustained a shock of fright*, আপ্ত [apto] *self*, হাতপা [ɦatpa] *hand and foot*, আটকা [aṭka] *fixed*, হাঁটতে [ɦãṭṭe] *to walk*, সাপ্টা [ʃaṭa] *embracing all*, বাগদী [bagdi] *a caste*, etc.; হাটখোলা [ɦaṭkhola] *a mart*, পাতক্ষীর [patkhir] *condensed-milk paste spread out on a leaf*, সাবধান [ʃabdɦan] *careful*, অদ্ভুত [ədbɦut] *strange*, দুগ্ধ [dugdɦə] *milk*, উদ্‌ঘাটন [udgɦaṭon] *opening*, etc.

In the case of aspirate (stop, or affricate) + aspirate or stop, voiced or unvoiced, there is deaspiration of the first aspirate. In deliberate and careful pronunciation, however, the aspirate may be retained (so far as it can be retained in a final position in a syllable) where we have a sound of a different class. Examples: রথতলা [rəthtəla > rəttəla] *car-festival common*; দুধদই [dudɦdoi > duddoi] *milk and curds*; আধখান [a:dɦa + tha:n > adthan, atthan] *half a piece (of cloth)* (not [adɦthan]); মুখখানি [mukhkhani > mukkhani] *that face*; বাঘবন্দী [baghbondi > bagbondi] *capturing the tiger (a game)*; মুখপোড়া [mukhpoṛa > mukpoṛa] *burnt-face (a term of abuse)* ([mukhpoṛa] is also heard); so কাঠফাটা [kaṭhphaṭa > kaṭphaṭa] *wood-splitting (said of sunshine)*; আদফোটা [adɦiphoṭa > adphoṭa] *half-open (as a flower)*; and Persian « haftah, taxtah » > *হফতা, *তখতা « hâphtā, tâkhtā » > হপ্তা [ɦəpta] *week*, তক্তা [təkta] *a plank*; পথঘাট [pəthgɦaṭ > pətgɦaṭ] *roads and ferries*; বাঘভাল্লুক [bagɦbɦalluk > bagbɦalluk] *tigers*

and bears, etc., which can have the aspirate retained in the first consonant of the group.

There is *Regressive Assimilation* when stops (or affricates) and aspirates of the *same class* occur side by side, by the first sound acquiring or losing voice according as the second one in the group possesses or does not possess it: and the first sound, if it is an aspirate, loses its aspiration; *e.g.*, এক-গাড়ী [æggaṛi] *one waggon-load* < [æ:k+gaṛi]; এক ঘুম [æ:k+gʃium > æggʃium] *one (long) sleep*; ডাক-ঘর [ḍa:k+gʃo:r > ḍaggʃor] *post-office*; রাগ করা [ra:g+kɔra > rakkɔra] *to be angry*; মেঘ করেছে [me:g(ɦi)+korecʃhe > mekkorecʃ(h)e] *it is cloudy*; পাঁচজন [pã:cʃ+ʃʃo:n > pãʃʃon] *(five) people*; কাজ-চালানো [ka:ʃʃ+cʃalano > kaccʃalano] *carrying on work, just useful*; বড়-ঠাকুর [bɔṛ(ɔ)+ṭhakur > bɔṭṭhakur] *husband's elder brother (among women)*; চট-ঢাকা [cʃo:ṭ+ḍɦaka > cʃoḍḍɦaka] *covered with gunny cloth*; এতদিন [æto+din > æddin] *such a long time*; MB. সাদিনা < সাতদিনা [ʃa:t+dina > *ʃaddina, ʃadina] *seventh-day celebration (after birth of a child)*; হাত-দেখা [ɦa:t+dækha > ɦaddækha] *seeing one's palm, feeling one's pulse*; হাত-ধরা [ɦa:t+dɦɔra > ɦaddɦɔra] *catching one's hand, under one's control*; দুধ-তোলা [du:dɦi+tola > duttola] *vomiting milk (as a baby)*; সব-পাওয়া [ʃo:b+paŏa > ʃoppaŏa] *get all*; পাপ-ভয় [pa:p+bɦoe > pabbɦoe] *fear of sin*; বাপ-বেটা [ba:p+bæṭa > babbæṭa] *father and son*; etc. But when there are stops or aspirates, voiced and unvoiced, of *different classes*, ordinarily there is absence of assimilation to voice or breath of the first sound. It is, however, not unlikely that there is a certain amount of unavoidable unvoicing of a voiced consonant before an unvoiced one, and *vice-versa*, and there is no full assimilation in this case. Entire assimilation to voice or breath is generally absent because of the full explosion given to the first stop or aspirate: *e.g.*, আদফোটা [a:dɦi+phoṭa > adphoṭa] *half-open (flower)* does *not* become [atphoṭa]; so চাঁদপাল [cʃãdpal] *a personal name* is never [cʃãtpal], হাটবাজার [ɦaṭbaʃʃar] *mart and fair* is not [ɦaḍbaʃʃar, ɦaṛbaʃʃar], nor is আজকাল [aʃʃkal] *to-day and morrow, nowadays* assimilated to [acʃkal]; so we have সাতডাক [ʃatḍak] *seven calls, calling one for a long time*, শিবতলা [ʃibtola] *Śiva's spot (temple of Śiva)*, হাঁড়কাঠ from হাঁড়িকাঠ [ɦãṛikaṭ(h) > ɦãṛkaṭ(h)] *sacrificial stake*, রাজপুত-বীর [raʃʃputbir] *a Rajput*

warrior, সব-কিছু [ʃɔbkiʧhu] *everything*, ইট-গাদা [iṭgada] *brick-stack*, এক-দম [ækdɔm] *at one breath, entirely*, মোট-বহা [moṭbɔ(ɦ)a] *load-carrying*, etc., etc. There are a few exceptions, however: *e.g.*, লোকজন [lokʒon] *people* is heard frequently as [logʒon], and ছোটদাদা [ʧhoṭodada] *little elder brother* (= *fourth elder brother*, generally) becomes ছোড়দা [ʧhoṛda]; বুঝিতে > বুঝতে « bujhitē > bujhtē » *to understand* becomes [buzte, buste]; but a case like উপকার [upɔkar > ubgar] is through a MB. and NB. tendency to voice intervocal breathed stops [ubɔgar].

Before the (unvoiced) sibilant, there is no unvoicing of a voiced stop or affricate, or aspirate: *e.g.*, আধ-সেরা [ad(ɦ)ʃera] *of half a seer weight*, সাঁজ-সকাল [ʃãʒ(ɦ)ʃokal] *evening and morning*, ঘোড়-শাল [gɦoṛʃal] *stable*, দেব-সভা [debʃɔbɦa, -ʃɔba] *gods' gathering*, etc.

Assimilation of consonants of different groups, also a regressive assimilation, is found in some cases. Here, however the points of articulation are not very much removed from each other. [t, d], and occasionally [ṭ], become assimilated to a following [ʧ, ʤ], and sometimes to [ʃ]; and [ʧ] is assimilated to a [ʃ]: *e.g.*, হাত ছিনিয়ে [ɦa:t+ʧhinie > ɦaccʃhinie] *having jerked away the hand*; বাদ যাবে [ba:d+ʤabe > baʃʤabe] *it will be deducted*; গোট-চার > গোচ্চার [go:ṭ+ʧa:r > gocʧar] *some four, a few*; পাঁচশ [pã:ʧ ʃɔ: > pãʃʃo] *five hundred*; পাঁচসাত [pã:ʧ+ʃa:t > pãʃʃat] *five and seven, a few*; পাঠশাল [pa:ṭh+ʃa:l] *school* becomes [paʃʃal]; স্যাঁৎসেঁতে [ʃæ̃tʃẽte] *damp* becomes [ʃæ̃ʃʃẽte], and পঞ্চসেরী « pañca+sērī » *five seers* probably gave « *pãśśérī, pãśarī », whence পশুরী [poʃuri]; etc., etc. Assimilation of a dental stop to a cerebral one is extremely rare: *e.g.*, Barisal dialect সাতটা > সাটটা [ʃaṭṭa > ʃaṭṭa] *seven pieces, 7 o'clock*.

The dialect of Chittagong is most advanced in the matter of assimilation, both by shifting the point of articulation and by voicing or unvoicing. Assimilation in Chittagong Bengali is both progressive (in the case of stops and affricates and the sibilant and [l]), and regressive (in the case of the nasal): *e.g.*, পাঁচগোয়া [pãʧgoa] *five pieces* > [pãcʧoa], দাঁতগুন [dãtgun] *teeth* = Standard Bengali দাঁতগুলি [dãtguli] or দাঁতগুনো [dãtguno] > [dãttun]; রোজকার [roʒkar] *daily wages, income*, from Persian « rōz-kār », > [roʒʒar]; যাইতে পারি [ʒaite pari] *I can go* = [ʒaittari]; দিতে পারি

[dite pɑri] *I can give* > [dittɑri]; উপকার [upɔkɑr] *benefit*, > [*upkɑr > uppɑr]; নমস্কার [nɑmɔʃkɑr, nɔ̃:ʃkɑr] *obeisance* > [nɔ̃ʃʃɑr]; বৃহস্পতি [briɦiɔʃpoti] > [biuʃʃut]; শিয়ালগোয়া [ʃiɑlgoɑ] *the jackal* > [ʃiɑlloɑ]; ঘোড়া +নী « ghōṛā+nī » *mare* [*gʃioṛni > *gʃiuṛni > gunni]; দেখিতে না পারি [dekhite nɑ pɑri] *I can not see* <[deinnɑri]. (See Basanta-Kumār Chatterji, VSPdP., 1326, No. 2, p. 108ff.). The dialect of Chittagong thus stands apart from most Bengali dialects, and from MIA., in which assimilation is generally regressive.

Progressive Assimilation, however, is found in a few cases in Bengali (*e.g.*, জব্দ [ʤɔbdɔ] *punishment* from Persian [zabt] < Arabic [ḍabṭ-]); also in MIA. (cf. « lagna, bhagna » > « lagga, bhagga », beside « *lanna *bhanna » : cf. Bengali হিলান « hilānā » = « abhilagna », and ভানা « bhānā » *to pound, as rice* = « bhagna »).

[F] Metathesis.

248. Aspiration and deaspiration by metathesis of « h », *e.g.*, « bhaginī > bahin, mahiṣa > mahiñsa > bhaĩs », have been noticed before. Methathesis is found occasionally in OIA. and MIA. (cf. Wackernagel, I, 239; Pischel, § 354; Geiger, Pali Grammar, § 47). Some Bengali words are the result of this early metathesis: *e.g.*, ঘর « ghàrā < *garha, gṛha »; বহিন, বোন « bàhin, bōn < bahiṇī < bhaginī »; দ, দহ « dà, dàhà > daha < hada < hrada » *lake, tank*; হাল্‌কা « hālkā », cf. MIA. « halukka = laghuka » *light*, etc. Instances in Bengali: সুঁট্‌কী [ʃũṭki] *dried fish* (*sukhaṭī < śuṣka); গজরা « gàjrā » *to fret and fume, to be filled with rage* (*ts.*√garj); পর « √pàr » *to put on*, MB. পহ্‌র « pàhrà », < পহির « pàhirà » (pari+dhā); চট্‌কা « √càṭkā » *knead with the fingers* < কচ্‌টা « kàctā » (? √kṛṣ+vṛt); কনুই « kanui » = [konui] *elbow* (< « *kaṇōhi < kahōṇi < kaphōṇi »); ফাল « phāl » *leap*, cf. লাফ « lāph » *leap* (Skt. lampha); MB. পিনহে « pinàhē » *puts on* < পহিনে « pàhinē » (apinah-); MB. পহিচান « pàhicānā » *knowledge, acquaintance, recognition* (paccahiñña, pratyabhijñā); মাড়োয়ারী « mārwārī » *man from Marwar* (mārwārī); etc., etc. In *ts.* words, we find metathesis in a few cases: *e.g.*, পিচাশ « picāśā » (piśāca);

মটুক « mâṭukâ » (mukuṭa) ; গড়ুর « gâṛurâ » (garuḍa) ; etc. Also in foreign words : *e.g.*, কুলুপ « kulup » *padlock* (Arabic « qufl ») ; বোঁচকা « bõckā » *bundle* (Turkī « buǧca ») ; ডেস্ক, বাস্ক « ḍēskâ, bāskâ » = English *desk, box*, beside the proper ডেস্ক, বাক্স « ḍēskâ, bāksâ » ; etc.

[G] Haplology.

249. Loss of consonant through haplology is found in some instances in Bengali, mainly in *stss* : *e.g.*, সমিভ্যারে « sâmibhyārē » (samabhivyāhāra-) ; সাব্যস্ত « sābyâstâ » *arranged* (savyavastha) ; পাদোকজল « pādōkâjâlâ » (pādōdaka-jala) ; আন্দ « ândâ » as a name (ānanda) ; নৌকতা « nâukâtā » *social courtesies* (lāukikatā) ; নরুন « nârun » *nail-cutting instrument* (nahaharaṇī, nakha-haraṇikā), etc. Also -দা,-দি « -dā, -di » for দাদা, দিদি or দিদী « dādā, didi (-ī) » *elder brother, elder sister*. Cf. the Anglo-Indian spellings *Krishnagar, Krishnath* (for *Krishna-nagar, Krishna-nāth*), which are apparently based on not uncommon colloquial forms.

[H] History of the Bengali Consonants.

[I] The Stops and Affricates, and Aspirates.

(1) The Gutturals or Velars [k, kh, g, gh].

250. Intervocal stops tend to be lazily pronounced in NB., leading frequently to 'under-articulation,' or open or spirant articulation with very little audible friction. (See 'Brief Sketch of Bengali Phonetics,' §31.) In the Standard Colloquial, intervocal [k, g] of NB. is found to be dropped in a few cases : *e.g.*, ঠাকুর > ঠাউর [ṭhakur > ṭhaur], ঠাকুরাণী > ঠাক্‌রণ > ঠাউরুণ > ঠান [ṭhakurani > ṭhakuron, ṭhaurun > *ṭhauru, *ṭhaun > ṭhan]. The elision in the above words has been noted in the ordinary orthography. But voiced and open articulation of [k] is not infrequently heard, though not in careful speech. But it has not become sufficiently prominent to attract the attention of Bengali speakers, although here and there in *stss*. and foreign words, we see the [g] fully established : *e.g.*, -গুলা

[-gula], plural affix (-kula-) ; ছেগড়া [cʰegṛa] *ramshackle carriage* (śakaṭa-) ; MB. সগল্লাদ « sâgâllād » (Perso-Arabic « saqalāt »), etc. : see *supra*, p. 445.

Final [-k] in some *tbh.* verb and other forms has become [g] in the Standard Colloquial, *e.g.*, দিক্, নিক্ « dik, nik » *let him give, let him take* frequently become [dig, nig].

This voicing of non-initial [k] is a MIA. speech-habit which has thus continued down to the present day. It is found occasionally in OB. as well : *e.g.*, « saguṇa » =» śakuni » in Caryā 50.

Elision of intervocal [k, g] has almost become the rule in the Chittagong dialect—*e.g.* [ʃiɔl, ʃiɔ:l] = সকল (sakala) ; [ɑɑʃ, ɑ:ʃ] = আকাশ (ākāśa) ; [doɑn] = দোকান (Perso-Arabic « dukān ») ; [ʃioun] = শকুন *sts.* (śakuni) ; [ʃiɔr] = শিকড় « śikâṛ » *root* ; [ʃiɔl] = শিকল « śikâl » *chain* ; [ḍɑibɔ] = Standard Bengali ডাকিবে « ḍākibē » *will call* ; etc., etc.

In some East Bengali dialects, intervocal [k, kh] take the spirant sound of [x] : this [x] seems to have had its origin in the unvoicing of [g > ɣ]. We also find [ɦ]. The [x], and the [ɣ] where it is heard, do not have a strong friction : it is a mere open consonant, that is all. Thus we have, in the western and south-western Vaṅga dialects especially, টাকা [ṭɑkɑ] *rupee, money* as [ṭɑɣɑ, ṭɑɦɑ, ṭɑxɑ] ; ঢাকা *Dacca town* is heard as [ḍɦɑkɑ, ḍɑɦɑ, ḍɑɣɑ, ḍɑxɑ] ; Perso-Arabic « muqaddamah » > মোকদ্দমা, মোকর্দ্দমা « mōkâddâmā, mōkârdamā » *law-suit* becomes [moxɔrdɔmɑ, moɦɔrdɔmɑ] = Standard Colloquial [mɔkoddɔmɑ] ; Perso-Arabic « ḥākim » > হাকিম « hākim » *judge* is found as [ɑɦim] ; « mulluk » > মুল্লুক « mulluk » *country* becomes, in the locative মুল্লুকে « mulluke », [mullɑɦe, mulluɣe, mulluxe] ; Skt. « nārikēla » is transformed to [nɑirɦɔl, nɑirxɔl]. This fricative pronunciation is sometimes indicated by হ « h ».

Initial [k, kh] becomes the spirant [x] regularly in Eastern and South Eastern Vaṅga (Sylhet, Tipperah, Noakhali and Chittagong) : *e.g.*, কালী [kɑli] < [xɑli], কিছু [kicʰhu] *a little* = [xisu], কথা [kɔthɑ] = [xɔtɑ], কেন [kɛno] *why?* > [xɛ:n], কলঙ্ক [kɔloŋko] > [xɔloŋkɔ], কভু [kobɦu] *even at times* = [xovu, xobu], কোর্ত্তা [korta, kotta] *coat* = [xotta], খোলাইতে [kholɑite] *to put off* = [xolɑit], etc. Final [k] also is found as [x] commonly enough : *e.g.*, তিলক [tilɔk] > [tilox], এক [æ:k] > [ɛx, hɛx, æ:x],

etc. This spirantisation is not found in the other Vaṇga dialects, but initial [k] when it becomes intervocal within connected speech can become [x] or [ɦ]. The Chittagong and Eastern Bengali habit of turning initial [k] sounds to [x] also affects foreign words, and Bengali *maulavīs* from Chittagong, which is one of the predominantly Muhammadan districts of Bengal, often pronounce Arabic and Persian with [x] for [k, q]; and this has given rise to this Persian saying among Bihārī and Hindōstānī *maulavīs* in Calcutta and elsewhere: « agar cātgāmī šavad maulavī, 'xiblah' u 'xābah' u 'xuzā' mī-ravī » *if the Maulavī is a Chittagongese, then you go to* xiblah, xābah *and* xuzā (*for* qiblah *direction faced in praying*, qa°bah *shrine at Mecca*, kujā [Persian] *where*).

In the 'Crepar Xaxtrer Orthbhed,' Bengali [k] is transcribed « c » before « a, o, u », « qu » before « e, i », and « q » when final: *e.g.*, « crepā » কৃপা (kṛpā); « coina » কন্যা (kânyā); « cotha » কথা (kâthā); « xocol » সকল (sâkâlⱥ); « tthacur » ঠাকুর (ṭhākurⱥ); « thacuq » থাকুক (thākuk) *let it remain*; « queno » কেন (kēnâ) *why?*; « eq » এক (ēkⱥ); « quissu » কিছু (kichu) *a little*; « eque » একে (ēkē) *by one*; « thaquia » থাকিয়া (thākiyā) *having remained*; « houq » হৌক (hâuk) *let it be*; « naroq » নরক (nârâkⱥ); etc. There is no representation of a spirant pronunciation in the 'Crepar Xaxtrer Orthbhed.'

251. Bengali [k] in *tbh.* and *dēšī* words comes from MIA. « k-,-kk- ». Initially, Bengali [k] is derived ultimately from—

OIA. « k- »: কর « kâr » (√kṛ); কাম « kāmⱥ » (karma); কলা « kâlā » (kadala-); কাজ « kāj » (kārya); কালি, কাল « kāl(i) » (kalya); কান « kānⱥ » (karṇa); কু « ku » (ku-); কানাই, কানু « kānāi, kānu » (kṛṣṇa-); কাছ « kāchⱥ » (kaccha, kakṣa); কে « kē » (ka-); কয় « kây » (kathayati); etc., etc.

OIA. « kṛ-, kr- »: কিনে, কেনে « kinē, kēnē » (krīṇāti); কোশ « kōśⱥ » (krōśa); কোল « kōlⱥ » (krōḍa); কাঁদে (krandati); MB. কৈল « kâilâ » (kṛta+illa-); etc.

OIA. « kv- »: কাই « kāi » *paste* (kvātha); কোথা « kōthā » *where?* (kva-+tra); কনকন্ [kɔnkɔn], an onomatopoetic, based on « √kvan ».

OIA. « sk- > k- »; কাঁধ « kādha » (skandha): see p. 438.

Intervocally (and finally in NB., through dropping of vowels at the end of the word), NB. [k] comes from—

MIA. « k » after « ŋ » < OIA. « -ŋk-, -kr-, -ŋkr- -rk- »: কাঁকণ « kāṅkaṇa » (kaŋkaṇa); পাঁক « pāṅka » (paŋka); বাঁকা « bāṅkā » (vaŋka-, vakra); সাঁকো « sāṅkō » (saŋkrama); কাঁকর « kāṅkara » (kaŋkara, karkara); কাঁকড়া « kāṅkaṛā » (kaŋka-ṭa-, karka-); etc.;

from MIA. « -kk- » from the following OIA. groups:

« -k- », doubled in old *tss.* in MIA.: এক « ēka » (ĕkka, ēka); also একুশ « ēkus », etc.;

« -kk- »: চিকন « cikaṇa » *fine* (cikkaṇa): cf. তেল-চুকচুকে « tēla cukcukē » *glistening with oil* = MIA. « tĕlla-cikkaṇa »; নাকার, নেকার, ন্যাকার [nukur > nækur] (ṇakkāra, nyakkāra); কুকুর « kukur » (kukkura); হাক beside হাঁক « hāka, kāka » (MIA. hakka);

« -kn- »: MB. মুকল « mukala » (mukka < *mukna = Skt. mukta); নিকা « nikā » *to wipe* (ṇikka < *nikna < √niñj, nij);

« -ky- »: শিকা « śikā » (śikya-); মানিক « mānika » (māṇikya);

« -kr- »: চাক « cāka » (cakra); শুক-তারা « śuka-tārā » *Venus* (śukra); টক « ṭaka » *sour, acid* (« takra » *sour-milk, whey*: or onomatopoetic?); বিকি « biki » *sale* as in বিকি-কিনি « biki-kini » *transaction, buy and sell* (vi-krī-); etc.;

« -kv- »: পাকা « pākā » (pakva);

« -kṣ- »: নিকি « niki » (cf. Skt. nikṣā);

« -ṭk- »: ছক « chaka » (ṣaṭka);

« -tk- »: চুক « cuka » (cukka, cyut-kṛ); উকুন « ukuna » *louse* (utkuṇa);

« -rk- »: পাকুড় « pākuṛ » (parkaṭī); মাকড় « mākaṛa » (markaṭa); তাকে, তাকায় « tākē, tākāĕ » (tarkayati); আকন্দ « ākanda » (akka-manda = arka-mandāra); etc.;

« -lk- »: ‡উক « uka » (ulkā);

« -ḫk- » = Skt. « -ṣk-, -sk- »: চক « cāk », চৌকা « cāukā » (catuḫ + ka: catuṣka); নিকাশ, নিকাল, « nikāś, nikāl », see p. 445; নাক « nāka » (nas, *naḫ + ka > ṇakka); দুকাল « dukāla » (duḫkāla);

« -g- », through transference of voice in MIA.: ঢাকে « ḍhākē » *covers* (ḍhakkaï, *ṭhagati < sthagati ?).

From MIA. « -ŋgh- », from OIA. « -ŋgh- » > « -k- » in NB.: শিকনি « śiknī » (śiŋghaṇa) ; শুঁক, শোঁক « śūk, śōk » (śuŋgh, śiŋgh) ; etc.

From MIA. « -kk- » from Semito-Iranian « -kk- », written « -ky- » in Late Sanskrit: সেকরা « sēkʻārā » (*sekka-āra ; see pp. 194-195).

Some isolated cases are কুঁচ « kũcʻ » (guñjā), and শিকড় « śikaṛʻ », OB. (Sarvânanda) « śihaḍa » (śiṣphā-) ; cf. শিকল « śikâlʻ » (MIA. « siŋkala », Skt. « śṛŋkhala », beside « sṛŋkā »).

« k » occurs in a few words of probable *dēśī* origin: *e.g.*, বুক « bukʻ » *chest*, বক « bâkʻ » *chatter*, ঝক « jhâkʻ » *talk, jangle* (*dēśī* jhakkia), ডাক « ḍākʻ » *shout, call*, হাঁক « hãkʻ » *shout* (*dēśī* hakka), etc.

« k » is also found as an affix in numerous nouns and derived verbs: *e.g.*, মোড়ক « mōṛakʻ » *packet* (< √muṛ *roll, fold*) ; চড়ক « cârâkʻ » *hook-swinging, 'Churruck' festival* (caḍakka, √caḍ *ride*) ; চটক « câṭâkʻ » *shine, brightness* ; ঝলক « jhâlâkʻ » *flame* ; ঝিলিক « jhilikʻ » *spark, shine* ; চমক « cământâkʻ » *flash, startle* ; মড়ক « mârâkʻ » *pestilence* ; বৈঠক « bâiṭhâkʻ » *seat, stand for anything, assembly, session* ; আটক « āṭâkʻ » *restraint* ; হালকা « hālʻ-kā » *light* ; ছোকরা « chō-kʻ-rā » *lad* ; ছোটকা « chōṭʻ-kā » *little one*, cf. Hindī « laṛ-kā » *boy* beside Assamese « lârā » [lora] (*laḍ-i-a-) ; থাক « √thāk » *remain* ; থক « thâk » *be at stand still* ; মচকায় « mâcʻkāy » *sprains, crackles, breaks* ; হেঁচকায় « hẽcʻkāy » *drags* ; টপকায় « ṭâpʻkāy » *leaps* ; etc. The NB. « -ka-, -k- » is derived from a MIA. « -kka- ». Hoernle traces this « -kka- » to the OIA. root « -kṛ- »: cf. « camat-kṛ » in Skt. = « camakka », « *cyut-kṛ » > MIA. « cukka », etc. ('Gaudian Grammar,' § 204; JASB., 1880, I, p. 37). Jules Bloch thinks that this « -k- < -kk- » goes back in part at least to an OIA. « -kya- < -akīya », as in « pārakya < pārakīya », but also suggests a Dravidian affinity ('Langue Marathe,' p. 105). (See *infra*, under *Morphology*: Origin of the Formative Affixes: '-k-'.)

Final « -kʻ » as a verbal person affix (3rd person) occurs in Bengali: *e.g.*, করিলেক « kâr-il-ē-kʻ » *he did*, যাইবেক « jā-ib-ē-kʻ » *he will go*, দিউক « di-u-kʻ » *let him give*, etc.: the origin of this « -kʻ » is obscure, but

it is possibly the OIA. pleonastic « -k- », present in MIA. as « -kk- ». (See later, under *Morphology*: the Verb: 'Personal Affixes.')

Interchange between « -k- » and « -g- » has been noticed above. In one case, « -k- » occurs for « -p- » in the Calcutta dialect: দুকুর « dukurâ » for দুপুর « dupurâ » *mid-day* (dvi-prahara); for « t », in the phrase পারক-পক্ষে « pārâkâ-pâkṣē », also পারগ « pārâgâ », for পারত পক্ষে « pārâtâ pâkṣē *on the eventuality of one being able*. In MB. (ŚKK.), we have the *sts.* কুকুহল « kukuhâlâ » (= kutūhala).

In *ts.* words, « -k- » occurs long (or double) in interior groups with « y, r, l, v, m »; also in « -khy- »: *e.g.*, শাক্য [ʃakko], চক্র [ʧokkrə], শুক্ল [ʃukklə], পক্ক [pokkə], রুক্মিণী [rukkini], বাখ্যা [bækkhæ, bækkhɑ]. In ক্ষ « -kṣ- », pronounced [kkh], we have a similar doubling of « k ».

[k] is commonly found through deaspiration of intervocal, final and preconsonantal [kh] in NB.

[k] in foreign words, Persian, Portuguese, English, is noted below.

252. [kh], intervocally and finally, has a tendency to be deaspirated in the Standard Colloquial. Intervocal [kh] in Typical East Bengali often becomes the spirant [x], with very little audible friction, and is reduced to the glottal spirant [ɦ]: *e.g.*, দেখেন [dækhen] *sees, you see* (*honorific*) = [dɛxen, dɛɦen]; রাখিও « rākhiō » *you will keep*, Standard Colloquial [rekho], becomes [raiho]; এখানে [ekhɑne] *here* = [ɛɦɑne]. In certain cases, the spirant is dropped: *e.g.*, Chittagong Bengali [tɔɔn, tɔ:n] = তখন [tɔkhɔn] *then*.

In the 'Crepar Xaxtrer Orthbhed,' « qh » is used for [kh]: *e.g.*, « qhaibar » = খাইবার *to eat*, « xaqhi » = সাক্ষী *witness*, « duqh » = দুখ *pain*. The spirant pronunciation is probably indicated in an occasional case like « rahoal » = রাখোয়াল « rākhŏālâ », NB. রাখাল « rākhālâ » *herdsman*—unless it is a typographical error for « qh ». Initially in some cases we have « c » for « qh »—*e.g.*, « calax » = খালাস (Perso-Arabic « xalāṣ ») *freeing*, « coraq » = খোরাক *meal* (Pers. « xurāk »), « cadaia » = খেদাইয়া *driving away*, « cazuaite » = খাজুআইতে, খাউজাইতে *to scratch*, etc., which may be due to the mistake of the transcriber.

[kh], initially, comes from MIA. « kh- », derived from—

OIA. « kh- »: খায় « khāy » (khādati); খাজা « khājā » (khādya-); খাজুর, খেজুর « khā/ējurɨ » (kharjura); ‡খাওজা « khāojā < khāju-ā- » *scratch* (kharju, √kharj); খাট « khāṭɨ » (khaṭvā); খন্তা « khântā » (khanitra-); খাঁড় « khãṛɨ » (khaṇḍa); খয়ের « khåyērɨ » (khadira); খুঁড় « √khũṛ » *dig* (khuḍḍa: < ?); খাই « khāi » (khāta-); etc.

« kṣ- »: ক্ষেত, খেত « khētɨ » (kṣētra); খড়ী « khåṛī » (khaṭikā); খুদ « khudɨ » (kṣudra); খীর « khīrɨ » (kṣīra); খেয়া « khēyā » *ferry* (kṣēpa-); MB. খুদ্দা, খুঁয়ে (kṣāuma-); খণ « khânɨ » (kṣaṇa), also ক্ষণ = [khɛ:n]; *sts.* খেমা « khĕmā » [khɛmɑ] (kṣamā); খুড়া « khuṛā » (*kṣudra-tāta).

The change of « kṣ » to « kkh » seems to have been the Māgadhī change. The « ch » development of « kṣ » characterised the North-western IA. dialect of the Early MIA. period. Bengali has some « ch » words as well, which apparently were later additions into the Eastern speech.

OIA. « k- », by aspiration: *e.g.*, খুঁচি « khũci » *basket* (kuñcikā); খিল « khilɨ » (kīla, khila); খেল « khēlɨ » (khēlā); খিচুড়ী « khicuṛī » (kṛṣara, *kṛsarikā); খরতাল, খত্তাল « khår(å)tālɨ, khåttālɨ » *cymbals* (kara-tāla); খাবল « khābålɨ », *sts.* (kavala: *tbh.* = kálɨ, see p. 347); খাল *skin* (cf. Skt. « khalla », beside « kṛtti »); MB. (ŚKK.) *sts.* খস্তরী « khåstårī » (kastūrī), খরল « khårålå < *kårålå » (garala *poison*); NB. খোলঙ্গা « khōlåṇgā », beside কুলঙ্গী, কুলুঙ্গী « kuluṇgī » *niche* (= *dēśī* ?); MB. কুটীনাটী « kuṭīnāṭī » *details*, *bickering* = NB. খুঁটীনাটী « khũṭīnāṭī » (kuṭṭa-); etc.

« sk- »: খামার « khāmārɨ » *barn* < *house with posts* (skambhâgāra); খাড়া « khāṛā » *standing*, *erect* (MIA. khaḍḍha = OIA. *skabdha).

The word « khānɨ » খান *place*, *piece*, is probably a blend of « khaṇḍa » + « sthāna »: see page 365. « kh- » is found in some *dēśī* words: *e.g.*, খিড়কী « khiṛɨkī » (khaḍakkī), খড় « khåṛɨ » *straw*, খাঁখার « khākhārɨ » *abuse*, *insult*, cf. Assamese খঙ্গ « khåṇ » *anger* (*khaṇkha-).

Medially and finally, [kh] is from—

OIA. « -khy- » > MIA. « -kkh- »: বাখান « bākhānɨ » (vyākhyāna);

OIA. « -ṇkh- » > MIA. « -ṇkh- »: শাঁখ « śãkhɨ » (śaṇkha);

OIA. « -k- » > MIA. « -kk- », by aspiration: শালিখ beside শালিক « śālikhā, śālikā » (śārikā). Cf. বাঙ্কুর as in বেঁটে বাঙ্কুর « bẽṭē bāṇkhurā » *short, dwarfish* (? *vaṇk-ura, vakra);

OIA. « -kṣ- » > MIA. « -kkh-, -ṇkh- »: কাঁখ « kā̃khā » (kakṣa); পাখী « pākhī » (pakṣin); রাখে « rākhē » (rakṣati); আখড়া « ākhāṛā » (akṣa-vāṭa-); আঁখ « ā̃kh » (akṣi); MB. পেখ « pēkhā » (prēkṣā); মাখে « mākhē » (mrakṣati); লাখ « lākhā » (lakṣa); চাখে « cākhē » (cakkhaï, √cakṣ); etc.;

OIA. « -kṣṇ- » > MIA. « -kkh- »: MB. তীখ « tīkhā » (tīkṣṇa); but cf. Oṛiyā « sānā » *small* from « ślakṣṇa » (MIA. saṇha);

OIA. « -kṣm- », in the old *sts.* লক্ষ্মী=লক্খী [lokkhi] (lakṣmī); MB. *sts.* লখিন্দর « lākhindārā » (lakṣmîndra);

OIA. « -tkh-, *-dkh- » > MIA. « -kkh- »: উখাড় « ukhāṛā » (utkhāta); উখলী « ukhalī » (*udkhala-, udūkhala-);

OIA. « -ṣk(h)-, -skh- » > MIA. « -kkh- »: পুখুর « pukhurā » (puṣkarini); শুখা « śukhā » (śuṣka-); পাখালে « pākhālē » (pra-skhālayati);

OIA. « -ḷkh- » > MIA. « -kkh- »: দুখ « dukh » [du:kh] (duḷkha).

In one or two words, in the Apabhraṁśa or Old Bengali stage, medial « -kkh- » has been reduced to « -h- »: লাহা, লা « lāhā > lā » (lākṣā); and কে « -kē- », from « *kahi » (locative of « *kakha =kakṣa »: or < « kaï < kaē < kṛtē »?). In বহা « bāhā » *to go astray*, from earlier বহকা « bāhākā » (vahakka, √vah), cf. Hind. « bahaknā », « kh » originates through transposition of the aspirate.

« kh » occurs in *ts.* words: সুখ « [ʃukh], শাখা [ʃakha], খ্যাতি [khæti], দুঃখ [dukkhɔ], লিখ [likh], etc.; *sts.* খিদা « khidā » (kṣudhā); রক্ষা [rokkhæ, rokkha] (rakṣā), etc.

In the medieval pronunciation of Sanskrit, ষ « ṣ » was [kh] in Northern India. See p. 243. This value of « ṣ » was unknown to Bengal. But some *tss.* and *sts.* from Northern India (Western and Eastern Hindī and 'Bihārī' areas) with [kh] for « ṣ », have come to Bengali also, mainly through the Brajabuli dialect: *e.g.*, MB. দোখ « dōkhā » (dōṣa); NB. রোখ « rōkhā » (rōṣa); ঝখ in ঝখমারী « jhākhā-mārī » *evil deed* < *the*

work of a fisher-man, cf. ঝষ « jhāṣṭ » *fish* (jhaṣa)(?); MB. হরিখ « hārikhṭ » (harṣa); বরিখন, বরিখে « bārikhāṇā, bārikhē » (varṣaṇa, varṣati); জোখ, জুখ « √jōkh, jukh » *weigh, compute* (« juṣ », as in the 'Dhātu-pāṭha' = « paritarkaṇam, ūhaḥ: 'jōṣayati kāntam anyâsaktam bālā,' tarkayati ity arthaḥ »: NIA. « √jōh » *watch, see, want* is probably another derivation).

Persian [x] regularly becomes [kh] in Bengali.

253. [g] is spirantised and dropped intervocally in the Chittagong dialect: *e.g.*, [ɑoin] = « āgâin, āgani » (agni); [bʰiɑina] = ভাগিনা « bhāginā » (bhāginēya); [sɑol] = ছাগল « chāgâlṭ » *goat*; [kɑots] = কাগজ « kāgâjṭ » *paper* (Persian « kāgaẕ »); [ʃɑu] = সাগু « sāgu » *sago* (< Portuguese), etc. But on the whole, [g] derived from OB. is preserved in the NB. dialects.

Initial [g] comes ultimately from—

OIA. « g- »: গান « gānṭ »; গা « gā » (gātra: see p. 255); গেল « gēlâ » (gata + illa); গোরু « gōru » (gō-rūpa); গোঠ « gōṭhṭ » (gōṣṭha); গুণ « guṇṭ » *quality, rope*; গুণ, গুন « √gun » *count* (√gaṇ); গুন « gunṭ » *gunny* (gōṇī); গালি « gāli » (garha-); গোরা « gōrā » (gāura-); গলে « gâlē » (galati); গেরুয়া « gērua » (gāirika »); গলা « gâlā » (gala-); গাল « gālṭ » *cheek* (MIA. galla = gaṇḍa); গোলা « gōlā » *ball* (gōlaka-); etc.;

OIA. « gr- »: গাঁ « gā̃ » (grāma); গাঁট « gā̃ṭ » (granthi); MB. গাঁথাঘর « gā̃thā-ghârâ » (grantha- + gṛha); গুমট « gumâṭṭ » for « *gimâṭṭ » (grīṣma-); MB. গিম « gimâ » (grīvā); গহনা, গয়না « gâhânā, gâynā » *ornaments* (grahaṇa-); etc.;

Medial and final [g]:

OIA. « -gu- » > MIA. « -gg- »: আগি, আগ « āg(i) » (agni-); লাগ « lāgṭ » (lagna); ভাগ « bhāg » *run away, flee* (bhagna);

OIA « -gy- » > NIA « -gg- »: MB. জোগ « jōgâ » (yōgya);

OIA. « -gr- » > MIA. « -gg- »: আগা « āgā » (agra-); পাগ « pāgṭ » *turban* (pragraha); MB. আগন, আঘন « āgânṭ, āghânâ » (agrahāyaṇa);

OIA. « -ŋg- »: this « -g- » is frequently nasalised to « ŋg > ŋ » (see pp. 363-364): MB. ভাঁগ « √bhā̃g- » (bhaṇga);

OIA. « -ḍg- » > NIA. « -gg- »: খাগ-ড়া « khāgṭ-ṛā » *reed* (khaḍga);

OIA. « -dg- » > MIA. « -gg- » : মুগ « mugɲ », beside মুঙ্গ « muŋ(g) » (mudga) ; মুগুর « mugurɲ (mudgara) ; মাগুর « māgurɲ » *a fish* (madgura) ;

OIA. « -rg- » > MIA. « -gg- » : আগল « āgalɲ » (argala) ; মাউগ, মাগু « māgu > māug » (*mārguka) ; OB. « mā(ŋ)ga », NB. « māŋ » (mārga) ; মাগে, মাঙ্গে « mā(ŋ)gē » (mārgayati) ; বাগ « bāgɲ » (varga) ; দুগী « dugi » *contemptuous form of the name* Durgā (*durgikā) ;

OIA. « -lg- » > MIA. « -gg- » : ফাগ, ফাগুন « phāgɲ, phāgunɲ » (phalgu, phālguna) ; বাগ « bāgɲ » *rein* (valgā).

OIA. « -k- » is represented by « -g- » in the numeral এগার « ēgārâ » [ægaro], which is a *sts.* in Late MIA. Similar « -g- » for « -k- » is found in a few other *stss.*, *e.g.*, বিগড়া « big(å)ṛā » *to get vicious* (vikaṭa-), beside the *tbh.* বেয়াড়া « bēāṛā » *bad, ugly, vicious* ; পগার « pågārɲ » (prākāra) ; MB. মগর « mågârâ » (makara), etc. See *ante*, pp. 445, 446.

[g] stands for Skt. « g » in *tss.* and *stss.* : জগ « jågâ » (jagat), যুগ « jugɲ » (yuga), আগমন « āgâmânɲ » (OB. *tbh.* « avaṇā », NB. আনা « ānā »), ব্যগ্র [bæggrə] (vyagra) ; etc. [g] also occurs in the pronunciation of the Skt. groups « -ghr-, -ghv- » : ব্যাঘ্র [bæggfirə] (vyāghra) ; শীঘ্র [ʃiggfirə], (śīghra), with a *sts.* শীগ্‌গির [ʃiggir] ; MB. লগ্‌ঘী, নগ্‌ঘি « lågghī, någghī » (laghvī) = *lesser* (*call*), *passing water*. [gh] > [g] is found in final and intervocal positions, and sometimes the spelling notes it : *e.g.*, *sts.* বাগড়া « bāgɲṛā » (vyāghāta + -ḍa-) ; হাগরে < হাঘরে « hāgårē > hāghårē = hā-ghåriyā » *homeless, vagrant* (cf. হাভাতিয়া > হাবাতে « hābhātiyā > hābātē » *beggar, cryer for rice*).

Ts. « jñ » is pronounced « gy̆-, -ggy̆- » ; and sometimes in MB. and NB. we find the *sts.* orthography গেয় « gēy- » : *e.g.*, গেয়ান, অগেয়ান « gēyānâ, âgēyānâ » (jñāna, ajñāna) ; আগে « āgē », as in the phrase কার্য্যকাগে « kārjyâñ-cāgē » as a preliminary in formal or official letters and legal documents (= Skt. « kāryañ ca ājñāpayati » : see Rāmêndra-sundar Trivēdī, 'Śabda-kathā,' San 1324, pp. 93, 94).

In South-eastern Bengali of Chittagong, there is a euphonic [g] originating in consonant groups with the semivowel « -y- » : *e.g.*, সিন্দুগিয়া

« sindūriyā » *vermillion-coloured*, Standard Colloquial [ʃ̍idure], Typical East Bengali [ʃ̍induira,-irĭa] > [ʃiⁿduirgɛ] ; কুড়িয়া « kuṛiyā » *lazy*, Standard Coll. [kuṛe], Typical East Bengali [kuira, kuĭrĭa], > [xuirgɛ]; Standard Beng. পারিব « pāribā », East Bengali পারিবাম « pāribām, pāirbām » পারিমু « pārimu » *I shall be able* = Chittagong * পারিয়ম্ « pāriyàm » > [*phairĭom > ɾairgĭom] ; Standard কহিল+ই+ওই « kâhilâ+i+ōi » *he said indeed, he said* > [*koillĭoi > xoilgĭoi, xoilgoi]. Cf. Sinhalese *sts.* « sūrgya- » = Skt. « sūrya » , beside *tbh.* « ira ».

In foreign words, Persian « g, ﮒ », and sometimes « ق », are represented by [g] in Bengali. See *infra*.

254. [gɦ] medial and final tends to be deaspirated in NB. Medial [gh], however, is very rare in *tbhs.* See under 'Nasalisation,' *supra*, p. 364.

Initially, NB. [gɦ] comes from :

OIA. « gh- » : ঘন « ghânâ » *thick* (ghanaka) ; ঘড়ী « ghâṛī » *bell, watch* (ghaṭikā) ; ঘাম « ghāmɲ » *sweat* (gharma) ; ঘা « ghā » *wound* (ghāta) ; ঘী « ghī » (ghṛta) ; ঘাট « ghāṭɲ » (ghaṭṭa < ?) ; ঘিণ « ghiṇɲ » (ghṛṇā) ; ঘাস « ghāsɲ » (ghāsa) ; ঘাঁট, ঘিঁট, ঘুঁট « ghāṭ, ghĩṭ, ghũṭ » (ghṛṣṭa) ; ঘষ « √ghâṣ » (√ghṛṣ) ; ঘোল « ghōlɲ » *churned milk, whey* ; *making turbid* (ghūrṇ-) ; ঘোড়া « ghōṛā » (ghōṭa-, < *dēśī*).

OIA. « ghr- » > MIA. « gh- » : ঘানী « ghānī » *oil-mill* (« ghrāṇikā » ; cf. « ghraṇaka », in Siyadoni Inscription, Lalitpur, U. P., 11th century, Ep. Ind., I, pp. 162 ff.).

Medially : from OIA. « -ghr- » > MIA. « -ggh- » : বাঘ « bāghɲ » (vyāghra).

In ঘর « ghårɲ » < « gṛha », we have [gɦ] by transposition of [ɦ] and [r] in the Late OIA. or Early MIA. period (gṛha > *garha). Cf. NB. *tts.* অঘ্রাণ « âghrāṇɲ » (agrahāyaṇa), beside the folk form [ɔggeraṇ] : the *tbh.* is found in MB., আঘন, আগন « āg(h)ânâ ». So Oriyā « ghēnāï » = « gṛhṇāti ».

In বিঘৎ « bighât » *span* = « vitasti », in MIA. « vihatthi » (Pischel, § 207), we have [gɦ] for MIA. « h », which itself is obscure. The word

বিঘা « bighā » *a land measure,* is similarly unexplained, although it has been connected with « varga ». The following [gñ] words also are among the obscure ones: some of them seem to be of *dēśī* origin. *E.g.*, OB. ঘাটা « ghāṭā », NB. ঘাড় « ghāṛa » *neck* cf. Hind. « ghōṭ » ; ঘাবড়া « ghābaṛā » *to be confused,* cf. Hind. « ghabrānā » ; ঘুঙড়ী « ghuṇṛī » *whooping cough* (probably onomatopoetic, but cf. Hind. « ghumrī » *vertigoe*) ; ঘুঙ্গনী, ঘুগনী « ghuṇṇī, ghugaṇī » *boiled peas with spices and oil* (Hind. also = ghūṇṇgnī) ; ঘোমটা « ghōmṭā » *veil*, cf. Hind. « ghūṇṇghaṭ » ; ঘোঙ্গা, গোঙ্গা « g(h)oṇṇgā » *dumb* ; ঘুচা « ghucā » *be finished* ; ঘেঁচি as in ঘেঁচি-কড়ি « ghẽci-kaṛi » *knotted cowry-shell* ; connected with the last probably is ঘিঞ্জি « ghiñjī » *close, narrow, crowded* ; ঘের « ghērạ » *circumference* ; ঘুঙ্গুর « ghuṇṇgurạ » *tiny bells worn round feet in dancing, morris-bells* = Hind. « ghuṇṇgrū » ; ঘুমসী, ঘুঙসী « ghumsī, ghuṇṇsī » *thread ornament for the waist* (cf. Hind. « ghūmnā » *to turn round*) ; ঘুণ্টী, ঘুণ্ডী « ghuṇṭī, ghuṇḍī » *tiny buttons* (also in Hind.) ; ঘুষ « ghusạ » *secret, bribe*, as in « ghusạkī » *a secret harlot*, ঘুষঘুষে জ্বর « ghusạghusē jwārạ » *slight fever not easily noticed* ; OB. « ghāla- » *throw* (also in Rājasthānī) ; ঘুম « ghumạ » *sleep*, cf. ঝিমান « jhimānā » *doze*, Marāṭhī « jhõpṇẽ » *sleep* ; ঘুড়ী « ghuṛī » *paper kite*, Hind. « guḍḍī ».

For gutturals interchanging with palatals, see below, under Palatals.

(2) The Palatal Affricates [c͡ʃ, c͡ʃh, ɟ͡ʒ, ɟ͡ʒɦ].

255. The OIA. palatal *stops* [c, ch, ɟ, ɟɦ] became palatal *affricates* in Eastern India as early as the First MIA. period (see §132). This value is preserved in West Bengali ; but in North and East Bengali, they have been further modified to the dental affricates and sibilants [t̪s̪, s, d̪z̪, z]. There are class dialects in the [t̪s̪]-areas, however, in which the West Bengali [c͡ʃ]-pronunciation is occasionally heard. The 'Crepar Xaxtrer Orthbhed' employs both « ch » (= [ʃ] in Modern Portuguese, but earlier [tʃ]) and « s » for the sound of চ « c » in Dacca Bengali : *e.g.*, « chair » = চাইর, চারি « cāir < cāri » *four*, also « sair » ; « xancha, xansa » = সাঁচা « sãcā » *true* ; « panse » = পাঁচে « pãcē » *fifthly* ; « chinio, sinio » = চিহ্ন « cihnā », etc. Probably both the sounds of [t̪s̪] and [c͡ʃ] were heard. But Padre

Assumpçam writes « s, ss » invariably for ছ « ch »: « asse » = আছে « āchē » *is*, « quissu » = কিছু « kichu » *a little*, « soe » = ছয় « chây » *six*, « saoal » = ছাওয়াল « chāŏāl » *child*, etc., which would demonstrate that [s] was the only value of ছ. The letters জ ঝ « j, jh » are both transliterated by « z »: it seems it was due more to the absence in the Portuguese-Roman script of a symbol for the sound of [ʃʒ, dʒ] rather than to that sound being not heard in Dacca Bengali: for the [ʃʒ] sound is not yet entirely suppressed by [dz] there.

256. The dental affricate and sibilant pronunciation does not seem to have developed in West Bengali, and in the 'Bihārī' speeches. As it has been suggested before (p. 79), the dental affricates (*i.e.*, tongue-tip alveolar or dental, instead of tongue-middle supra-alveolar sounds) probably originated in North-eastern Bengal and Kāma-rūpa, whence they advanced south and west, and affected the East Bengali (Vaŋga) dialects to a considerable extent. The Tibetan values of the letters ཚ, ཛ, ཛྷ as « ts, tsh, dz » in the transliteration of Sanskrit words (cf. Śarat Chandra Das, 'Tibetan-English Dictionary,' Calcutta, 1902, p. xviii) would perhaps indicate some influence from North and East Bengal in the closing centuries of the 1st millennium and beginning of the second millennium A. C., when Bengali scholars had a great deal to do with the religious organisation of Tibet. The [ts] values were probably established in Kāma-rūpa as early as the 7th century, whence they spread to East Bengal and North Bengal. In West Bengali (Rāḍha), « c, ch » never shifted their palatal or supra-dental articulation, as we see from a frequent change of শ, ষ, স « ś, ṣ, s » = [ʃ̇] to চ, ছ [c͡ʃ, c͡ʃh], and from an occasional change of চ, ছ [c͡ʃ, c͡ʃh] to শ, স [ʃ̇]. This alternation of [c͡ʃ, c͡ʃh] and [ʃ̇] means simply the introduction or removal of the stop element: cf. the derivation of [ʃ] in French from earlier [tʃ]: Late Latin « caballus » [kaba|:us] > [kava|:us] > [cava|:u] > [tʃɛvaɬə] > [ʃəval]. As there is no reason to doubt that the sibilant in Old Bengali, at least in the west, was anything but [ʃ̇], this interchange would be a strong evidence that « c, ch », etc., never altered their *palatal* affricate character (whatever might have been the change in East and North Bengali, and in the old Kāma-rūpa dialect).

257. The interchange between « c, ch » and the sibilants is quite old in IA. (see Jules Bloch, 'Langue Marathe,' p. 111). In OIA. « t, ñ, + ś », i.e. [t, ɲ, + ç], optionally results in [cch, ɲch] : here only the stop [t] shifts its position back to the palatal region, and the spirant [ç] is turned to the aspirate stop [ch], or the nasal [ɲ] alters the spirant to a stop aspirate [ch] : *e.g.*, [tat + çrutwa: > tacchrutwa:, swapaɲ çe:te: > swapaɲche:te:]. In some rare cases, alternation of « ś » and « ch » in OIA. and MIA. forms is due to Indo-European phonetic conditions : *e.g.*, IE. « *koipo-, *skoipo- » (k = 'palatal') > Skt. « śēpa- », MIA. « chēpa » respectively (Wackernagel, I, §230b). In other cases, interchange between « c, ch » and the sibilants « ś, s » are due to OIA. and MIA. dialectal pronunciation. Skt. forms like « Vaśiṣṭha, kiśalaya, kēśara, kalaśa, śūkara, Kōśala, Kaṅśa », etc., side by side with the earlier « Vasiṣṭha, kisalaya, kēsara, kalasa, sūkara, Kōsala, Kaṅsa » in all probability originated in the dialect with « ś » pronunciation (Māgadhī) ; and similarly « sūrpa » for « śūrpa » was an imposition from an « s » dialect in Early MIA. In Aśōkan Prakrit, and in Pali, as well as in the Second MIA., we have cases of original OIA. or derived MIA. « cc, cch » occurring as sibilants : *e.g.*, « cikisā » (Dhauli, Jaugada and Kalsi) beside « cikichā, cikīchā » (Girnar) (= cikitsā) ; « usapāpitē » (Rumindei, < *ucchrapāpita = ucchrāpita) ; « usāhena » (Pillar edicts : utsāhēna) ; « usaṭēna » *by the best* (Rock edict X : a Māgadhī form = « utsṛṭa + ucchrita ») ; Pali « ussīsaka » (ucchirṣaka), « ussussati » (ucchuṣa-), « ussaŋkī » (ucchaŋkī), « ussa » (ucca), « Kakusanda » (Krakucchanda), « kasira » (kṛcchra) ; Second MIA. « ūsavēha » (ucchrapayata), « ūsaa » (ucchaya), etc. (cf. Pischel, §327a). The change, at least for the Eastern speech of Aśōka and for the Pali forms (which can reasonably be expected to have been on a Māgadhī basis), was that of the palatal *affricates* of Māgadhī to palatal sibilants : these palatal sibilants would be indifferently written « ś », or « s » (through the influence of the orthography of the Western Prācya court dialect, presumably), in the Māgadhī or the Eastern Prācya area ; and the « s » spellings would establish the dental sibilant pronunciation in the Midland speech, Pali, as representing Late OIA. « cch » : thus, OIA. [cikitsa:] > [*cikiccha:] >

pre-Aśōkan Prācya [cʃ͡ikicʃ͡ha:] > Aśōkan Māgadhī [*cʃ͡ikiʃʃ͡a:], written « cikisā » (but in Girnar probably pronounced [cikiccha:], with stop sounds, and written « cikichā, cikīchā »); so OIA. « *ucchrapāpita (= ucchrāpita) » gave [*ucʃ͡hapa:pita] > [uʃʃ͡apa:pita], written « usapāpit- », and OIA. [utsṛta] possibly through influence of « ucchrita », in Prācya Māgadhī [*ucʃ͡haṭa] > [uʃʃ͡aṭa], written « usaṭa ». The Pali forms may similarly expected to have been based on eastern forms in « śś » for « cc, ch », written « s » or « ss »; and Skt. « kacchapa » seems to be from a Māgadhī « *kaśśapa » = OIA. « kaśyapa ». Is the Later Māgadhī (Second MIA.) orthography « śc » for the derived « cch » connected with a « śś » pronunciation which originated at least as early as the time of Aśōka? Cases of « ś » for the affricate « ch » in Bengali are given below, under the treatment of [ʃ͡]. This « s, ss » in the orthography of the Aśōkan inscriptions and of Pali does not by itself warrant the conclusion that the « s, ss » is the result of a [t͡s, ss] pronunciation of [c, ch] in the Early MIA. period. Change of « cch » > « ss » in the Second MIA. period (Pischel, §327a), may, however, be partly due to the pronunciation of « c » as « t͡s » and of « ch » as « s » which in all likelihood characterised the source forms of Marāṭhī (and Rājasthānī), at least dialectally, during the middle of the first millennium A. C.[1] And MIA. change of « ś, s » to « ch » (Pischel, §211), savours of being in its origin Māgadhan: but so great has been the intermixture among the IA. dialects, that the original threads in the texture have been overlapped, and are now almost impossible to trace. Hindī, for example has « lālac » = Skt. « lālasā », and « muskurānā » *smile*, but cf. Bengali মুচকিয়া হাসা « mucʃ͡kiyā hāsā »; and it is difficult to unravel the « c : s » relation. That Aśōkan and Pali « ss = cch » is on the basis of [ʃʃ͡] modification of Eastern IA. [cʃ͡h] only can be legitimately inferred.

[1] In Marāṭhī, MIA. 'c' has become the dental affricate 'ts' before the back vowels, and remains a palatal affricate before the front vowels; and MIA. 'ch' has become 's,' which changed to 'ś' before front vowels. In Sinhalese *tbhs.*, MIA. 'c, cc, ch, cch' changed to 's' in the Eḷu stage (W. Geiger, 'Litteratur und Sprache der Sinhalesen,' pp. 40, 46). The South-Western IE. speech, the source of Marāṭhī, and possibly also of Sinhalese, can well be assumed to have developed the 'ts' value for 'c' (= cś, tś) early.

258. According to the Prakrit grammarians, Māgadhī did not drop the intervocal palatals, while the other groups of MIA. did. This would be quite in accordance with the theory that the palatals become affricates in Māgadhī earlier than in Śaurasēnī and Mahārāṣṭrī, in which they were voiced and elided, like the guttural and the dental stops. As a descendant of Māgadhī, Bengali ought to preserve the intervocal palatals in *tbh.* words. We have a few words, which are *tbhs.*, showing « -c-, -j- » (page 247); but there are quite a number of other words with elided palatal; *e.g.*, MB. রাউত « rāuta » (rāja-putra); রাউল « rāula » (rāja-kula); সিউনী « siunī » (sōcanikā); MB. রয়নী « rāyanī » (rajanī), and সুই « sui » beside ছুঁচ, সূচ « chũc, sūc » (sūcī), in addition to the words noted above at p. 247. The words with elided palatal can very well be borrowings from the Śaurasēnī and Ardha-māgadhī. Bengali does not show long a list of words with the elided palatal, as Hindī for instance: words like « bīā » (bīja-), « ār » (ajagara), « lōyana » (lōcana), « bhōyana » (bhōjana), « baina, bayana » (vacana), « gayavara, gaivara » (=Old Rājasthānī gēmara) (gajavara), « gainda » (gajêndra), « bēnā » (vyajanaka), etc., are absent in Bengali; and if the ŚKK., which preserves a larger percentage of old *tbhs.* than any MB. work, employs the form রআনী « rāānī » once, রজনী « rājanī » is employed 5 times; and বচন « bacanā » is found 21 times, but a form with elided « c », never. And side by side with বিউনী « biunī », we have what may be regarded as the genuine Bengali বিজনী « bijani » (vyajanikā). The OB. of the 'Caryā-padas' shows a few forms with elision, like « nia » (=nija) (Caryās 13, 32, 39, 49), « biāra- » (= vicāra-) (Caryā 20), « baaṇa » (=vacana) (Caryās 38, 39, 45); but these have never taken root in the language, and look like being borrowings from Śaurasēnī Apabhraṅśa. On the other hand, the Caryās have a form like « ācāya » (Caryā 36 = ācārya) which seems to have been a living form in Eastern Magadhan, as it is attested in an Oṛiyā Inscription of the 13th century. Dropping of « c » occurs in the names of the numerals in Bengali: *e.g.*, বিয়াল্লিস « biāllisa » (dvācatvāriṅśat). But the numerals are exceptional words in most NIA., they represent a mix-up of forms from diverse MIA. dialects which were standardised possibly in the Midland during the Transitional MIA.

period, and they do not represent in all cases the genuine Māgadhī forms.

259. OIA. « kṣ » had a two-fold development in Early MIA., « (k)kh » and « (c)ch » : the former characterised the dialects of the East and the Midland, and the latter those of the North-west and South-west, as can be judged from the early epigraphical and other evidence. (Jules Bloch, 'Langue Marathe,' §104, p. 112). But there has been through an early inter-influence among the MIA. dialects a mingling of « kh » and « ch » forms in all NIA. speeches. Marāṭhī, as Bloch shows (*op. cit.*, p. 114), is in its origin a « (c)ch » dialect, being derived from a South-western IA. speech; and so are Sinhalese, and Gujarātī, in their basic stratum. « (c)ch » words seem to have been imposed upon Śaurasēnī (and Pali) by its western neighbour, the North-western speech; and Bengali and Oṛiyā, and other Māgadhan speeches, can reasonably be regarded as having obtained the « (c)ch » words they possess, side by side with the older « (k)kh » forms in some cases, as loan words through Śaurasēnī. The western or « cch » tradition in the pronunciation of « kṣ » seems to have become thoroughly naturalised in the Midland, and from thence into Eastern India excluding the Oṛiyā-Bengali-Assamese tracts; so much so that in the Western Hindī, and Eastern Hindī, and partly in the 'Bihārī' areas, the compound consonant क्ष « kṣ » normally has come to acquire the value of « cch », except in the present-day educated pronunciation, in which the « kṣ » sound seems to be a revival. Early and Medieval Hindī *stss.* are based on the « cch » pronunciation. Thus, in the 'Prithīrāja-Rāsau' we have « lacchana » (lakṣaṇa), « paccha » (pakṣa), « dacchina » (dakṣiṇa), « nachatra » (nakṣatra), « chana » (kṣaṇa), etc.; and we find क्ष used in old Hindī MSS. and inscriptions even for a « cch » which is not connected with « kṣ » : *e.g.*, पच्छिम for « pacchima » (<paścima). The North-western tradition thus overshadowed the original « (k)kh » change from OIA. in the Midland. And the « (k)kh » value, in its turn, is not absent in the Panjābī and Lahndī (*i.e.* North-Western) areas. But the « (c)ch » pronunciation never established itself in Bengali, despite a number of « ch » words imposed on it. The « (k)kh(y) » sound alone is

the basis for the alteration of « kṣ » in *ts.* and *sts.* words. (See pp. 226, 227, 228).

260. Quite a number of cases of the palatal affricate in NIA. go back to OIA. groups of a dental + « y »: thus « ty » [tĭ] > palatalised « t' » + « y » [tj] > [tç, tc] > « cc » [cc], later [cʃ] ; « dy » [dĭ] > [dj] > [dʝ] > « jj » [ʝ, ʝʒ] ; « thy » [thĭ] > [thj] > « cch » [cch, cʃh] ; « dhy » [dhĭ] > [dhj] > « jjh » [ʝɦ, ʝʒɦ]. (See p. 250.) The intermediate stage of [cc, ʝ], etc., is heard in the pronunciation of Sanskrit words in parts of Western and Southern India.

In the Māgadhī or Prācya speech of the First MIA. stage, as illustrated in the inscriptions of Aśōka, there was no palatalising tendency : « ty, dhy » etc. became « tiy, dhiy », and « dy » occurs as « yy ». The dialects of the West changed these groups to double palatals. Words with the palatalised sounds thus were introduced into Māgadhī, and later Māgadhī fell in line with other MIA. in this matter, giving up the vocalised forms native to it.

261. NB. [cʃ],=[ts] in East and North Bengal, in initial positions comes from—

OIA. « c- » > MIA., OB., MB. « c- » : চৌ- « cāu- » (catur-) ; চাঁদ « cãdą » (candra) ; চাক « cāką » (cakra) ; চাখে « cākhē » *tastes* (cakkhaï = caṣṭē < √cakṣ) ; চকা « cākā » (cakravāka) ; চল্লিশ « cālliśą » (catvāriṅśat) ; চিকণ « cikāṇą » (cikkaṇa) ; চিত « citą » (citta) ; চিয়ে « ciē » (cētayati) ; চীতা « cītā » (citra-) ; চুঁচি « cũci » (cucuka) ; চিন « ciną » (cihna) ; চুমে « cumē » (cumbati) ; চোঁচ « cõcą » (cañcu) ; etc. ;

OIA. « cy- » > MIA., OB., MB. « c- » : চুয়ে « cuē » *leaks* (cyavati).

Medial and final [cʃ] is from—

OIA. « -c-, -cc- » > MIA. « -c- (?), -cc-, *-ñc- » : উঁচা « ũcā » (*uñca-, ucca-) ; কাঁচ, কাচ « kãcą, kācą » (*kāñca, kāca) ; ছুঁচ « chũc », also সূচ « sūc » [ʃu:cʃ] (*chuñcī, *śūcī, sūcī) ; ছেঁচে « chẽcē » [cʃhæ̃cʃe] (*cheñcēi, sēcayati) ; পাঁচালি « pãcīlą » (*pañcīla, *pācīla = prācīra) ; (*peñca-, pēcaka-) ; পেঁচা « pẽcā » [pæ̃cʃa] ; বচন « bācāṇą » (vacana) ; etc. ;

OIA. « -ñc- » > MIA. « -ñc- » : আঁচল « ãcâlʔ » (añcala) ; কোঁচা « kõcā » *pleat* (√kuñc) ; ছাঁচ « chãcʔ » (sañca) ; পাঁচ « pãcʔ » (pañca) ; মাচা « mācā = mãcā » (mañca-) ; etc. ;

OIA. « -cy- » > MIA. « -cc- » : রুচে « rucē » (rucyati, or rōcatē ?) ;

OIA. « -ty- » > MIA. « -cc- » : আইচ « āicʔ » *a surname* (āditya) ; *কচহরী > কাছারী « *kacaharī > kāchārī » *office* (kṛtya-gṛha-) ; MB. কাচ « kācʔ » (kṛtya) ; কোনাচ « kōnācʔ » *at an angle* (kōṇatya-) ; *জিয়াচ > জেঁআচ « *jiyāca > jẽācʔ » (jīvitâpatyā) ; সাঁচা « sãca » (satya-) ; etc. ;

OIA. « -try- » > MIA. « -cc- » : বাইচ « bāicʔ », also বাইছ « bāichʔ » *boat-race* (*vāhicca, *vāhitrya ?).

By unvoicing of « j », we have [c͡ʃ] in a few instances : *e.g.*, পাঁচন বাড়ী « pãcânʔ-bāṛī » *cowherd's stick* (prājana : cf. Pali pācēti = OIA. prājayati) ; বেচে « bēcē » *sells* (beccaï < *bejjaï = vyayati : ?) ; কুঁচ « kũcʔ » (guñjā) ; কুলচী, কুলুচী « kulâcī, kulucī » for কুলজী « kulâjī » (kulapañjikā).

By palatalisation : a solitary instance in IA. is চিরাতা « cirātā », OB. « cirāyita- » (cilāitta-, cilāa + titta = kirāta-tikta) ; চাউল « cāulʔ », OB. তাউল, তাঁড়ুল « tāulâ, tãṛulâ » (taṇḍula < ?).

By deaspiration : OB. « cātipanna », but MB. ছাতীঅণ, ছাঞিঁঅণ « chātīâṇâ, chāñīaṇa », NB. ছাতিম « chātimʔ » (chattavaṇṇa, saptaparṇa) ; OB. « cillī » *cricket* (jhillī) ; বিচালি « bicāli » *straw* (<? *bichālī : cf. বিছানা « bichānā » *bed* < « vicchādana- ») ; *sts.* চান « cānʔ » beside ছান « chānʔ » (snāna) ; *dēśī* চেঙড়া, চেঙরা « cēṇṛā, cēṇrā » beside ছেমরা « chēmrā », ছোঁড়া « chõṛā » *urchin, lad.*

In *ts.* words, [c͡ʃ] is regular for Skt. « c ». The group « t + s », now pronounced as [t + ʃ], used to be [cc͡ʃh] in the earlier pronunciation with a Prakrit tradition which is now disappearing : *e.g.*, the *sts.* forms ভচ্ছ « bhâcchâ » (bhartsa-), কুচ্ছা « kucchā » (kutsā), বচ্ছর « bâcchârʔ » (vatsara), কুচ্ছিত « kucchitʔ » (kutsita), মচ্ছ « mâcchâ » (matsya), জোচ্ছনা « jōcchânā » (jyōtsnā) ; etc., etc.

[c͡ʃ] is also the result of assimilation : *গোট + চিআর > গোটচার, *গোটচের গোচ্চার, গুচ্চের « *gōṭa-ciāra > *gōṭcār, gōṭcēr > gōccārʔ, guccēr » *some four*,

some; হইতেছে > হ'চ্ছে, হ'চ্চে « hâitēchē > *hōitchē > hōcchē, hōccē » *is taking place, is happening* (?).

[c͡ʃ] in foreign words, represents Persian « c », also « s, ś »; Portuguese [tʃ (?), [ʃ], and English *ch* = [tʃ]: see *infra*.

262. Bengali [c͡ʃh]. Initially, it is from—

OIA. « ch- »: ছই « châi » (chadis); ছিনাল « chinālą » *woman of bad character* (chinna-); ছাত(ঁ) « chāt(ā) » (chatra-); ছে, ছেনী « chē, chēnī » (chēda, chēdanikā); ছাল « chālą (challi); ছাপর « chūpārą » (chatvara); ছেঁদা « chēdā » (*chinda-, chidra-); ছাড়ে « chārē » (chardati); ছাওয়া « chāŏā » (chāyā-); MB. ছেলি « chēli » (chaẏala-, chagala-); ছিঁড়ে « chīṛē » (chiṇḍati); etc., etc.;

OIA. « kṣ- »: in words which apparently did not belong to the Old Māgadhī dialect. *E.g.*, ছার, ছাই « chārą, chāi » *ashes* (kṣāra); *sts.* ছেপ « chēpą » *juice spat out after chewing* (*a betel-leaf*) (kṣēpa); ছিনা « chinā » *thin* (kṣīṇa-); ছুত < ছুধ « chutą < OB. chūdha » *pollution, untouchability* (kṣubdha); ছুরি « churi » (kṣura-); ছিপ » chipą » *a swift boat*; *an angling rod* (kṣipra);

OIA. « ś-, s- » > probably « ch- » in Late MIA.: *e.g.*, ছা « chā » (śābaka); ছেঁচা « chēcā » (√sic); ছুঁচ « chũc » (sūcī); ছুঁচি « chũci » *ceremonial cleanliness* (śāucika; śuci ?); ছুট « chuṭą » as in দোছুট « dō-chuṭą » *two pieces of cloth, dhōtī and chādar* (sūtra); ছুতার « chutārą » (sūtra-dhāra, -kāra); ছাতু « chātu » (śaktu-); MB. ছামু « chāmu » (sanmukha); ছুলি « chuli » *skin disease*, OB. (Sarvânanda) « sihuli » (cf. Skt. sidhma); ছী « chī » (śrī); *sts.* ছিরি « chirī » (MIA. *śī, sī < śrī); *sts.* ছত্তর « chăttarą » (satra); etc.

In some obscure words, Aryan and *dēśī*, we have also « ch- »: ছুঁয়ে, ছোঁয় « chõĕ < chũc » (chuvaï, *chuṁvaï = spṛśati); ছি « chī » *fie* (< ?); ছোট « chōṭą » *small* (< ?); etc.

Medially, [c͡ʃh] represents—

OIA. « -cch- » (from Indo-European « *-sko- ») > MIA. « cch »: *e.g.*, আছে « āchē » *is* (acchaï < acchati < *es-sko-ti); গাছ « gāchą » *tree* (gaccha *progression, line, race, tree* < *gʷṃ-sko-); পঁহুছে

« pâhũchē » *reaches* (*pahuñc[h]aï, pahucchaï < *prabhucchati < *pro + bhu-sko-ti); পুছে « puchē » (pucchaï < pṛcchati < *pṛk-sko-ti); also পিছল « pichâlā » (picchala < ?);

OIA. « -cch- » = « -kṣ- »: কাছ « kāchā » *neighbourhood* (kaccha, kakṣa); কাছি « kāchi » *hawser* (kacchikā = *kakṣikā ?); চাঁচে < চাঁছে « cā̃cē < cā̃chē » (*cañchaï, tacchaï, √takṣ); মাছি « māchi » (makṣikā); MB. পড়ীছা « pāṛīchā » *attendant* (pratīkṣaka-);

OIA. « -ch-, -cch- : বিছানা « bichānā » *bed* (vicchādana-); মেছ « mēchā » *name of a Tibeto-Burman tribe* (? mlēccha = *mlāikṣa);

OIA. « -tśv- » > « -cch- »: MB. উছাস « uchāsā » (ucchvāsa < ut-śvāsa);

OIA. « -ts- »: উছল « uchâlā » (ucchala < utsala); বাছা « bāchā » (vatsa-); বাছুর « bāchurā » *calf* (vatsa-rūpa). Also *sfss.*: মোচ্ছব « mōcchâbā » (mahôtsava), etc. See *supra*.

OIA. « -tsy- »: মাছ « māchā » (matsya);

OIA. « -thy- »: মিছা « michā » (mithyā-); MB. লাছ, নাছ « lāchâ, nāchâ », OB. (Sarvânanda) « lāccha » (rathyā);

OIA. « -ps- » > « -cch- »: গোছা « gōchā » (goccha-, *gṛp-sa-); MB. *sfs.* অপচ্ছরা « âpâcchârā », a blend of a *tbh.* in ছ « -ch- », « *accharā » + the *ts.* « apsarās ».

OIA. « -śc- »: তেরছ, তেরছা « tērâchā, tērâchā » (tiraśca-); পাছা « pāchā » (paścāt-); বিছা « bichā » (cf. vṛścika); *sfs.* বরছা « barâchā » (vraśca-); *sfs.* পছিম « pâchimā », also পচ্ছিম « pâcchimā » (paścima);

OIA. « -śy- » > « -cch- »: কাছিম « kāchimā (kacchapa, kaśyapa: see p. 335);

OIA. « -śr-, -sr- »: মোছ « mōchā » (mhacchu, śmaśrū); *sfs.* অজচ্ছল « âjâcchalā » (ajasra); *sfs.* পেচ্ছাপ « pēchâpā » (prasrāva); etc.

Interchange of [ʧh] and [ʃ] is very noticeable. It occurs in the naturalised forms of foreign words: *e.g.*, আকছার « âkchār » *continually* (Persian « akśar », < Arabic « akθar- »), পছন্দ « pâchândâ » *liking* (Persian « pasand »), ছয়লাপ « châylāp » *inundation* (Pers. « sayl-āb »), etc.; Western Hindī « jaiśā, taiśā, jaiśan, taiśan », etc., were written (and

possibly pronounced also) « ch » in MB.; *e.g.*, জৈছে « jâichē », তৈছন « tâichânṅ » = « jaisē, taisan »; so the archaic Western Hindī (=Avahaṭṭha) forms like যছু « yachu » (=jasu, yasya), তছু « tachu » (=tasu, tasya), etc. For change of [ʧh] to [ʃ], see *infra*, under the latter sound.

In parts of Central Bengal (Jessore, Nadiya, 24-Parganas, Hugli), intervocal [ʧh] is dropped: *e.g.*, গেইলে « gēilē » for গেছিলে « gēchilē » = গিয়াছিলে « giyāchilē » *you went, you had gone*; হ'য়েলো « hōyēlō » for হ'য়েছিলো « hōyēchilō » = হইয়াছিল « hâiyāchilâ » *did happen*. This elision is recent: [ʧh > ʃ > ʒ > ɹ > ĭ]: the spirant [ɹ] is at times faintly audible. In Chittagong and Noakhali, similarly, the « ch » > « s » of verb forms is altered and voiced, and the spirant which takes its place becomes transformed to a full guttural « g »: *e.g.*, করিয়াছি « kâriyāchi » > কইর্‌ছি [koirsi] > *[koirzi] > *[koirji] > [koirgji] > [koirgi], written কর্গি. The « z » pronunciation also is heard.

263. Bengali [ʤ] is written জ « j », or য « y » when connected etymologically with Skt. « y »: the য « y » spellings are recent (see *Introduction*, p. 226). Initially, [ʤ] comes from—

OIA. « j- »: জীয়ে « jīē » (jīvati); জল « jâlṅ » (jala); জাগে « jāgē » (jāgarti); জন « jânṅ » (jana); জানে « jānē » (jānāti); জামাই « jāmāi » (jāmātṛ); জিব, জিভ « jib(h)ṅ » (jibbhā < jihvā); জায়ফল « jāyṅ-phâlṅ » (jātiphala); জৌ « jâu » (jatu); জোহার « jōhārṅ » (jaya-kāra); OB. জাম « jāmă » (janma); *sts.* জগ « jâgâ » in compounds (jagat); OB. « jāṛī », NB « jālā » *large earthen jar* (*dēśī*); etc.;

OIA. « jy- »: MB. জেঠ « jēṭhṅ » (jyēṣṭha); জেঠা « jēṭhā » (jyēṣṭha-tāta); জুনি, জোনাকী « juni, jōnāki » *moonlight* > *fire-fly* (jyōtsnā-);

OIA. « jv- »: জলে, জ্বলে « j(w)âlē » [ʤ্বale] (jvalati); জ্বালে, জ্বালে « j(w)ālē » [ʤ্বale] (jvālayati); জ্বর « j(w)arṅ » (jvara);

OIA. « dy- »: জুআ, জুয়া « juā » (dyūta-); ‡জুঁই « jūi » *fire* (jyōtiṣ, √dyut-);

OIA. « y- »: যায়, MB. জায় « jāy » (yāti); যে, MB. জে « jē » (yaḥ); যবে, জবে « jâbē » *when* (yad-); যা « jā » *husband's brother's wife, sister-in-law* (yātā); জো, যো « jō » *opportunity* (yōga); জুয়াল,

যোয়াল « juāl৵, jōāl৵ » *yoke* (yōga-) ; যোত, জোৎ « jōt৵ » (yōktra) ; MB. জাঠা « jāṭhā » *stick, weapon* (cf. yaṣṭi) ; জাঁতা, যাঁতা « jãtā » *grinding mill* (yantra-) ; যুঝে, জুঝে « jujhē » (yudhyati) ; জুঝার « jujhār৵ » (jūjha + -āra < yudhy- + -kāra). In *sts.* forms also : *e.g.*, যতন « jàtànn৵ » (yatna), যুগ « jug৵ » (yuga), যব « jàb৵ » (yava), etc.

Medially and finally, the sources of [j̃] are—

OIA. « -j- » : রাজ « rāj৵ » (rājan) ; OB. « uju », MB., NB. আজলী « ājàlī » (ṛju-) ; ভাজ « bhāj৵ » (bhrāṭṛ-jāyā) ; শালাজ « śālāj৵ » (syāla-jāyā) ; MB. বিজনী « bijàni » (vyajanikā) ;

OIA. « -jj- » : কাজল « kājàl৵ » (kajjala ; = < kad-yala ? : cf. H. Petersen in the 'Indogermanische Forschungen,' 1914, Vol. XXXIV, p. 223) ; ভাজ « bhāj » *to fry* (bhrajj-) ; সাজ « sāj৵ » (sajjā) ; লাজ « lāj৵ » (lajjā) ; মাজ in মাজকাঠ « māj৵-kāṭh৵ » *heart of wood or timber* (majjā) ; etc. ;

OIA. « -jjv- » : উজল « ujàl৵ » (ujjvala) ;

OIA. « -jy- » : MB. বাণিজার « bāṇijār৵ » (vāṇijya-kāra) ; রাজ « rāj৵ » (rājya) ; ভেজায় « bhējāĕ » *is shut, shuts* (abhyajyatē) ;

OIA. « -jr- » : বাজ « bāj৵ » (vajra) ;

OIA. « -ñj- » : গাঁজা « gãjā » (cf. gañjikā) ; পাঁজর « pãjàr৵ » (pañjara) ; পিঁজরা « pĩjàrā » (piñjara-) ; ভাঁজ « bhãj৵ » (bhañja) ; ভিজ « √bhij » (abhyañj) ;

OIA. « -dj- » : পাজী « *vile fellow, wretch* pājī » (padja- ; or <? pāyya-) ;

OIA. « -dy- » : আজ « āj৵ » (adya) ; আনাজ « ānāj৵ » (annâdya) ; সাজ « sāj৵ » *fresh* (sadya-) ; বাজা « bājā » (vādya-) ; খাজা « khājā » (khādya-) ; উপজে « upàjē » (utpadyatē) ; উজায় « ujāy » *goes upstream* (udyāti) ; বিজলী, বিজুলী « bijàlī, bijulī » (vidyut-) ; OB. « ċhijaï » (chidyatē) ; MB. বেজ « bējà » (vāidya) ; etc. ;

OIA. « -bj- » : কুঁজো « kũjō < kũjā » (kujja-, *kuñja- < kubja) ;

OIA. « -yy- : শেজ « śēj৵ » (śayyā) ;

OIA. « -rj- » : †খাওজা « khāŏjā » (kharj-) ; খাজুর, খেজুর « khājur৵, khējur৵ » (kharjura) ; গাজে « gājē » (garjati) ; ভোজপাতা « bhōj৵-pātā » (bhurja-patra-) ; মাজা « mājā » (mārjita-) ; etc.

OIA. « -ry- »: কাজ « kāja » (kārya); আজিমা « āji-mā » *grandma* (āryikā mātā); *sts.* দুজ্জুগ « dujjuga » (duryōga);

OIA. « -ly- »: সাঁজারু « sājāru », সেঁজারু « sējārū », East Bengali হেঁজা [hẽza], OB. (Sarvânanda) « sejja-ka » (Sanskritised) (OIA. « śalyaka- + rūpa »: « śalyaka » gave in Old Māgadhī « *śayyaka, *śeyyaka », in Aśōkan orthography « sayakē, sēyakē »; the Bengali form « sēja- » is derived from the Māgadhī form. This « -ly- > -yy- » of Māgadhī is absent in other dialects of Aśōka. Cf. the French modification of [lj, ʎ] to [j, i]).

OIA. « -yá- » of passive forms became « -ia-, -iya-, -i- » in MB., where not assimilated with a preceding consonant. (See under *Morphology*: the Verb, ' Passive Voice '). The Western Apabhraṅśa dialects turned this « -yá- » of OIA. to both « -i(y)a- » and « -ijja- > -īja- ». The adjectival « -īyá- » affix similarly became « -īa-, -īja- ». Bengali has some obsolete « -ij- » forms, which look like having been introduced from the West: *e.g.*, লিজে, লিজ্জে « li(j)jē » *is taken* (*as in the arithmetical rules of Śubhaṅkara, in the old Indian system*) (=lahijjaï, labhyatē); the MB. ordinals দুঅজ, তিঅজ « duâjâ, tiâjâ », NB. দোজ, তেজ, only in compounds like দোজ-বরিয়া, তেজ-বরিয়া « dōjʰ-bâriyā, tējʰ-bâriyā » *a bridegroom for the second time, for the third time* (*duajja, *duijja = dvitīyá; tiajja, tiijja = tṛtīyá) (dōsar-, tēsar- » are the genuine Magadhan forms; see under *Morphology*: ' the Numerals '). Bengali কলিজা, কলেজা « kâlijā, kâlējā » (kālēyá) seems similarly to be a Western form with « -j- » for « -yá- ».

[ʃʒ] occurs in Bengali through deaspiration of [ʃʒɦ], medially and finally: *e.g.*, মাজখানে [maʃʒkhane] *in the middle* (mājhʲ, madhya); সেঁজুতি < সাঁঝুতি [ʃẽʃʒuti < ʃãʃʒɦuti] *evening lamp* (sājhʲ-: sandhyā-vartti-): etc.

[ʃʒ] occurs in *ts.* words: in the groups « -jy-, -jv-, -jr- », [ʃʒ] is ' doubled ' in Bengali. In the groups « -hy- » in *sts.*, pronounced [ɟʒɦ], we have the [ʃʒ] sound. *E.g.*, জাতি, জাত « jāti, jāt »; রাজ্য [rɑɟʒo] (rājya); উজ্জ্বল [uʃʒol] (ujjvala); বজ্র [bɔɟʒro] (vajra); সহ্য [ʃɔɟʒɦo] (sahya); etc

Sanskrit « y- » in *ts.* words is pronounced as « j- » in most cases in Northern India, and Bengali also has the « j- » pronunciation generally, except when the « y » is subscribed. The following rule laid down in

the 'Yājñavalkya Śikṣā' is obviously indicative of the medieval pronunciation of Sanskrit in Northern India, which some Yajur-vēda schools still follow in the North, but not in the South:

« pādâdāu ca, padâdāu ca, saṁyōgâvagrahēṣu ca |
'jaḥ' śabda iti vijñēyō, yō' nyaḥ sa 'ya' iti smṛtaḥ || »

At the beginning of a foot, and at the beginning of a word, as well as when compounded or analysed, the sound of « j » *is to be known, and elsewhere,* « y » *is enjoined.* (Ślōka 150, 'Yājñavalkya-śikṣā' in the 'Śikṣā-saṃgraha,' Benares, 1889.)

The above rule holds good for Bengali pronunciation of Sanskrit, and for *tss.* in Bengali. Thus, যোগ [ʃʒo:g] (yōga), যুক্তি [ʃʒukti] (yukti), Skt. যস্মিন্ [ʃʒoʃʃin] (yasmin); দুর্যোগ [durʃʒog] (duryōga), *sts.* দুজ্জুগ [duʃʒʒug]; কার্য [karʃʒo] (kārya); সংযুক্তা [ʃoŋʃʒukta] (saṁyuktā), etc. In a few instances, were the « avagraha » or breaking up the word is not present in the mind of the speaker, we have « y »: *e.g.*, বিয়োগ [biog], not [biʃʒog], but সু-যোগ [ʃuʃʒog], সু-যুক্তি [ʃuʃʒukti], etc.

[ʃʒ] is pronounced [dz, z] in the Eastern and Northern Bengali dialects, and this is not found in the Standard Colloquial. But in the latter, however, in the groups « -jhd-, -jht- -jd-, -jt- », [ʃʒ] has developed a [z] pronunciation, which is frequently unvoiced to [s]: *e.g.*, মাঝুআ দাদা > মেজোদাদা > মেজদা [maʃʒua-dada > meʃʒodada > meʃʒda > mezda] *second elder brother*; so বুঝিতে > বুঝ্‌তে > বুজ্‌তে [buʃʒiite > buʃʒ(i)te > buzte > buste] *to understand*; সাজিতে > সাজতে [ʃaʃʒite > ʃaʃʒte > ʃazte > ʃaste] *to adorn oneself*. « -ct-, -cht- » also similarly are assimilated to « -st- »: *e.g.*, নাচিতে > নাচতে [naʧite > naʧte > naste] *to dance*; বাঁচিতে > বাঁচতে [bāʧite > bāʧte > bāste] *to live*; কাছথেকে [kaʧhtheke > kastheke] *from the neighbourhood=from*, etc.: cf. also বিছানা > বিছনা [biʧhana > biʧhna, bisna] *bed*.

In foreign loan words, Persian « j, z » ([z]=Arabic [z, ð, ḍ, ẓ]) and « ž » =[ʒ] are changed to [ʃʒ] in Bengali; also Portuguese « z », English [z, dʒ, ʒ]. See *infra*.

264. « jh », =Standard Bengali [ʃʒɦ], Marāṭhī Gujarātī [z], is a very rare sound in OIA., but it became quite prominent in MIA., both

in some *tadbhava* forms and in a number of non-Aryan words, and in onomatopoetic formations. « jh » words in MIA. show some relationship with the « kṣ » of Sanskrit, and with the other palatals, « c, ch, j, ś », and sometimes with the dentals. The exact derivation and affiliation of most of the « jh » words has not been settled.

The following are the typical groups of « jh- » words in Bengali: they are also to be found in most other NIA. languages and dialects.

ঝক, ঝকঝক, ঝকমক « jhåk, jhåk-jhåk, jhåk-måk » *glisten, be bright, shine*: from a MIA. « *jha(va)kka ».

ঝকড়া, ঝগড়া « jhåkaṛā, jhågaṛā » *quarrel*, cf. ঝকা in বকাঝকা « båkā-jhåkā » *reprimand, rebuke, speak sharp words* (cf. *dēśī* jhakkia = vacana).

ঝট « jhåṭ », MB. ঝাট « jhāṭa » *quick* (cf. Skt. jhaṭiti); ঝড় « jhåṛa » *storm, high wind* (cf. Skt. jhaṭikā, *dēśī* jhaḍī = nirantara-vṛṣṭiḥ); derivatives—ঝটকা « jhåṭakā », ঝড়কা « jhåṛakā » *jerk, clash*; ঝটপট « jhåṭ-påṭ » *flutter* (cf. Śaurasēni Ap. « jhaḍappaḍa » *quick*). This group is probably connected with ঝর « √jhår » *flow, drip*, see below: an OIA. passive participle « *jhṛta, *jharta » would become in MIA. « *jhaṭa, *jhaṭṭa, jhaḍa ». Cf. চট « cåṭ » *quick*, connected probably with « √car > *cṛta, *carta ».

ঝপ « jhåp » *splash, dash, quick*: a modification ঝুপ « jhup », and extensions ঝপাক্, ঝপাৎ, ঝপাস « jhåpāk, jhåpāt, jhåpās »; probably connected with ঝাঁপ « jhā̃pa » *plunge*, see below.

ঝন ঝন « jhån-jhån » *metallic sound, sound of gong*: onomatopoetic.

ঝম ঝম « jhåm-jhåm » *ring, patter like heavy rain*; onomatopoetic.

ঝর « jhår » *drip, fall (as water), flow*: ঝরনা « jhåraṇā » *water-fall*: ঝরঝরিয়া « jhar-jhåriyā » *clear, fine (like running-water)*; a modification ঝির ঝির « jhir-jhir » *gentle, fine, slow (as breeze)*; ঝারী « jhārī » *water-pot with a spout*. From dialectal OIA. « √*jhar » = Skt. « √kṣar », preserving the voiced sound of the Indo-Iranian « *źhar, *gźhar » < Indo-European « *gʷhðer, *gʷðher »).

ঝরোখা, ঝরকা « jhårōkhā, jhåraṛkā » *lattice* (< ? jāla-gavâkṣa-).

ঝল « jhal » (1) *hang, dangle*: ঝুল « jhul » *dangle* > *festoon*; ঝুলন « jhulan্a » *swing*; ঝোলা « jhōlā » *swing, bag*, ঝুলী « jhulī » *bag*; ঝিলিমিলি « jhilimili » *lattice, shutters*; ঝালর « jhālar্a » *lace-end*. (Cf. *dēśī* jhullurī = gulma).

ঝল « jhal » (2) *burn, be bright*; ঝলমল « jhal-mal » *sparkle*; ঝালা « jhālā » *to clean* (*as a well*), *to clear, to polish, to repair* (*as a pot by soldering*); ঝলসা « jhal্asā » *to roast* (cf. *dēśī* jhalusia = *burnt*); ঝলকা « jhal্kā » *scorching flame* (cf. Saur. Ap. jhalakka *burn*: < Skt. √jval ?).

ঝাউ « jhāu » *pine-tree* (Skt. jhābuka : < ?).

ঝাঁ « jhā » *quick, with speed of wind, as it were*: connected with Skt. « √dhmā, dham » *blow* (?); or onomatopoetic; cf. সাঁ « sā » *quick*.

ঝাঁ ঝাঁ « jhā-jhā » *shimmer of sun-shine*; ? connected with « jhāmā ».

ঝাঁক « jhāk » *shake*: extended to ঝাঁকরা, ঝাঁকড়া, ঝাঁকড় « jhāk্arā, jhāk্ara, jhāk্ar্a » *dishevelled, loose, easily shakeable* (*as long hair*); ঝাঁক « jhāk্a » *flight of birds, swarm, scattered band*; ঝাঁকা « jhākā » *basket* (*to hold loose articles*). (Cf. *dēśī* jhaṅkharia = avacayana).

ঝাঁঝ « jhājh্a » *flavour, strong flavour*; *cymbals with very loud noise* (cf. Skt. jhañjhā); ঝাঁঝর « jhājhar্a » (1) *cymbals*, (2) *perforated ladle* [(1) = jarjara ? (2) = jharjhara < √jhar ?]. [(2) also found as ঝাঁঝরা, ঝাঁঝরী « jhājh্arā, jhājh্arī »].

ঝাড় « jhār্a » *tree* (Skt. jhāṭa); ঝাঁটা, ঝাড়ু « jhāṭā, jhāṛu » *broom*; ঝাড়া « jhāṛā » *to dust, to clear*, ঝাড়ন « jhāṛan্a » *duster*; ঝাঁট « jhāṭ্a » *hair, tuft of hair*, also ঝুঁটী « jhuṭī », ঝোঁটন « jhōṭan্a » *tuft of hair* (cf. *dēśī* jhaṇṭī = laghūrdhva-kēśāḥ; but conn. with চুল « cul্a » *hair* = Skt. « cūḍā » ?). Also ঝাঁটী « jhāṭī », ঝিণ্টি « jhiṇṭī » *a plant*.

ঝাণ্ডা, ঝণ্ডা « jhāṇḍā, jhaṇḍā » *standard, flag* (derivation suggested from « dhvaja », also from « jayanta »: but probably connected with ঝাড় « jhār্a » *tree* above).

ঝানু « jhānu » *clever* (< ?).

ঝাঁপ « jhāpd » *jump, plunge* (Skt. jhampa : cf. *dēśī* jhampaï = bhramati) ; ঝাপটা « jhāpḍṭā » *throwing, struggling* ; ঝাঁপ « jhāpḍ » *covering, matted shutter* ; ঝাঁপী « jhāpī » *basket with lid* : cf. also ঝাপসা « jhāpḍsā » *hazy,* ' *covered-like* ' (cf. *dēśī* jhampaṇī *eyelash,* connected with « √kṣap » *throw* ?).

ঝাঁপান « jhāpānd » *litter* (= Skt. yāpyayāna).

ঝামা « jhāmā » *burnt brick, pumice stone* ; ঝামরা « jhāmarā » *ill, ill through fever, pale* (cf. Skt. kṣāma).

ঝামেলা « jhāmēlā » *crowd, noisy gathering* ; *an intricate business* (cf. *dēśī* jamāla = magic).

ঝাল « jhālḍ » *hot to taste* ; ঝালাপালা « jhālā-pālā » *burning and scorching, said of ear-grating noise or chatter* (< OIA. √jval, jvālā ? ; or = Skt. kṣāra ?).

ঝাঁসা « jhāsā » *flattery* (< ?).

ঝি, ঝী « jhi, jhī » *daughter* > *maid-servant* (*dhītā < duhitā).

ঝিঁঝিঁ « jhījhī » *cricket* (*insect*) : onomatopoetic, cf. Skt. « jhillī ».

ঝিঁঝিঁট « jhījhiṭḍ » *a tune* (Hindī jhiñjhauṭī = jējākabhuktika).

ঝিঙ্গা « jhiṇ(g)ā » *a vegetable* : cf. also চিচিঙ্গা « cicin(g)ā » *another vegetable of the same sort* (*dēśī*).

ঝিমঝিম « jhim-jhim » *feeling of dizziness* < *to hear a tinkling or singing sound* : a variant of « jhām-jhām » ? : but cf. ঝিমা *doze* below.

ঝিমা « jhimā » *sleep, doze* : connected with ঘুম « ghum » *sleep* etc. : see §§ 199, 265.

ঝিল, ঝীল « jhilḍ, jhīlḍ » *a lake, channel of water* : conn. with ঝোল « jhōlḍ » ? : see below.

ঝিনুক « jhinukḍ » *pearl shell* : cf. জোঙ্গড়া « joṇgḍṛā » : Skt. « śambuka ».

ঝুঁঝা « jhũjhā » *ooze, drip, exude* (*as blood from a wound*) : cf. Skt. « √kṣud—kṣundatē āplavanē ».

ঝটা, ঝুঠা « jhuṭ(h)ā » *orts, leavings of meal* ; *false, lying* (*dēśī* jhuṭṭha, = Skt. juṣṭa).

ঝুনা « jhunā » *seasoned, old* (< jūrṇa- ?)

ঝুম ঝুম « jhum-jhum » *tinkling noise* : ঝুমুর « jhumurḍ » *bells* ; *a kind of song and dance* ; ঝুমকা লতা « jhumḍkā lātā » *a creeper with*

flowers in hanging clusters, like bells worn on the toes: onomatopoetic, apparently a variant of « jhâm-jhâm ».

ঝুরা « jhurā » *powdered stuff, loose stuff*: cf. চুর « cūrṇ » *powder*, Skt. « cūrṇa ».

ঝুরি « jhuri » *twig*: cf. ফুলঝুরি from ঝরি « phul-jhuri < -jhâri » *golden rain (fire-work)*, < « √jhâr ».

ঝুরে « jhurē » *weeps*: MB. অঝরু « ajhâru », NB. অঝোর « ajhōrṇ » *tears, flood of tears*: ? conn. with a MIA. form « *añj(h)u = aśru », attested in Sindhī; or connected with « √jhâr » ?

ঝোঁক, ঝোঁখ « jhōk(h)ṇ » *leaning*, ঝুঁকে < ঝুঁখে « jhũk(h)ē » *leans*, ঝুঁকি « jhũki » *a leaning*; ঝক্কি < *ঝোঁক্খি « jhâkki < *jhōkkhi » *responsibility*; ঝিঁক « jhīkṇ » *support for pot in the oven*: < ?

ঝোপ « jhōpṇ » *bush*, ঝোঁপড়া « jhōpṇṛā » *cabin, cottage* (Śaur. Ap. jhumpaḍā *cottage*: cf. Skt. kṣupa).

ঝেঁৎলা « jhētṇlā » *moss, scum*, beside ছেঁৎলা « chētṇlā » (< ?: cf. Skt. śāivāla, śādvala).

ঝোড় « jhōṛṇ » *bush, scrub jungle*; ঝোড়া « jhōṛā » *basket*: conn. with ঝাড় « jhāṛṇ » ?

ঝোল « jhōlṇ » *soup*; ঝোলা « jhōlā » *moist, watery*: cf. জোল, জুলী « jōlṇ, julī » etc., pp. 65, 66.

The above are some of the more important words in Bengali with initial « jh- ». It will be seen that in most cases, no sure OIA. affinity can be found. In a certain number of cases, we find the « jh- » is obviously the result of aspiration of original « j- ». In other cases, as in « √jhâr », we have inheritances from an OIA. dialect which altered Indo-Iranian « *gź(h)-, *źh » to « jh- », and not to « kṣ- » as in Sanskrit. Possibly a large proportion of the « jh- » words will be explained from this point of view. Some, again, are *dēśī*, and others obviously onomatopoetic.

Medial and final « -jh- » in Bengali is found mainly in *tbh.* words:

OIA. « -dhy- » is the source commonly of this « -jh- »: *e.g.*, ওঝা « ōjhā » (upādhyāya); মাঝ « mājhṇ » (madhya); সাঁঝ « sājhṇ » (sandhyā); বুঝে « bujhē » (budhyati); সমুঝে « sāmujhē »

(sambudhyati); যুঝে « jujhē » (yudhyati); সিঝে « sijhē » *is boiled, boils* (sijjhaï, sidhyatē); বাঁঝা « bājhā » (vandhyā).

In *ts.* words, « -hy- » is pronounced « -jjh- »: সহ্য [ʃoɟʄʒio] (sahya), বাহ্য [boɟʄʒio] (bāhya), গ্রাহ্য [groɟʄʒio] (grāhya), etc. In Skt. words, it is always written হ্য « hy »: but often in the *sts.* words as phonetically written, we find জ্জ « jj », *e.g.*, গেরাজ্জি [geroɟʄʒi-] (< grāhya).

Interchange between Palatals and Gutturals, and Palatals and Cerebrals and Dentals.

265. In a small number of words, connected in meaning and probably also in etymology, we note interchange between palatals and gutturals. These words seem to be mainly *dēśī* in origin. The gutturals are of course the older sounds. Examples are given below.

কোপ « kōpa » *blow with a sword* (connected by some with « √kḷp »): চোপ, চোব « cōpa, cōba » *ibid.*, cf. ছোবল « chōbāla » *snake-bite, bite*; খোঙ্গা, খুঙ্গী « khōṇ(g)ā, khuṇ(g)ī » *box of bamboo or cane*: চোঙ্গা, চুঙ্গী « cōṇ(g)ā, cuṇ(g)ī » *bamboo-cylinder used as vessel, cylinder*; কামড় « kāmāṛa » *bite*: চিমড়া, চিমটা « cimaṛā, cimaṭā » *pinch*; ঘুম « ghuma » *sleep*: ঝিম « jhima » *doze*, নিঝুম « ni-jhuma » *silence of sleep*; গমক « gāmāka » *elegance*: জমক « jāmāka », জাঁক « jāka » *pomp*; খাল « khāla » *skin*: ছাল « chāla » *skin*, ছিলকা « chilaka » *skin of fruit*, ছোলা « chōlā » *to skin*, ছুলী « chulī » *skin-disease* (an Aryan group, apparently); খোঁড়া « khōṛā » *lame*, cf. Oṛiyā « chōṭā » *lame*; লেজ « lēja », লেজুড়, লেঞ্জুড়ী « lē(ñ)juṛ(ī) » Oṛiyā « lañjā » *tail*: but cf. Skt. « lāṇgula »; ঢঙ্গ « ḍhāṇ(g)a », beside ধাঁজ « dhāja », ধাঁচা « dhācā » *manner, form, style, fashion*; চুঁচি « cũci », Skt. « cucuka » *nipple, teat*: Skt. « kuca » *breast*; OB. « bahēñci », NB. বইচি, বোঁচ « bāīci, bōc » *a fruit* = Skt. « vikaṇkata ». Cf. also Bengali চিরাতা « cirātā = Skt. kirāta-tikta: kirāta = MIA. cilāa-, cirāa- ».

Palatals, and cerebrals and dentals: টাক, টাখ « ṭāk(h) »: চাখ « cākh » *taste* (cakṣ-); টাং « ṭāṇ » *foot*, টেঙ্গরী « ṭēṇ(g)aṛī » *leg (of meat)*, connected with জাং « jāṇ » = « jaṇghā » (?); MB. চেণ্ঢালী « cēṇḍhālī » *viciousness*,

connected with চণ্ড « cáṇḍá », চণ্ডাল « cáṇḍāla » beside NB. টণ্ডাই, টাণ্ডাই « táṇḍāi, tāṇḍāi » *wildness, opposition, perversity* (?); তেঁতুল « tẽtul », OB. « tēntalī » *tamarind*, Skt. « tintiḍī », beside Skt. « ciñcā », Telugu « cintā »: compare also Bengali কাঁই as in কাঁই-বিচি « kãi-bici » *tamarind-seed*, Oṛiyā « kāyã » *green tamarind* (< *kañña-, *kañca- ?); NB. চাউল « cāula », MB. চাউল « cāulā » beside তাউল, তাঁড়ুল « tāulā, tãṛulā » = Skt. « taṇḍula » *threshed and winnowed grain* > *rice* (? Aryan : < *tandrula, cf. √tandr); Bengali চষ « √cāṣ » *cultivate*, চাষা « cāṣā » *cultivator*, cf. OIA. « carṣaṇi- » *cultivating* (?), « √kṛṣ »: Oṛiyā « tāsā » *cultivator*; MB. দনাই « dānāi », *a pet form of the name* « Janârdana », for জনাই « *jānāi »; কচলা « kācalā » *to rinse*, beside কতলা « kātalā »; etc.

(3) The Retroflex or Cerebral Stops and Aspirates [ṭ, ṭh, ḍ, ḍh], and the Retroflex Flapped and its Aspirate, [ṛ, ṛh].

Cerebralisation in OIA. and in the Eastern Dialect: Resultant Cerebralisation.

266. The cerebrals had originated in the Aryan language in India already in the earliest period. The conditions under which the cerebral stops and aspirates (and sibilant as well as lateral) came into being are various. Thus, for example, Indo-European dental « s » under certain conditions became « š » (an *sh* sound) in Indo-Iranian, and this « š » changed to « ṣ » in OIA.; and a « t(h) » following it was duly cerebralised: *e.g.*, IE. « *sthisthāmi » > Indo-Iran. « *tišthāmi » > OIA. « tiṣṭhāmi »; IE. « *usto- » > Indo-Iran. « *ušta- » > OIA. « uṣṭa- »; OIA. superlative affix « *-istho- » > Indo-Iran. « *-ištha- » > OIA. « -iṣṭha- »; etc. Similarly, IE. « z » became « ž », and this « ž » was changed to « ẓ » (or [ɻ]) in the oldest IA., to be cerebralised and assimilated with a following « d(h) »: *e.g.*, « *ni-sd-os, *nizdos > *nižas > *niẓdas, *niɻdas > nīḍaḥ »; « *mizdhos > *mižđhas > *miẓdhas, *miɻdhas > mīḍhaḥ ». Indo-European groups of 'palatal' « k, g »+« t, d(h) » respectively became « ṣṭ, ḍ(h) » in OIA.: *e.g.*, « *oktōu > *açtāu, *aśtāu > *aṣṭāu »; « *mṛgdīqo- > *mṛźdīka- > *mṛẓdīka-, *mṛɻdīka- > *mīḍ-, mṛḍīka- »; « *ligh-to-, *ligdho- > *liźdha- >,

*liẓdha-, *liꞡdha- > līḍha »; etc. (Cf. C. Uhlenbeck, 'Manual of Sanskrit Phonetics,' London, 1898, §§ 44, 63, 86; J. Wackernagel, 'Altindische Grammatik,' I, § 145 ff; A. A. Macdonell, 'Vedic Grammar,' § 42). Through analogy, we get « ṭ, ḍ » in certain nominal and verbal forms in OIA. (Skt.): « viṭ < *vik < *vikṣ < *viśs, = IE. *wik-s »; « dviṭ < *dvik < *dvikṣ < *dviš-š, = IE. *dwis-s »; « viḍbhiḥ < *vijbhis < *viźbhis < IE. *wigbhis, *wig = wik »; so « rāṭ < √rāj »; « avāṭ < < √vah »; etc. In addition to the above changes, the dentals were cerebralised in OIA. when they occurred in connection with the liquid « l » (and « r »). In the earliest stage of IA., the Indo-European (and Indo-Iranian) group of « l » + dental (stop, aspirate nasal, or sibilant), became cerebralised, with assimilation of the « l »: thus IE. « *spheltō » gave OIA. (Skt.) « sphaṭā-mi »; « *ghōlto- » through I-Ir. « *źhālta- » gave Skt. « hāṭa(-ka) »; IE. « *kulth- » gave « kuṭh-āra », « *pelnos » gave « paṇaḥ », and «*√lals » gave «√laṣ ». But while « l » + dental was thus cerebralised, IE. « r » + dental was retained intact (except in the case of « *rn, *rs », which changed to « rṇ, rṣ » in OIA.): *e.g.*, IE. « *wertō » > OIA. « vartā-mi », « *merdō » > « mardāmi », « *wornos » > « varṇaḥ », *dhersō » > « dharṣā-mi », etc. This kind of cerebralisation (generalised into a law by Fortunatov, cf. Uhlenbeck, *op. cit*, § 44) seems thus to have characterised the oldest Indo-Aryan, which as a whole distinguished between IE. « r » and « l ». But already as early as the time of the Vedic hymns, the earlier « r, l » were confused in the various dialects of OIA. In one dialect, that of the west, on which the speech of the Rig-Veda seems to have been based, all original « l » became « r », apparently *after* the change of « l » + dental groups to cerebrals (see *ante*, p. 34), and it maintained the OIA. speech habit in not allowing cerebralisation of the group « r » + dental. In another dialect, apparently that of the extreme east (the speech of the Prācya tracts and and the source of the eastern dialect of Aśōka—of Ardha-māgadhī and Māgadhī) all original « r » sound seems to have become « l »: so that the « r » sound was absent in this dialect. What happened in the central dialect, or dialects, in the OIA. period, to which the later Midland speech (Śaurasēnī) is to be

affiliated, is not known; but it seems there was no tendency to use exclusively one sound in it. (Cf. A. A. Macdonell, 'Vedic Grammar for Students,' Oxford, 1916, p. 11.) It is not impossible that these three groups of Aryan speakers formed originally three separate bodies, the eastern-most coming into India first, and being followed by the others, and the western-most having certain Iranian affinities. However, Sanskrit in the matter of its « r, l » sounds agrees mainly with Vedic speech, and it does not normally change a « r » to « l » when occurring with a dental. The normal OIA. « vikṛta, artha, vardhita » etc., as in Vedic and Sanskrit, can be expected to have become « *altha, *vikḷta, *valdhita » in the OIA. source-dialect of Māgadhī etc.; so that Early Eastern MIA. forms like « aṭṭha, vikaṭa, vaḍḍhita » can very well be regarded as the result of the continuation of the « l » + dental > cerebral tradition in the East.[1] It is very likely that the cerebralisation in connection with this « l + t(h), etc. » came into being, giving rise first to forms like « *aḷṭha, *vaḷḍhita », in the OIA. period. A form like « vikaṭa », found in the Rig-Veda, is an indication of its existence in the Late OIA. stage at least. It is not necessary, however, to assume stages like « lt, ḷt, ḷṭ » in the development of « rt (ṛt) » to « ṭ »: in dialectal Norwegian and Swedish, there is change of « r » + dental stop to a cerebral stop without an « l » stage. But the case in the Prācya speech seems to have been through the « l » stage, which characterised that dialect in the Brāhmaṇa period and possibly also in the Late Vedic period: witness a form like OIA. « kṣulla », from « *kṣudla » (= kṣudra), found in the 'Atharva-Veda,' the 'Taittirīya Saṁhitā' and the 'Śatapatha Brāhmaṇa' (see p. 82).

When the « r » followed a dental stop, as in the groups « tr, dr », we find cerebralisation from Late OIA. times. (Cf. Wackernagel, *op. cit.*, I, § 147.) Such cases, however, are not so very common, and although they might be Māgadhī or Prācya in origin, nothing can be asserted about them.

[1] Compare the case of the Germanic name '*Hildaz (Xildaz)' > 'Ciṭa' (see *ante*, pp. 245-246). This change of '-ld-,' or '-lt-,' to '-ṭ-,' however, is late, and occurs as a sporadic case apparently in the South-western MIA. of the Transitional period.

Be it as it may, the nett result is that in Early MIA. of the East the OIA. « rt, rd », etc. became cerebralised to « ṭṭ, ḍḍ » by the 3rd century B.C., but « rt, rd » remained intact in the North-west in the same period. In other dialects, of the Midland and of the South-west, they were assimilated to « tt, dd », without cerebralisation. The Western speeches [1] resisted the cerebralising tendency of the East for quite a long time. But as we can see from the Aśōka inscriptions, and the Kuṣāṇa and other inscriptions in the Western areas, Eastern or Magadhan forms with cerebrals had imposed themselves on the former. This was due both to political influence of Magadha and to social and other relations between the eastern and the western tracts. Non-cerebralising dialects of the Midland, West and North-west thus gradually came to acquire and naturalise from the Early MIA. period quite a number of cerebralised forms. And the Eastern cerebralising speech, in its turn, through the strong influence exerted on it by the Midland and the Western dialects, received a number of non-cerebralised forms which have largely overlaid the original cerebralised ones. Thus Māgadhī or Eastern forms like « maṭa » (=mṛta), « *maṭṭikā » (mṛttikā), « √vaḍḍh » (vṛdh, vardh), « bhaṭa » (bhṛta), « vaṭṭa » (vartman), etc., are found not only in the Magadhan languages, but also in other non-Māgadhī IA., like Western Hindī, Rājasthānī-Gujarātī, Marāṭhī and Panjābī. And non-Māgadhī forms like « addha » (ardha), « sattha » (sārtha), « *vattikā » (vartikā), etc. are equally found in Bengali etc. « bhartā > bhaṭṭā, bhaṭṭa > ভাট bhāṭṭa » *a bard*, originally = *a Brahman*, is a genuine Māgadhī form in Bengali, and « bhartā > bhattā, bhatta », extended to « bhattāra », whence Bengali ভাতার « bhātāra » *husband*, is a later and a non-Māgadhī form. Further examples will be found under the treatment of the cerebral and dental stops and aspirates individually. The Magadhan dialects became subject to greater and still greater influence of the Midland speech after

[1] Sindhī, alone, however, among the Western IA. tongues, developed a tendency to cerebralisation, but this seems to have been very late: *e.g.*, 'puṛu' = 'putra,' 'caṇḍu' = 'candra,' 'ṛre' = 'tri,' etc.

a brief period of suzerainty which it seems to have exercised in the few centuries before the Christian era over the whole of Indo-Aryandom ; so much so, that from the Second MIA. period, it borrowed numerous forms from the latter, and adopted them, to the restriction or suppression of its native forms: and these later Western borrowings have been inherited by the Modern Magadhan languages: thus « mṛta = maṭa > maḍa » gave মড়া « mårā » to Bengali, which is no longer used to indicate the past tense, but has only a restricted meaning, namely, of *a dead body* ; and a Western form « maa, maẏa » (< mṛta) was adopted in the Second MIA., which, strengthened with the « -ilá > -illa » affix, gave the Māg. Ap. past base « mailla- », whence Old and Middle Bengali মৈল « maila », as well as the forms in other Magadhan. Cf. the case of কৰিব « kåribå » as non-Māgadhī form, which has ousted the native Māgadhī « *kaṭṭaviya » : see p. 375. The habit of cerebralisation, which once marked off the Eastern Aryan dialect from the dialects of the Midland and the West, has thus from the Transitional or Second MIA. period ceased to be a distinctive trait.

Spontaneous Cerebralisation.

267. Apart from the 'resultant' cerebralisation (through the influence of « -š-, -ž- > -ṣ-, -ẓ- » and « -l- » in the proto-Indian stage, and of « r », or « r > l » in the eastern dialect, in the OIA. stage) which has been described above, original IA. dentals have in a number of cases been cerebralised without any explicable cause. There is no neighbouring « r » or « l » which can account for the change. A few instances of this spontaneous cerebralisation are found in OIA. : *e.g.*, Skt. « √ḍī, ud + ḍī > uḍḍī » from « √dī » *to fly* ; « āḍi, āṭi » from earlier « āti » *a water-bird* ; « aṭati » < « ataṭi » ; and a few others. But the number of such forms is on the increase from the MIA. period. (Cf. Wackernagel, I, § 148b ; Jules Bloch, *op. cit.*, §§ 117-119). It cannot be ascertained which form of OIA. or MIA. was characterised specially by this tendency. But judging from South-western and North-western Aśōkan forms, like « dbādasa- » (Girnar), « badaya- » (= « badaźa », Shahbazgarhi : the Mansehra form « duvāḍasa- » is a

'Magadhism'), as contrasted with the cerebralised form « duvāḍasa- » (Kalsi; also Pillar Edict VI, Delhi-Siwalik, Allahabad, Radhia and Mathia and the Barabar Caves[1]); and Panjābī and Sindhī « paẅē, paē » (<*paaï, *padadi = patati), as compared with Eastern and Midland (Bengali, 'Bihārī,' Hindī, etc.) cerebralised « paṛē » *falls* (<paḍaï, *paḍadi, *paṭati = patati); it may be surmised that the spontaneous cerebralisation characterised the Eastern (and possibly also the Midland) dialects, rather than those of the North-west and the South-west. In a few instances, the same Aryan word occure in two forms in NIA.: *e.g.*, খাই « khāi » *trench*, beside খাড়ী « khāṛī » *channel, gulf* (=khāta, *khāṭa-), found also in Western Hindī. Intervocal « -n- » and « -l- » became cerebralised in all dialects in the Second MIA., but curiously enough, only the speeches of the West (Western and Eastern Panjābī, Rājasthānī-Gujarātī and Marāṭhī, and partly Sindhī) have preserved the « -ṇ-, -ḷ- » inherited from MIA., and not the Midland dialects and the dialects of the East (except Oṛiyā). In the development of spontaneous cerebralisation, analogy and contamination certainly played some part: *e.g.*, « *ṣaṣ-daśa > *ṣaḍdaśa » certainly gave « sōḍaśa », and the « r » in « trayōdaśa » may have influenced the cerebralisation of the « d » which gave « *tēḍaśa > tēraha »: and through analogy, « ekādaśa > *ēgāḍaha > ēgāraha, dvādaśa > duvāḍaśa », etc., may have originated; so Māgadhī « gaḍa < gaṭa < gata » through the analogy of « kaḍa, maḍa < kaṭa, maṭa < kṛta, mṛta », and Bengali ডাড় « ḍāṛa » from « daṇḍa », through influence of the following « r ». But analogy and contamination do not explain cases like « patati > *paṭati, paḍai », « saptati > *sattaṭi, *sattaḍi, sattari », « dakṣina > ডাহিন ḍāhina », « √daṁś > MIA. daṁsa > Bengali ডাঁস ḍāṁsa (=*gnat*) », « pataṇga > ফড়িং phāṛiṇ » *grasshopper*, etc. Such interchange between cerebrals and dentals is unknown to Dravidian, in which each type of sound has its nett value.

[1] Dhauli and Jaugada (Rock Edict III), however, show 'duvādasa,' with the dental, rather than 'duvāḍasa': this is curious, but it cannot be doubted that the 'ḍ' forms characterised the Eastern IA speech as contrasted with the Western dialects: cf. 'paṁnaḍasa' = 'pañcadaśa' in Pillar Edict V. But the equivalents of 'caturdaśa' all show 'd' and not 'ḍ.' The numerals are a puzzle, and show cross influences.

A great many NIA. words with initial cerebral are evidently *dēśī* in origin. But it is noteworthy that the cerebral as an initial sound does not occur in Dravidian, at least in Modern Dravidian. Kōl, or 'Old Kōl,' possibly had cerebrals initially. It is also possible that the non-Aryan sources of the NIA. *dēśī* words with initial (and medial) cerebral, whether in Primitive Dravidian, or Primitive Kōl, partly had dental + « r », for the NIA. cerebral: so that the change in this matter, in Indo-Aryan at least, has been uniform for a number of words of both Aryan and non-Aryan origin. In any case, the words with initial cerebral (as well as initial palatal, in some cases) present a possible pre-Aryan substratum, and quite a numerous and characteristic one too, in MIA. and NIA.

In *dēśī* words, [ṭ ṭh ḍ ḍh] seem to interchange with each other. The cerebrals occur largely in onomatopoetics as well.

268. Bengali [ṭ]. Initially, it is from—

MIA. « ṭ- », from OIA. « ṭ- », and from *dēśī* sources: *e.g.*, টলে « ṭalē » (ṭalati); টাকা « ṭākā » *rupee* < *coined money* (ṭaṇka-); and the following words, among others, are apparently of *dēśī* origin: *e.g.*, টাং « ṭāṇ » *foot*, টেংরী « ṭēṇ(g)ṛī » *leg* (*of meat*); টেঙ্গরা « ṭēṇ(g)ṛā » *high land*, also *a fish*; টাঙ্গা « √ṭāṇ(g)ā » *to hang*; টং « ṭaṇ » *high ground*, *loft*; টক্কর, টেক্কা « ṭakkaṛa, ṭēkka » *striking*, *competition*; টুক « ṭuka » *strike gently*, *note down* (cf. ঠুক « ṭhuk »); টুকরা « ṭukṛā » *a tiny bit*, টিকলী « ṭikḷī » *a slice*, *a piece*; টোকরা, টুকরী « ṭōkṛā, ṭukṛī » *basket*; টুনী « ṭunī » *little one*, *a little girl*; টাঙ্গী « ṭāṇ(g)ī » *axe* (< ṭaṇka?); টিকি « ṭiki » *tuft of hair*, *top-knot*, *queue*; টিপ « ṭipa » *press with the fingers*, *a point*; টিঁক, টেঁক « √ṭīk, √ṭēk » *endure*, টেঁকা, টাঁকা « ṭēkā, ṭākā » *repair*, *sew* (=ṭaṇka?); টোপর « ṭōpaṛa » *helmet*, *crown of tinsel worn by bridegrooms*, টুপী « ṭupī » *helmet* > *hat*; টোনা « ṭōnā » *charm*, *sorcery*; টোল « ṭōla » *depression* (*opp. to swelling*); টোলা, টুলী « ṭōlā, ṭulī » *quarter in a town*, টোল « ṭōla » *university or college quarter* > *Sanskrit school*; টিলা « ṭilā » *hillock*, *high land*; টহল « ṭahala » *walk*, *wander*; টিয়া

« ṭiyā » *parrot* ; টুঁটী « ṭũṭī » *throat* ; টের « ṭēr꞉ » *knowledge, consciousness* ; etc., etc.

MIA. « ṭ- » from OIA. dental « t- », through spontaneous cerebralisation : *e.g.*, টান্ « √ṭān » *draw, make tight* (√tan, tānayati), connected with which are টন্ টন্ « ṭan̊ ṭan̊ » *pain with feeling of tightness*, টনক্ « ṭan̊ak꞉ » *tight, memory, consciousness* ; টিপ « ṭip » *drop* (cf. √tip = kṣaraṇē) ; টস « √ṭas » *drip, fall as a drop of water* (cf. √taṇs *draw to and fro, decorate, pour out*), whence টসকা « ṭasak꞉kā *drop off* ; টাঁস « √ṭaṁs » *to be all over with any thing* (cf. √taṇs *be distressed*, √tas = upakṣayē, vastu-hānir iti) ; *sts.* টগর « ṭagar꞉ » *a flower* (tagara) ; etc.

MIA. « ṭ- » from OIA. « t- », in connection with « r (l) » either immediately following or in a following syllable : *e.g.*, টুটে « ṭuṭē » (truṭyati) ; টাট « ṭāṭ꞉ » *plate of metal*, টাটী « ṭāṭī » *mat* (trātra *plate*) ; টীকা « ṭīkā » *sect-mark on forehead, point, patch-work* (*tilka-, tilaka-) ; টাটু, টাট্টু « ṭā(ṭ)ṭu » *pony* (tartṛka ?) ; টিকটিকি « ṭikṭiki » *wooden triangle for whipping* (tri-kāṣṭha- ?) ; টাপ « ṭāp꞉ » *jumping, stamping of foot*, টপকা « ṭap꞉kā » *cross over at one bound* (cf. √tṛp = hiṅsāyām) ; টক্ « ṭak꞉ » *acid or sour to taste* (takra- ?) ; টাকু « ṭāku » (tarku-) ; টাকে, টাখে « ṭāk(h)ē » *taste* (< ? tark- ; ? cakkh = caks), cf. টাকরা « ṭāk꞉rā » *palate* ; টেরা « ṭērā » *squint-eyed* (= Late Skt. ṭagara-), beside তেড়া « tēṛā » *awry*, Hind. « ṭēṛhā » (conn. with « tiryac » ?) ; টাড় « ṭāṛ꞉ », *an ornament for the arm* beside তাড় « tāṛ꞉ » (tāṭa, tāḍa) ; টেনা « ṭēnā » beside তেনা *rag* ; etc., etc.

Medially and finally, [ṭ] is from—

MIA. « -ṭṭ-, -ṇṭ- » < OIA. « -ṭṭ-, -ṭy-, -tr-, -tv-, -rt-, -ṛt-(-ḷt-), -rtm-, -ṣṭ(h)-, -st- » ; also < *dēśī* « -ṭṭ- » : *e.g.*, আটা « āṭā » *flour* (*aṭṭa- < OIA. *arta-) ; পাট « pāṭ꞉ » *silk* > *jute* (paṭṭa) ; লাঙ্গট « lāṅgaṭ꞉ » (*liṅga-paṭṭa) ; কোট « kōṭ꞉ » *fort, final demand* (kōṭṭa, kōṣṭha) কোটাল « kōṭāl꞉ » (kōṭṭapāla, kōṣṭha-pāla) ; মোট « mōṭ꞉ » *load* (mōṭṭa : *dēśī* ?) ; ঘাট « ghāṭ꞉ » (ghaṭṭa, ghaṭṭā : *dēśī* ?) ; হাট « hāṭ꞉ » (haṭṭa : *dēśī* ?) ; পেট « pēṭ꞉ » (*dēśī* *pĕṭṭa, pŏṭṭa) ; OB.

« piṭā », NB. ‡পেটা « pēṭā » *earthen pot, pail,* probably conn. with the preceding ; লোট, লুট « lōṭa, luṭa » *roll on the ground, scatter* (lōṭṭa, <?) ; চাট « √cāṭ » *lick, back-kick* (*caṭṭa : caṣṭa ? <√*caṣ as in « caṣaka » *cup, wine*) ; বিট্‌লা « biṭalā » *a term of abuse (for a Brāhman generally)* (cf. viṭa ; MIA. viṭṭ(h)āla- *polluter* : < viṣṭhā ?) ; টুটে « ṭuṭē » (truṭyati) ; খাট « khāṭa » (khaṭvā) ; খাটে « khāṭē » *works, labours,* খাটায় « khāṭāy » *puts money in business* (Late Skt. khaṭṭayati, < ?) ; টাট « ṭāṭa » (trātra) ; ঠাট « ṭhāṭa » *style, manner* (? sthā+tra) ; বেটা « bēṭā » *son* (? vētra ; cf. vaṅśa *family*) ; কাটে « kāṭē » *cuts,* কুটে « kuṭē » *pounds* (kaṭṭaï, kuṭṭaï < √kṛt- : karttati, kuṭṭati) ; ফাটে phāṭē » *cracks,* ফুটে « phuṭē » *bursts, pricks* (*phaṭṭaï, phuṭṭaï < √sphaṭ(ṭ), sphuṭ(ṭ) < *sphḷṭ) ; ছোট « chōṭa » *small,* conn. with ছুট « √chuṭ » *run, scatter* ? (chuṭ=√*chṛt ?) ; কাটারী « kāṭārī » (kartarikā) ; নাট « nāṭa » (naṭṭa < narta, √nṛt) ; ভাট « bhāṭa » (bhartā) ; নেওটা « nēŏṭā » (snēha-vṛtta-) ; কেওট « kēŏṭa » (kāivartta) ; MB. নিবড়ে « nibaṛē » (nir+√vṛt) ; নাংটা « nāṇ(g)-ṭā » *naked* (*naṇga-vaṭṭa-, nagna-vṛtta-) ; আঁষ্‌টে « ãṣṭē » *smelling of rank flesh or fish* (*āīśaṭiā, *ãwīśaṁaṭṭia-, āmiṣa-vṛttika-) ; দেউটী « dēuṭī » (dīpa-varttikā) ; the affix টা « -ṭā », টী « -ṭī » (? vartta-) ; মাটী « māṭī » (mṛttikā) ; বাটুল « bāṭula » *ball, sling-stone* (varttula) ; আওটা « āŏṭā » *stirring (as milk)* (āvartta-) ; মোটা « mōṭā » *fat* (? mūrtaka) ; বাট « bāṭa » (vartma), বেটো as in বেটো ঘোড়া « bēṭō ghōṛā » *hack* (bāṭuā < bāṭa-, vartma-) ; ইট « iṭa » (iṣṭa) ; উট « uṭa » (uṣṭra) ; ঘাঁট « ghãṭa » (ghṛṣṭa) ; পালট « pālaṭa » (paryasta) ; etc., etc.

MIA. « -ṇṭ- » from OIA. « -ṇṭ-, -ṛnt- » : কাঁটা « kãṭā » (kaṇṭaka-) ; কাঁটাল « kãṭāla » *jack-fruit* (kaṇṭāla-) ; বাঁটে « bãṭē » *divides, distributes, shares* (vaṇṭati) ; বাঁট « bãṭa » *teat,* বোঁটা « bōṭā » *foot-stalk of leaf or flower* (*vaṇṭa-, *vŏṇṭa-=vṛnta).

By deaspiration of « -ṭh- », we get « -ṭ- » in MB. and NB. : *e.g.,* শিটা « śiṭā » *dregs* (MIA. siṭṭha-, *śiṭṭha- śiṣṭa-,) ; আট « āṭa » (āṭha, aṭṭha, aṣṭa-) ; ঢেঁটা « ḍhēṭā » from ঢীট, ঢীঠ « ḍhīṭ(h)a » (dhṛṣṭa-) ;

কাট, কাঠ « kāṭ(h)ʻ » (kāṣṭha); লুট < লুঠ « luṭhʻ » (Skt. √luṇṭh); ঠাট্টা « ṭhāṭṭā, from the Hind. « ṭhaṭṭhā » (< ?); etc. Cf. কোট « kōṭʻ », ঘাট « ghāṭʻ » etc., above.

Through unvoicing of « ḍ » : ডাঁটা « ḍāṭā » *stalk*, ডাঁটী « ḍāṭī » *pestle, little stick* (daṇḍikā); ঢেঁটরা « ḍhēṭʻrā » *proclamation by beat of drum*, cf. Hind. « ḍhaṇḍ(h)ōrā ».

In the word পাঁকাটী « pākāṭī » *dried jute-stalk used as fuel*, also পাকাটী « pākāṭī », we have a MB. or NB. case of assimilation of « ṭ » to a following « k », from পাট-কাঠী « pāṭʻ-kāṭhī » (or is it from পাঁক-কাঠী « pākʻ-kāṭhī », from the jute stalks being soaked in river or tank beds, « paṅka » ?).

NB. « ṭ » in a few cases comes from OIA. « ṇ » in OB. and Early MB. *sts.* : *e.g.*, কেষ্ট « kēṣṭå » < « kṛṣṇa », তেষ্টা « tēṣṭā » < « tṛṣṇā », etc. See *infra*, under the Nasals.

In the printed text of the Caryāpadas, ট « ṭ » is found consistently for ঢ « ḍh(ṛh) » : *e.g.*, দিট « diṭa » for দিঢ « diḍha », গটই « gaṭaï » for গঢই « gaḍhaï », etc. This ট is certainly a variant form of the letter ঢ in the alphabet of the Caryā MS., as the ঢ « ḍh » sound remains a voiced aspirate in Early MB.

[ṭ] in foreign words commonly represents the alveolar [*t*] of English. See *infra*, under *Phonology of the English Element*.

269. Bengali [ṭh].

Initial [ṭh] is from MIA. « ṭh- » derived from—

OIA. « st-, sth- » : ঠা « ṭhā » (<√sthā); ঠাঁই « ṭhāi » (sthāman); ঠেক « ṭhēkʻ » *leaning*, also ঠাক « ṭhākʻ » (cf. stakati *strike against*); ঠিক « ṭhikʻ » *standing, correct, fixed, right* (<√sthā ?); ঠাণ্ডা « ṭhāṇḍā » (*ṭhaṇḍha-, *ṭhaḍḍha- = stabdha ?); ঠাট « ṭhāṭʻ » *style* (sthātra ?); etc.

« ṭh- » is unexplained in a number of words, possibly of *dēśī* origin: *e.g.*, ঠক, ঠগ « ṭhåkʻ, ṭhågʻ » *cheat*; ঠাহর « ṭhāhårʻ » *cognisance of something solid and standing* (*by one of weak eye-sight*), cf. Hind. « ṭhaharnā » *to stand still*; ঠাকুর « ṭhākurʻ » *god, respected being*; ‡ঠাঠা, ঠাটা « ṭhāṭ(h)ā » *thunder*; ঠার « ṭhārʻ » *looking*

askance, gesture, speech; ঠাস « √ṭhās » *knead, press*; ঠসক « ṭhāsāk » *conquetry*; ঠুক « √ṭhuk », ঠোক « √ṭhōk » *strike gently, as with a rod*; ঠুলী « ṭhulī » *blinkers for horses or oxen*; ঠেঙ্গা « ṭhēŋ(g)ā » *stick*; ঠেল « √ṭhēl » *push*; ঠেস « ṭhēsā » *leaning*; ঠোঙ্গা « ṭhōŋ(g)ā » *leaf-cup*; ঠোনা « ṭhōnā » *a blow under the chin*; ঠুঁটা « thũṭā » *armless*; etc.

« ṭh- » is through unvoicing, in ঠেঁটা « ṭhẽṭā » (= ḍhiṭṭha, dhṛṣṭa), feminine ঠেঁটী « ṭhẽṭī » (also = *a white sārī worn by widows*: < ?; cf. টেনা, তেনা « ṭēnā, tēnā » *rags*).

« ṭh- » seems to be intrusive in ঠোঁট « ṭhōṭā » (< oṭṭha, ŏṣṭha). In ঠেঙ, ঠেং « ṭhēŋ » *leg*, beside টাং « ṭāŋ », « ṭh- » is probably due to the aspiration of « ṭ- » (through influence of ঠেঙ্গা « ṭheŋ(g)ā » *stick* ?).

Medially and finally, [ṭh] is from—

OIA. « -ṇṭh- »: MB. কাঁঠী « kāṭhī » (kaṇṭhikā); শুঁঠ « śũṭh » (śuṇṭhi);

OIA. « -nth- » through influence of « r »: গাঁঠ « gāṭh » (granthi);

OIA. « -rth- » > « -ṭṭh- » in Old Māgadhī: eMB. (ŚKK.) আহুঠ « āhuṭhā », lMB. আউট « āuṭā » = ৩½ (MIA. aḍḍhuṭṭha < ardha-caturtha); চৌঠা « cāuṭhā » (caturtha-), with cerebralisation absent in « cauth » in Hindī etc.; পাঁঠা « pāṭhā » *billy-goat* < *young of animal, falling* (pṛthuka, *parthu- ?).

OIA, « -ṣṭ(h)- »: আঙ্গুঠি > আংটি « āṇguṭhi, āṇṭī » *ring* (aṇguṣṭhikā); কুঠারী « kuṭhārī » *chamber* (koṣṭhāgārikā); কাঠ « kāṭhā » (kāṣṭha); গোঠ « gōṭhā » (gōṣṭha); জাঠা « jāṭhā » (yaṣṭi); জেঠা « jēṭhā » (jyēṣṭha-tāta); ঢীট « ḍhīṭā » (dhṛṣṭa); নিঠুর « niṭhurā » (niṣṭhura); পিঠ « piṭhā » (pṛṣṭha); পুঁঠি « pũṭ(h)i » *a fish* (prōṣṭhikā); মুঠি « muṭhi » (muṣṭi-); রীঠা « rīṭhā » (ariṣṭa-); মাঠা « māṭhā » *cream* (? mṛṣṭa-); মিঠা « miṭhā » *sweet* (miṣṭa-); শেঠ « śēṭh » (śrēṣṭhin); ষাঠ « ṣāṭhā » (ṣaṣṭhi); লাঠি « lāṭhi » (laṭṭhi = OIA. yaṣṭi); MB. বেঠন « bēṭhaṇā » *turban* (as in the 'Caitanya-Bhāgavata': < « vēṣṭana »); etc.

OIA. « st(h)- »: আঁঠি « āṭhi » *stone of fruit* (asthi); পাঠায় « pāṭhāy » *sends* (paṭṭhāvēi, prasthāpayati); উঠান « uṭhāṇā » *court-yard* (*ut-

sthāna, Skt. utthāna); হেঁঠ « hẽṭhạ *low* (*adhiṣṭāt = adhastāt: cf. upariṣṭāt).

270. Bengali [ḍ, ḍh ; ṛ, ṛh].

Intervocal « ḍ, ḍh » have a 'liquid' pronunciation—that of the so-called cerebral « ṛ »—in all Indian languages, Aryan or Dravidian. In the northern languages (Bengali, 'Bihārī,' Hindōstānī, Panjābī, Sindhī), the « ṛ » pronunciation is indicated in orthography (ড়, ঢ়, ড়্ etc.); in Gujarātī and Marāṭhī, the script does not recognise the « ṛ » modification, any more than the Dravidian alphabets. The « ṛ » pronunciation is at least as old as the Transitional MIA. period (see *supra*, p. 249), and it is a sort of link in the change of « -ḍ-, -l-, -l- » to « -r- » and *vice-versa*, in MIA. and NIA. (cf. Pischel, §§ 238, 240, 241, 258). The liquid pronunciation of « ṛ » never occurs initially; and the stop « ḍ » occurs in the interior of words only when it is doubled (except in loan-words, like those from English, where we find single intervocal stop « -ḍ- »). In East and North Bengali, in Assamese, and even in portions of West Bengal (in Murshidabad district, for instance), « ḍ > ṛ » is reduced to « r » ; and « ṛ, r » are confused in some class dialects in different parts of Bengal.

« -ḍh- > -ṛh- » became deaspirated to « ṛ » in Late MB. (see p. 442).

271. Bengali [ḍ], initially, is from MIA. « ḍ- » (except where the cerebralisation is a late phenomenon in Bengali), mainly in *dēśī* words, and in some cases from OIA. « d- », with or without influence of « r »: *e.g.*,

ডর « ḍarạ » *fear* (dara); ডাবা « ḍābā », ডাবর « ḍābạ-rạ » *a round vessel* (darvī ?); ডুলী « ḍulī » (dōlikā); ডোঙ্গা « ḍōṇgā » (? drōṇī: probably *dēśī*); ডল « √ḍạl » *press, rub* (√dal); ডলা « ḍạlā » *lump* (dalaka- ?); ডাল « ḍālạ » *branch* (*ḍalla = dru, dāru ?); ডাল, ডাইল « ḍāl, ḍāil », beside earlier দাইল, দালি « dāil, dāli » *split pulse* (dālita); ডালিম « ḍālimạ », beside দাড়িম « dāṛimạ » (dāḍimba); ডোর « ḍōrạ » *string* (cf. dōraka, ḍōraka); ডেড় « ḍēṛạ » beside দেড় « dēṛạ » (*ḍiaḍḍha, diaḍḍha = dvyardha); NB. ‡উড়ু « ḍāṛạ » beside দাড় « dāṛạ » *oar* (daṇḍa); ডাঁশ « dāśạ » *gnat* (daṅśa); ডাহুক « ḍāhukạ » (cf. Skt. dātyūha); ডুমুর

« ḍumurɨ » (udumbara) ; ডাহিন, ডাইন, ডান « ḍā(h)inɨ, ḍānɨ » (dakṣiṇa) ; OB. « ḍāḍhi- » *burnt rice* (*daḍḍhia, dagdhikā) ; MB. *sts.* ডাড়ুকা « ḍāṛukā » *fetters* (dārukā), etc.

Initial « ḍ- » is found in ডোম « ḍōmɨ » (in Sanskrit ḍōmba), ডিম « ḍimɨ » (dimba), OB. « ḍauḍha », NB. ঢোঁড়া « ḍhōṛā » *a water-snake* (by transference of aspirate) (*ḍuṇḍuha, ḍunḍubha, dundubha), ডামাডোল « ḍāmāḍōlɨ » *tumult* (cf. ḍāmara), etc. ; but these seem to be of *dēśī* origin, like the following, which are some of the typical « ḍ- » words of Bengali : *e.g.*, ডাক « √ḍāk » *shout* ; ডুব « √ḍub » *sink* (cf. MIA. buḍḍa = Beng. বুড় « √buṛ ») ; ডাগর « ḍāgaraɨ » *big*, ডেকরা « ḍēkaɨrā » *ungainly, loutish* ; ডহর « ḍahaɨrɨ » *deep* ; ডবকা « ḍabaɨkā » *buxom*, cf. ডবডবে « ḍabaɨḍabē » *juicy*, ডাব « ḍābɨ » *green coco-nut* ; ডগা « ḍagā » *end of a branch* ; ডাঙ্গ « ḍāṇ », ডাঙ্গস « ḍāṇ(g)asɨ » *stick, pin, goad*, conn. with ডঙ্ক « ḍaṇkaɨ » *biting* ; ডাহা « ḍāhā » *complete, entire* ; ডহুআ > ডেও « ḍahuā > ḍēō » *a fruit, custard-apple* ; ডুকরা « ḍukaɨrā » *to blubber out* ; ডেম, ডেঁপ « ḍēmɨ, ḍēpɨ » *sprout, young of snake* ; ডোল, ডৌল « ḍōlɨ, ḍaulɨ » *shape* ; ডেঙ্গর « ḍēṇgaɨrɨ » *louse* ; ডাঁসা « ḍãsā » *half-ripe* (*as fruit*) (= *that which is to be bitten hard*, < √daṁś ?) ; ডাঁটো « ḍãṭō » *stiff, able* ; (= daṇḍa- ? : see p. 492 *supra*) ; ডালা « ḍālā » *a basket* ; *pour, throw* (cf. ঢালা « ḍhālā » *pour*) ; ডিঙ্গা « ḍiṇ(g)ā » *boat, to step or cross over something* (conn. with ডোঙ্গা « ḍōṇ(g)ā » above ?) ; ডিবা, ডিবিয়া « ḍibā, ḍibiyā » *small round box* (conn. with ডাব above ?) ; ডুমা « ḍumā » *a piece, square slice* ; ডেরা « ḍērā » *house, tent* ; ডোবা « ḍōbā » *puddle* (conn. with ডুব « √ḍub » *sink* ?) ; ডোল « ḍōlɨ » *large drum-shaped pot or bucket* ; ডোকলা « ḍōkaɨlā » *spendthrift* (conn. with ডেকরা « ḍēkaɨrā » above ?) ; etc.

Medially and finally, [ḍ > ṛ] is from—

OIA. « -ṭ- », commonly from « -ṛt- », or *dēśī* sources, > MIA « -ḍ- » : আখড়া « ākhaɨṛā » (akṣa-vāṭa-) ; কড় « kaṛɨ » *ring, bracelet* (kaṭa, kṛta) ; MB. কানড়(ী) « kānaɨṛ(ā) » (karṇāṭaka-) ; চড়ে « caṛē (caḍaï, caṭati) ; চিঁড়া « cīṛā » (cipīṭaka-) ; জুড় « √juṛ » (√yuṭ) ; ঝাড়

« jhāṛ̃ » (jhāṭa) ; পুড়ে « puṛē » *burns* (puṭati) ; কুঁড়ে, কুঁড়িয়া « kũṛē, kũṛiyā » *hut* (kuṭī-) ; খড়ী « khaṛī » *chalk* (khaṭikā) ; ঘড়া « ghaṛā » *vase* (ghaṭa-) : ঘোড়া « ghōṛā » (ghōṭaka-) ; ধড় « dhaṛ̃ » (dhaṭa : dhṛta) ; নড় « naṛ̃ » *dancer* > *a caste* (naṭa : nṛtu) ; MB. নিয়ড় « niyaṛ̃ » (nikaṭa) ; পেঁড়া « pẽṛā » (pēṭaka-) ; বেয়াড়া « bēyāṛā » (vikaṭa-) ; বাড়ী « bāṛī » (vāṭikā : √vṛt) ; বড়ী « baṛī » (vaṭikā) ; বাহুড়ে « bāhuṛē » *returns* (vyāghuṭati) ; ভড় « bhaṛ̃ » *soldier, servant* > *a surname ; a kind of boat* (bhaṭa, <bhṛta) ; MB. মৌড় « mauṛ̃ » (mukuṭa) ; সাড়ী « sāṛī » (sāṭikā); তোড়ে « tōṛē » (trōṭayati) ; ফোড়ে « phōṛē » (sphōṭayati) ; ফাড়ে « phāṛē » (sphāṭayati) ; etc., etc.

OIA. « -ḍ- » : গুড় « guṛ̃ » (guḍa<?) ; ছোড় as in ‡ছোড়ান « chōṛānṛ̃ » *key* (cf. chōṭayati *splits, opens* < √chuṭ) ; নীড় « nīṛ̃ » (nīḍa) ; খোঁড়ে « khõṛē » *digs* (kṣōḍa-) ; নাড়ী « nāṛī (nāḍikā) ; বঁড়শী « bāṛ̃śī » *fish-hook* (baḍiśa-) ;

OIA. « ḍy- » : জাড় « jāṛ̃ » *cold* (jaḍḍa, jāḍya) ;

OIA. « -ḍr- » : উড়ে, উড়িয়া « uṛē < uṛiyā » (Oḍḍīaa-, Āudrīyaka-) ; বোড়া « bōṛā » *a large snake* (vōḍra-) ; বুড়ি « buṛi » *one fourth of a paṇa, ¼th of* 80=20 (vōḍrī) ; বড় « bāṛ̃ » *big* (Late Skt. vaḍra < ? ; but probably < vaṭa-, vṛta) ;

OIA. « -ṇ- » > MIA. « -ḷ- » ? : বেউড় « bēuṛ̃ » *kind of bamboo* (cf. Pali vēḷu = vēṇu) ; পাহাড় « pāhāṛ̃ » *hill* (cf. pāṣāṇa) ;

OIA. « -ṇḍ- » : কুঁড় « kũṛ̃ » (kuṇḍa) ; কাঁড় « kãṛ̃ » *arrow* (kāṇḍa) ; খাঁড় « khãṛ̃ » *molasses*, খাঁড়া « khãṛā » *heavy sacrificial sword* (khaṇḍa-) ; ছিঁড়ে « chĩṛē » (chiṇḍati) ; চাঁড়াল « cãṛāl ṛ̃ » (caṇḍāla) ; আঁড় « ãṛ̃ » (aṇḍa) ; নাড় « nāṛ̃ » (laṇḍa) ; OB., MB. পাণ্ডিআ « pāṇḍiā », NB. পাঁড়ে « pãṛē » *a North Indian Brāhman* (paṇḍita-) ; ফাঁড় « phãṛ̃ » *circumference* (phaṇḍa, phāṇḍa *belly* <?) ; ভাঁড়ার « bhãṛārṛ̃ » (bhāṇḍâgāra) ; মাড় = মাঁড় « mãṛ̃ » (maṇḍa) ; শুঁড় « śũṛ̃ » (śuṇḍa) ; ষাঁড় « ṣãṛ̃ » (ṣaṇḍa) ; etc. ;

OIA. « -ṇḍr- » : পুঁড় « pũṛ̃ » *sugar-cane, a tribe* (puṇḍra) ;

OIA. « -t- », mainly in connection with « ṛ, r » : পড়িশী, পড়শী « paṛ(i)śi » (prativēśin) ; MB. পড়ীছা « paṛīchā » (pratīkṣaka-) ;

so পড়ি « pâṛi »<« prati- » in MB. পড়িহায় « pâṛihāē » (pratibhāti), পড়িহাস « pâṛihāsâ- » (pratihāsa-), etc. ; পড়ে « pâṛē » (paḍai, *paṭati, patati) ; ফড়িঙ্গ « phâṛiṇ » (Pali paṭaṇga, patanga) ; বয়ড়া, বহেড়া « bâyṛā <bâhēṛā » (MIA. bahēḍaa- = vibhītaka); also আমড়া « āmaṛā » (āmrātaka), শিঙ্গাড়া « siṇ(g)āṛā » (śṛngātaka, -ṭaka), etc. ; Māgadhī Pkt. « gaḍa » (gata) is on the model of « kaḍa, maḍa » (*kaṭa, maṭa = kṛta, mṛta) : this « gaḍa » is found in the MB. of the ŚKK. (see p. 343, footnote). Cf. সড়ক « sâṛâkâ » *road* (sṛta, √sṛ *to go*). The OIA. « -ṭ- »> MIA., NIA. « -ṛ- » words should properly come under this heading. The common lMIA. and NIA. pleonastic affix « -ḍ- > -ṛ- », = eMIA. « -ṭ- », seems to have been « -ta- » in OIA. : see *infra*, under 'Formative Affixes.'

OIA. « -dd- > -ḍḍ- » > MIA. « -ḍḍ- » > Beng. « -ṛ- » : উড়ে « uṛē » (uḍḍayati, ud + dayati).

OIA. « -dr- » > MIA. « *-ḍḍ- » : খুড়া « khuṛā » (*khuḍḍa-, kṣudratāta) ; পাড়া « pāṛā » *village quarter* (padra *village*, cf. Vaṭa-padra- > Vaḍavadda > Vaḍōd- = *Baroda in Gujarat*) ;

OIA. « -nd- » : সাঁড়াশী « sâṛāśī » (MIA. *saṇḍaṅśia, Skt. sandaṅśikā) ;

OIA. « -rt- (-ṛt-) » : see under « -ṭ-, -t- » above.

OIA. « -rd- » > MIA. « -ḍḍ- » : কড়া « kâṛā » (kaparda-) ; ছাড়ে « chāṛē » (chardati) ; মাড়ে « māṛē » *pounds (as in an apothecary's mortar)* (mardati) ;

OIA. « -l- » > « -ḷ- » > « -ḍ- » : তাড়ী « tāṛī » *fermented date-palm juice, 'toddy'* (tāla, *tālikā).

Through deaspiration, intervocal and final [ṛfi] has in all cases become [ṛ] in NB. : see under [ṛfi], below.

The following are some of the unexplained words with interior [ḍ > ṛ] ; they are probably of *dēśī* origin : এড় « √ēṛ » *give up*, নড় « √ nâṛ » *move*, মুড় « √ muṛ » *fold* : all these three roots are found in Dravidian (Tamil) ; আড় « ārâ » *cross-wise, screen*, whence MB. আড়ানা « ārânī » *umbrella*, NB. আড়াল « ārâlâ » *obstruction* ; আড্ডা « āḍḍā » *club, rendezvous* ; আড়গড়া « ārâgârā » *stables* ; খড় « khârâ », also খেড় « khēṛâ » *straw, fuel*, খড়কিয়া

« khaṛkiyā » *tooth-pick of rushes*; খিড়কী « khiṛkī » *window, back-door* (MIA. khaḍakkī); খাড়ু « khāṛu » *bracelet* (khaḍḍu-); গাড়ু « gāṛu » *water-pot with spout*; গড় « √gaṛ » *to roll*, whence গাড়ী « gāṛī » *carriage*, গড়িয়ান্ « gaṛiyān » *sloping ground* (= MIA. gaḍḍa: see p. 66); গেঁড় « gẽṛ » *sprout*; গোড় « gōṛ » *foot* (MIA. gŏḍḍa), গোড়া « gōṛā » *beginning*; গোঁড় « gõṛ » *fleshy navel* (see p. 67); গোঁড়া « gõṛā » *bigot, bigoted partisan*; ঘাড় « ghāṛ », OB. « ghāṭa » *neck*; চোয়াড় « cōāṛ » *ruffian* (see p. 71); নড়ী « naṛī » *stick*; MB. নাড়া, নাঢ়া « nāṛ(h)ā », NB. নেড়া « nēṛā » *shaven-head*; পাঁড় « pãṛ » *chief, excessive*; ‡ পাড়া « pāṛā » *buffalo*; ফাঁড়া « phãṛā » *impending danger, lucky escape*; ভিড় « bhiṛ » *crowd*; লড় « √laṛ » *fight*; লাড়ু « lāṛu » *sweet-meat* (MIA. laḍḍu-); হোড় « hōṛ » *competition, slippery* (cf. হুড়াহুড়ি « huṛāhuṛi » *shaking and pushing*); হাড় « hāṛ » *bone* (= Late Skt. haḍḍa-); etc., etc.

[ḍ-, -ḍ-] in foreign words represents the alveolar [*d*] of English; also the Persian dental « d » in ডিহি « ḍihi » *district, area* (dih *country*), দেগ « ḍēg » *caldron* (dēg).

272. Bengali [ḍ, ṛ]. Initially, it is from—

OIA. « ḍh- »: ঢুকে, ঢোকে « ḍhukē, ḍhōkē » *enters* (√ḍhāuk > MIA. ḍhŏkkaï *approaches*): but cf. ঢুঁ, ঢুঁস next page;

OIA. « dhṛ- » in ঢীট « ḍhīṭa » (dhṛṣṭa);

OIA. « *-ṛth- »: ঢিলা « ḍhilā » (MIA. « ḍhilla- » = « *śiḍhila-, *śiṭhila » beside Skt. « śithila » < « *śṛthila »: but this derivation is very doubtful);

OIA. « sth- »: ঢাকে « ḍhākē » (« ḍhakkaï < *ṭhagati < sthagati »: very doubtful).

In ঢোঁড়া « ḍhõṛā » *a water snake*, we have « ḍh » through aspiration: see *ante*, p. 425.

In most « ḍh- », however, as in those given above, the etymology is doubtful: « ḍh- » words are mostly *dēśī*. Typical Bengali words: ঢঙ্গ « ḍhaṅg » *style, manner, gallantry, coquetry*; ঢামালি « ḍhāmāli » *revelry, orgy*, also ধামালি « dhāmālī »; ঢনা « ḍhanā » *pale, weak*; ঢল « √ḍhal » *to slope, to lean, to flow*; ঢাক « ḍhāka » (Skt. ḍhakkā<?); ঢাঙ্গা « ḍhāṅg(g)ā » *tall*; ঢাল « ḍhāla » *shield*; ঢালে « ḍhālē » *pours*, ঢালু « ḍhālu » *sloping*, conn. with ঢল;

ঢাঁচা « ḍhãcā » *form, shape* (also = ধাঁচা); ঢিকা « √ḍhikā » *be weary* (cf. Skt. dhikṣ); ঢিপ « ḍhip » *sound of something falling* (cf. √ḍip = kṣēpanē); ঢিবি « ḍhibi » *mound*, ঢেবুয়া « ḍhēbuā » *a lump* > *a coin* (*stamped bit of copper*); ঢিবরী « ḍhibaṛī » *axle-iron*; ঢিমা « ḍhimā » *slow*; ঢিল « dhilaṛ » *clod, piece of stone*; ঢুল « √ḍhul » *move to and fro* (*as a chowry*), *doze, nod one's head in sleep*; ঢুঁড় « √ḍhũṛ » *seek* (MIA. ḍhuṇḍhaï); ঢুঁ « ḍhũ » *butting with the head*, ঢুস « √ḍhus » *push with the head, gore*; ঢেউ « ḍhēu » *wave*; ঢেঁকী « ḍhẽkī » *rice-pounding machine, lever machine*; ঢেঁটরা « ḍhẽṭaṛā » *proclamation by beat of drum*; ঢেঁকুর « ḍhẽkuraṛ » *belching*; ঢেঁড়স « ḍhẽṛāsaṛ » *a vegetable, 'lady's fingers,'* ঢেঁড়ী « dhẽṛī » *seed-pod* (*of the poppy*), *an ear-ornament*; ঢেকা « ḍhēkā » *push* (cf. ধাক্কা « dhākkā »); ঢেমন « ḍhēmānaṛ » *a wanton or characterless person*; ঢেমচা, -সা « ḍhēmcā, -sā » *a musical instrument*, beside ধাঙসা « dhāṇgsā »; ঢের « ḍhēraṛ » *much, excessive, a heap*; ঢেরা « ḍhērā » *scrawl*; ঢো « √ḍhō » *remove articles*; ঢোল « ḍhōlaṛ » *drum* (*dēśī* ḍhŏlla); ঢোল « ḍhōlaṛ » *a surname* (cf. Śaur. Ap. ḍholla- *lover*); etc.

Medially, [ḍhi = ṛhi] of OB., reduced to [ḍ > ṛ], comes from—

OIA. « -th- » (generally < « rth ») > MIA. « -ḍh- »: পঢ়ে > পড়ে « pāṛhē > pāṛē » (pathati < √prath); কুঢ়ালী > কুড়াল, কুড়ুল « *kuṛhālī > kuṛāluṛ, kuṛul » (kuṭhāra- < *kulthāra, cf. Latin culter); গঢ় > গড় « √gāṛh, gāṛ » *make, build, shape* (√gaṭh, √grath).

OIA. « -ḍh- »: MB. গাঢ়া « gāṛhā » (gāḍha-); দঢ় > দড় « dāṛhâ > dāṛà » (dṛḍha-); আঢ়া > আড়া « āṛlā > āṛā » *a grain measure* (ādhaka-); *সেঢ়ী > সিঁড়ী « *sēṛhī > sīṛi » *steps* > (śrēḍhī-);

OIA. « -ṣṭ(h)- » > Early MIA. « -ṭṭh-, -ṭh- » > Second and Late MIA. « -ḍh- »: কাঢ়া > কাড়া « √kāṛhā > √kāṛā » *snatch away, raise* (*a shout*) (kṛṣṭa-); *কুঢ়ি > কুড়ি « *kuṛhi > kuṛi » (kuṣṭha-); দাঢ়া > দাড়া « dāṛhā > dāṛā » (daṅṣṭrā-); দাঢ়ী > দাড়ী « dāṛhī > dāṛī » *beard* (daṅṣṭrikā); বেঢ়া > বেড়া « bēṛhā > bēṛā » (vēṣṭa-); মাঢ় > মাড় « mārhâ > māṛaṛ » *water in which rice is boiled* (mṛṣṭa); লুঢ়ী, নুঢ়ী « luṛī, nuṛī » *pebble* (lōṣṭa-: see p. 307); etc.

OIA. « -ṛdh-, -rdh- » > Māgadhī MIA. « -ḍh- »: আঢ়ত > আড়ত « āṛ(h)âtaṛ » *store, magazine* (ṛddha-: cf. ādhya); বাঢ়ে > বাড়ে

« bār(h)ē » (vaḍhaï, vardhatē); বঢ়া > বড়া « buṛ(h)ā » (vṛddha-); সাঢ়ে > সাড়ে « sāṛ(h)ē » *plus half* (*saḍhahi < sârdha-); *আঢ়াঈ > আড়াই « *āṛhāī > āṛāi » 2½ (*aḍḍha-titīya, ardha-tṛtīya); আড় « āṛā », probably from *আঢ় « āṛhā » (aḍḍha, ardha-), as in আড়-মাতলা « āṛā-mātalā » *half-drunk*, আড়-পাগলা « āṛā-pāgalā » *half-mad*, আড়-চিবান « āṛā-cibānā » *half-chewed*, etc.; বাঢ়ই > বাড়ই « bāṛhāï > bāṛui » (vardhakin); বাঢ়ন > বাড়ন « bāṛhanā > bāṛanā » *broom*, as in the street-cry বীড়া-বাড়ন « bīṛā-bāṛanā » *pot-rests* (*of straw* = vīṭa-) *and brooms* (vardhana); etc. The word গঢ় « gaṛhā », NB. গড় « gaṛā » *fort*, seems to be from a 'Māgadhī' or Prācya « *gaḍha » < OIA. « *gṛdha » (whence possibly the Vedic and Skt. « gṛha, gēha », due to Prakritisations) = Indo-European « *ghṛdho- », cf. Slav « gradŭ » *town*, etc. (Cf. C. C. Uhlenbeck, 'Etymologisches Wörterbuch der altindischen Sprache,' Amsterdam, 1899, under « gṛha »; T. Bloch in the 'Annual Report of the Archaeological Survey of India for 1906-07,' p. 126, foot-note; A. Walde, 'Lateinisches etym. Wörterbuch,' Heidelberg, 1910, under « cohors »).

The « -ḍh- » in রাঢ় « rāḍha » is obscure: a connection with a « *raḍḍha < raṭṭha < rāṣṭra » does not seem convincing. চঢ় « √cāṛh » *ride*, is found in Hindī, and seems to be due to aspiration of চড় « √cāṛ » (attested in the Śaurasēnī Apabhraṁśa fragments in Hēma-candra's grammar) = « √caṭ » in Skt. (< ceṭa ?).

Ts. words have « -ḍh- » and « -ḍh- > -ṛh- »: ঢক্কা « ḍhakkā », মূঢ় « mūṛhā », নবোঢ়া « nabōṛhā », আরূঢ় « ārūṛhā », etc.

(4) The Dental Stops and Aspirates [t, th, d, dh].

273. The dentals do not present any difficulty. Barring cases of cerebralisation (which was native Māgadhī), and palatalisation in connexion with « -y- » (which was non-Māgadhī), and a few instances of labialisation in connexion with a labial or denti-labial (which also was non-Māgadhī), the dentals have had a uniform history. The non-cerebralised forms in

cases where we have preceding « r » in OIA. are apparently old loan-words from the Midland and Western dialects.

Bengali [t].

Initially, [t] is from MIA. « t- », coming from—

OIA. « -t- »: MB. তড় « tāṛa » (tāṭa, *tṛta); তল « tāla » (tala); তরশু « tāraśu » (tiraḥ-śvaḥ); তা « tā » (tāpa), also তাও « tāŏ »; তাঁত « tāta » (tantra, tantu); তাত « tāta » (tapta); তাকে « tākē » (tarkayati); তাজে « tājē » (tarjati); তাড়ী « tāṛī » *toddy* (tāla-); তিতা « titā » (tikta-); তিল « tila » (tila); তেল « tēla » (tāila); তোলে « tōlē » *raises* (tōlayati), etc.;

OIA. « tr- »: তিন « tin = tīn » (tiṇṇi, trīṇi); তে « tē- » (tri-, tray-); তোড়ে « tōṛē » (trōṭayati); তোড়ী also টোড়ী « tōṛī, ṭōṛī » *a Rāginī* (trōṭikā, tōḍikā);

OIA. « tv- »: তুই « tui » (tvayā-, tva-); তুরিত « turita » (tvarant-);

OIA. « y- », by analogy changed to « t- » in MIA.: তুমি « tumi » (tumhē, *tumhahi = yuṣma-, yuṣmābhiḥ).

In the interior of words, [t] is from—

OIA. « -ŋkt- » > MIA. « -nt- »: পাঁতি « pāti » *row, a line, an opinion* (paŋkti);

OIA. « -tt- »: উতরে « utārē » (uttarati); মাত « māta », মাতাল « mātāla » (matta); ভীত, ভিত « bhīt, bhit » (bhitti);

OIA. « -t- » with accent following > MIA. « -tt- »: জিত « jita » *victory*, also জিত « √jit » *to win* (jitta, jitá); cf. পিতল « pitāla » (pittala > pītá);

OIA. « -t- » with spontaneous nasalisation > MIA. « -nt- »: সোঁতা « sõtā » current, OB. « sonta- » (sŏnta, srōtas); পুঁতি « pũti » *fine beads stringed in ornaments* (? põntia = *prōtikā, prōta);

OIA. « -tr- » > MIA. « -tt- »: আরতি « āraṭi » (ārātrika); করাত « karāta » (karapatra); খেত, ক্ষেত « khēta » (kṣētra); খন্তা « khāntā » (khanitra-); MB. গাত « gāta » (gātra); চীতা, চিতা « cītā, citā » *leopard* (citraka-); চরিত « caṛita » (caritra); চাটুতি « cāṭuti » *a surname* (caṭṭa-putra); ছাতা « chātā » (chatra-); MB. জাযতী « jāẏaṭi » *horoscope* (jāta-patrikā); যাঁতা, জাঁতা « jāta » *quern*

(yantra-); MB. ছুতার « chutārʼ » (sūtra-dhāra); নেত « nētʼ » *fine cloth* (nētra); পইতা « païtā » *sacred thread* (pavitra-); পাত « pātʼ » (patra); পুত « putʼ » (putra); বেত « bētʼ » (vētra); MB. বুহিত, বোহিত « buhitā, bōhitā » (vahitra); মাহুত « māhutʼ » *elephant-driver* (mahāmātra); মূত, মুত « mūtʼ » (mūtra); রাতি, রাত « rāt(i) » (rātri); তীস « -tīsʼ » (-triṁśat); etc., etc.;

OIA. « -kt- » > MIA. « -tt- »: আলতা « ālʼtā » (alakta-); ছাতু « chātu » (śaktu-); তিতা « titā » (tikta-); ভাত « bhātʼ » (bhakta); মোতী > MB. মুতী « mōtī > mutī » (mauktika); রতি « rātī » (raktikā), from the Hind. « rattī »; রাতা « rātā », রাতুল « rātulʼ » *pink, red* (rakta-); সেঁতান « sẽtānā » *moistened* (sikta-);

OIA. « -ktr- » > MIA. « -tt- »: জোত « jōtʼ » *farm*, জুতা « jutā » *shoe* (yōktra-);

OIA. « -ṭt- » > MIA. « -tt- »; ছত্তীস « chāttisʼ » (saṭtriṁśat), beside the *sts.* ছত্তিরিশ, ছত্রিস « chātt(i)riśʼ ».

OIA. « -nt-, -ntr- » > MIA. « -nt- »: আঁত « ātʼ » (antra); উরুত « urutʼ » *thigh* (p. 325); MB. কাঁতি « kātī » (kānti); তাঁত « tātʼ » (tantra, tantu); দাঁত « dātʼ » (danta); বহুত « bāhutʼ » *much, excessive, many* (? bahu-vant-); MB. ভাঁতি « bhātī » (bhrānti); সাঁওতাল « sāotālʼ, sāōtālʼ » *Santal* = *border-tribe* (sāmanta-pāla); সাঁতরা « sātʼrā » *a surname* (sāmanta-rāja); সীঁতি « sītī » (sīmanta-); etc. The locative affix ত, তে « -tā, -tʼ, -tē » (< anta, anta + hi); the dative post-position তরে « tārē » (antara + hi); etc. The MIA. affix « -anta » of the present participle has given ইত « -it- » in Bengali: see pp. 132, 335. Cf. মাইঁতি > মাহিতী « māītī < māhitī » *a surname* (mahanta- + -ika: Oṛiyā māhitī);

OIA. « -pt- » > MIA. « -tt- »: নাতি « nātī » (*naptrikā = naptṛ); নিসুতি « niṣutī » (niṣupta-); বিনতি « binātī » (vijñapti-); সাত « sātʼ » (sapta); সতের « sātērā » (sapta-daśa); (in সত্তর « sāttārʼ », একাত্তর « ekāttārʼ » etc., we have « -tt- » in NB. for OIA. « -pt- »); ‡সুত « √sut » *to sleep* (supta); etc.

OIA. « -rt- » > MIA. « -tt- »: MB. কাতি « kātī » (kārttika); OB. « gātī » (garta-); বাতি « bātī » (vartikā).

In ছুঁত « chũtā » *pollution, untouchability,* we have [t] through unvoicing and deaspiration of « -dh- », from OB. ছুধ « chudha » (ksubdha), with influence of √ছুঁ, ছোঁ « √chū, chõ » *touch.*

In বোলতা « bōlatā » *wasp,* it seems we have [t] from « -ṭ- » or « -l- » (Skt. varaṭā, varalā; Hind. barrā).

[t] is intrusive in জাঠতুতা, খুড়তুতা, পিসতুতা, মাসতুতা, মামাতুতা « jāṭh-t-utā, khuṛ-t-utā, pis-t-utā, mās-t-utā, māmā-t-utā » *cousins, children of father's elder brother, younger brother, and sister, and of mother's sister, and brother respectively,* side by side with জেঠুতা, খুড়ুতা, পিসুতা etc. « jēṭh-utā, khuṛ-utā, pisu-tā » etc. (<* jēṭhāutā, khuṛāutā, piusiutā: jyēṣṭha-tāta-putra, kṣudra-tāta-putra, pitṛ-ṣvasrikā-putra, etc.)

[t] is found for « st » in a few MB. *s/ss.*: তিরি « tiri » (strī), তন « tānā » (stana).

[t] occurs in *s/s.* forms. *e.g.*, জুগতি « jugati », also জুগিৎ « jugitā » (yukti); বাতাস « bātāsā » (vāta-); MB. পতিয় « √pātiyā- » (pratyaya-). It is found also in some *ts.* affixes, like ইত « -itā- »: *e.g.*, থকিত « thāk-itā » (√thāk *to be at stand-still*). In *ts.* words, there is 'doubling' of the [t] in the groups « -tm-, -ty-, -tr-, -tv- », also in « -thy- »: *e.g.*, আত্মা [ātta], হত্যা [hotta], রাত্রি [rattri], দ্বিত্ব [ditto], মিথ্যা [mittha].

In the word বিতিকিচ্ছি « bitikicchi » *bad, ugly* (= vicikitsa-), we have an uncommon change of « -c- » to [t], to avoid repetition of the « c » sound; cf. also folk-Bengali তিকিচ্ছে « tikicchē » (= cikitsā).

Intervocal [th] tends to deaspirate, and a number of *tbh.* forms like হাত « hātā » (for eMB. হাথ « hāthā ») have dropped the aspiration quite early.

The English alveolar [*t*] is normally represented by the cerebral [ṭ in Bengali, but we find the dental in a few cases: *e.g.*, ডাক্তার « ḍāktār » *doctor*; হাঁসপাতাল « hãspātāl » *hospital*; তারপিন « tārpin » *turpentine,* etc. For [t] in loan-words from the Persian, Portuguese, French, English, see *infra.*

274. Bengali [th]. Initially, [th] is from—

OIA. « st-, sth- »: থর « thārā » (stara); MB. থাহ « thāhā » (stāgha); MB. থন « thānā » (stana); থানা « thānā » (sthāna-); থাম « thāmā » (stambha); থাকে « thākē » *remains, arrests oneself* (√sthā?;

√stabh- + √kṛ ?) ; থির « thiṛ » (sthira) ; থাল « thāl » *plate* (cf. sthālī) ; থোয় « thōy » (sthāpayati) ; থোড়া « thōṛā » (stōka-) ; *stss.* থিতা « thitā » *subside*, থিতু « thitu » *established* (sthita-) ;

In the word থরথর « thṛathṛ » *trembling, shaking*, cf. MIA. « tharaharaï » *trembles*, the origin of the [th] is not clear. In থুক « thuk » , থুথু, থুতু « thut(h)u » *spittle*, it is clearly onomatopoetic. [th] is of unknown origin in the following (probably *dēśī*) words : থতমত « thât-mât » *taken aback* (conn. with « stabdha » ?) ; থল « thal », থাস « thas », *the idea of flabbiness* (prob. onomatopoetic); থাবা « thābā » *paw*, with which are connected থাবড়া « thābaṛā », থাপ্পড় « thāppaṛ » *slap*, etc. ; থিক « thik » *the idea of teeming, as of maggots* (onomatopoetic ?) ; থুঁথি > থুঁতি « thũt(h)i », থুঁতনী « thũtanī » *chin*, থোঁথা, থোঁতা « thōt(h)ā » *fat chin* ; থুড়া, থুরা « √thuṛā, √thurā » *mince* (*as meat*) ; থুবড়া « thubṛā » *to tumble down face forward, tottering old person* ; থেঁতান « thẽtānā », extended to থেঁতলান « thẽtalānā » *to pound, to mash* : থোবা « thōbā » *bunch* (< stabaka ?) ; থোড় « thōṛ » *inner part of the plantain tree*, etc.

In the interior of words, [th] is from—

OIA. « -tth- » : অশথ « aśāth » (aśvattha) ; ইথে « ithē » (itthā-) ; কয়েথ, কথ « kā(yē)th » (kapittha) ; কুলথী « kulathī » (kulattha-) ; তুঁতিয়া « tũtiyā » from *তুঁথিয়া « *tũthiyā » (tūttha-).

OIA. « -tr- » : হেথা « hēthā » (atra-), যেথা « jēthā » (yatra-) (?).

OIA. « -nt- » : সিঁথি, সিঁথা « sīthi, sīthā », beside সিঁতি, সিঁতা « sīti, sītā » (sīmanta-) ; cf. Maithilī « karathi, bhanathi » etc. = MIA. « karanti, bhaṇanti ».

OIA. « -rth- » > MIA. « -tth- » : সাথ, সাথে « sāth, sāthē » *company, in company with* (sârtha-) ; চৌথ « cauth » (caturtha), a non-Māgadhī form.

OIA. « -st(h)- » : নথ « nāth » (nastā) ; আথান্তর « āthāntar » (avasthântara) ; MB. *sts.* আবথা « ābāthā » (avasthā) ; কায়েথ, কায়েত « kāyēt(h) » (kāyastha) ; পাথর « pāthar » (prastara) ; পুথি, পুঁথি « puthi, pũthi » (pustikā ; see p. 194) ; MB. পৈথান « pâithān » (pada-sthāna) ; বাথান « bāthān » *cow-pen* (? vāsa-sthāna) ; মাথা « māthā » (mastaka-) ; মুথা « muthā » (musta-) ;

MB. হাথ « hāthå » > NB. হাত « hātą » (hasta); শিথান « śithānę » (śiras-sthāna): etc.

[th] occurs in *ts.* words: কথা « kåthā », প্রথম « pråthåmą », যথা « yåthā » [ʃʒothɑ], etc.

In foreign words: the English spirant sound of [θ] regularly becomes [th] in Bengali.

275. Bengali [d]. Initially, it is from—

OIA. « d- »: MB. দে « dē » (= dēva, dēha); দাঁত « dātą » (danta); দাপ « dāpą » (darpa); দাঁড় « dāṛą » (daṇḍa); MB. দিঠি « diṭhi » (dṛṣṭi); দশ « dåśą » (daśa): MB. দেয়া « dēẏā » *sky, cloud* (dēva-); দুখ « dukhą » (duḥkha); দাড়া « dāṛā » (daṃṣṭrā-); দেউটী « dēuṭī » (dīpa-vartikā): দেখ « √dēkh » (dṛkṣ-); দীঘল « dīghålą » (dīrgha-la-); দুধ « dudhą » (dugdha); দোনা « dōnā » *leaf-packet* (damana'ka-); etc.

OIA. « dr- » > MIA. « d- »: দৌড় « √dåur » (drava-ḍa: see pp. 345, 348); দাম « dāmą » (dramya < Greek drakhmē);

OIA. « dv- » > MIA. « d- »: দু « du- » (dvi-); দুঁদিয়া, দুঁদে « dũdiā, dũdē » *quarrelsome, masterful, strong* (dvandva-); দুনা « dunā » (dviguna-); -দীয়া, -দে « dīā > dē » (dvīpa-).

In the interior of words, [d] is from —

OIA. « -dd-, -dr- » > MIA. « -dd-, -nd- »: কোদাল « kōdālą » (kuddāla < ?); আদা « ādā » (ārdraka-); উদ in উদ-বিড়াল « udą-biṛālą » *otter*, lit. '*otter-cat*' (udra); নীদ, নিন্দ « nīdą, nindą » (nidrā); OB. « bhāda » (bhādra); MB. মুদড়ী « mudāṛī » *ring* (mudrā-); হলুদ « haludą » (haridrā); সোদো as in NB. সোদো ভাসান sōdō-bhāsānå « *a festival, when toy boats with lights are floated in rivers or tanks* (*såuduā < *saw̃udduā < samudra- + -uka- ?);

OIA. « -dm- » > MIA. « -dd- »: ছাদ « chādą » *roof* (chadma? see *infra*, next page).

OIA. « -dv- »: ছাদলা, ছেৎলা « chādąlā, chētąlā » *moss, slime* (? śādvala-: see under ঝেঁৎলা, p. 481).

OIA. « -bd- » > MIA. « -dd- »: OB. « sāda » (śabda);

OIA. « -nd- »: ছাঁদ « chãdʻ » (chanda); ননদ « nânâdʻ » (nanandā); সিঁদুর « sīdūrʻ » (sindūra);

OIA. « -ndr- » > MIA. « -nd- »: চাঁদ « chãdʻ » (candra);

OIA. « -rd- » > MIA. « -dd- », a non-Māgadhī change: আদা « ādā » (ārdraka); কাদা, কাদো « kādā, kādō » (kardama); কুঁদে « kũdē » *jumps* (kūrdati < ?); চৌদ্দ « câuddâ » (caturdaśa); পাদ « pādʻ » (parda); বাদল « bādâlʻ » (vardala < ?); মাদল « mādâlʻ » (mardala); etc.

[d] is intrusive and euphonic in বাঁদর « bãdârʻ », probably borrowed from the Hind. « bandar » (vānara); cf. জাঁদরেল « jãdrēl » *huge, big* = Hind. « jandrāl » < English *general*.

[d] for [ʃʃ] we get in দনাই « dânâi » for জনাই « jânâi » (= janârdana); গাঁদলা « gãdʻlā », probably for গাঁজলা « gãjʻlā » *scum, froth*; Chittagong রাদহাঁস « rādʻ-hãsʻ » for রাজহাঁস « rājʻ-hõsʻ » *swan*; and probably দাঙ্গা « dāṇgā » *fight, brawl* is a variant of Persian « jang » *battle*.

Through voicing of [t(h)], we get [d] in a number of words: *e.g.*, অশুদ « âśudʻ » = অশথ « âśâthʻ » (âśvattha); কদবেল « kādʻ-bēlʻ » for কয়েথ-বেল « kâyēthʻ-bēlʻ » (kapittha-bilva), through progressive assimilation; ছাদ « chādʻ » *roof* seems rather to be from the voicing of the dental in ছাত « chātʻ » (chatra), rather than from a form like OIA. « chadma » (see above, under « -dm- »). NB. [d] through deaspiration of final and intervocal [dfi] is exceedingly common.

In *tss.*, [d] is retained: and in « -dm-, -dy-, -dr-, -dr-; -dhm-, -dhr-, -dhy-, -dhv- », the stop is lengthened in *tss.*

[d] in foreign words: see *infra*. English spirant [ð] becomes [d].

276. Bengali [dfi]. Initially, from—

OIA. « dh- »: ধন « dhânʻ » (dhana); ধান « dhānʻ » (dhānya-); MB. ধরে « dhârē » (√dhṛ); ধুনে « dhunē » (dhūnōti); ধনী « dhânī » *lady, woman* (*dhanikā); OB. « dhāmʻ » (dharma); ধায় « dhāy » (dhāvati); ধোয় « dhōy » (dhāvayati); ধুঁয়া « dhũā » (dhūma-); ধলা « dhâlā » (dhavala-); ধোখা, ধোঁকা « dhōkhā > dhõkā » *to be weary, to pant* (√dhukṣ-); ধড় « dhâṛʻ » *torso* (dhṛta-); ধোসা « dhōsā » *a grey woollen stuff* (dhūsa-); ধুতি « dhuti » (dhōtra-);

ধাঁধা « dhãdhā » (dhandhā- < ?); ধুনা « dhūnā » (dhūpana-); ধুলা « dhūlā » (dhūli-) etc.;

OIA. « dhr- » > MIA. « dh- »: ধুয়া « dhūā » *refrain* (dhrūva-);

OIA. « dhv- » > MIA. « dh- »: ধস « √dhās » (dhvas); MB. ধুনি « dhuni » (dhvani).

Medially—

OIA. « -gdh- » > MIA. « -ddh- »: দুধ « dudhą » (dugdha);

OIA. « -ddh- »: MB. আবুধ « ābudhå » (abuddhi); MB. বুধি « budhi » (buddhi); উধো « udhō » (uddhava); ধার « dhāraą » *loan* (uddhāra); পিন্ধ « √pindh » (apinaddha); সাধ « sādhą » *desire* (śraddhā); শুধি, শুধ, সুধি, সুধ « śudh(i), sudh(i) » *knowledge* (śuddhi);

OIA. « -dhr- » > MIA. « -ddh- »: MB. গিধ, গিধিনী « gidhå, gidhinī » (gṛdhra, gṛdhriṇī);

OIA. « -ndh- »: আঁধার « ãdhāraą » (andha-kāra); আঁধি « ãdhi » *dust-storm* (andhikā); কাঁধ « kãdhą » (kandha, skandha); বিঁধ « √bīdh » (vindh, vyadh); বাঁধ « bãdhą » (bandha); OB. « sãdhi « (sandhi), etc.;

OIA. « -bdh- » > MIA. « -ddh- »; OB. « ladhā » (labdha-); OB « chudha » *impure* NB. ছুত « chutą » (kṣubdha-);

OIA. « -rdh- » > MIA. « -ddh- »: আধ « ādhą » (ardha); বধনা « bådhąnā » *water-pot with spout* (vardhana-);

[dfi] through transference of aspiration is not uncommon: *e.g.*, গাধা « gādhā » (gaddaha-, gardabha-); *sts.* সন্ধ beside সন্দ « sånd(h)å » (sandēha); dialectally চৈধ্য [cʃoiddfio] = চৌদ্দ « cåuddå » < « cauddaha » (caturdaśa).

[dfi] interchanges with the cerebral [ḍfi] initially in some cases: *e.g.*, ঢাঢা, ধাঢা « ḍhãcā, dhãcā » = *style*, also ঢঙ্গ « ḍhåṇ » ; ধোঁড়া « dhõṛā » beside ঢোঁড়া « ḍhõṛā » (= ḍuṇḍubha, duṇḍubha); ঢীট, beside ধীট « ḍhīṭą, dhīṭą » (dhṛṣṭa); ঢেঁড়স, ধেঁড়স « ḍhẽṛåsą, dhẽṛåsą » *a vegetable*; ধাউস, ঢাউস « ḍhāusą, dhāusą » *huge* (= *ḍhāb-u-sâ < ḍhābā, ḍhibi *mound, hillock* ?); etc. A number of « -dh- » words in Bengali (as in other NIA.) are obscure: *e.g.*, ধুম « dhūmą » *pomp, splendour, hugeness* (cf. ধুমসা « dhumą-sā » *fat*); ধাক্কা « dhākkā », *push*, ধকল « dhåkåląą » *strain*, beside MB. ঢেকা « ḍhēkā » *push*; ধামা « dhāmā » *basket*; ধামসা « dhāmąsā » *squeeze, beat, press*, cf. ধামালী

« dhāmālī » *sport, orgy, revelry*; ধাড়ী « dhāṛī » *grown-up animal, leader*; ধিঙ্গি « dhiṇgi » *wanton, full of spirits, bad*; ধুচনী « dhucanī » *basket to wash grain*; ধোকড় « dhōkaṛa » *rags*; ধাঙ্গড় « dhāṇgaṛa » *a sweeper* < *aboriginal or low-caste man from the Kōl and Oraon land*; ধেৎ, দেৎ « d(h)ēt » *an exclamation of disgust*, etc., etc.

[dh] occurs in *ts.* words.

(5) The Labial Stops and Aspirates [p, ph, b, bh], and the Bilabial and Denti-labial Spirants [ɸ, β; f, v].

277. Labialisation of the OIA. groups of dental stops (or aspirates) + « m » or « v » is a phonological development which is quite noteworthy in MIA. (see Jules Bloch, 'Langue Marathe,' § 129). Two kinds of treatment are found in MIA.: (i) assimilation of the labial nasal or semi-vowel to the preceding dental (*e.g.*, ātmā > attā); (ii) labialisation (*e.g.*, ātmā > atpā > appā). Judging from the evidence of Aśōkan MIA. (in which the dialect of Girnar normally uses « -tp- » for « -tv-, -tm- » and « -db- » for « -dv- »), from a Greek transcription like « Barakhē » = « Dvārakā », and from Modern Gujarātī and Sindhī (*e.g.*, « bē, bbē » *two*) it can be very well inferred that the labialisation with « v, m » characterised the dialects of the Gujarat side in the First MIA. period. Labialisation was absent in the East (and possibly also in the Midland) in the Early MIA. period, but it was found in the North-western speech: *e.g.*, the equivalents of « dvādaśa » in the Early MIA. dialects were, as can be inferred from the Aśōka inscriptions, « duvāḍasa, duvādasa » in the East and the Midland, « dbādasa » in the South-west, and « badaya, =*bādaźa » in the North-west; and those of « ātman » were, respectively in the East and the Midland, in the South-west and the North-west, « atta- », « atpa- », and « ātma » (as in Mansehra: the Shahbazgarhi « ata- = atta » seems to be a 'Māgadhism'). The North-western speech also shows change of « m, v » to « p » after a sibilant: *e.g.*, « pravasaspi = *pravāsasmin = pravāsē », « spasuna(ṁ) = svasṛṇām », « spamikēna = svāmikēna » etc. This is a change which is not found in other parts of India, but it has

a parallel in the Iranian change of « śv » to « sp », as in « spa-ka, aspa » = « śvan, aśva ».

The labialised forms are very few in Bengali and in other Magadhan (see below). These forms can very well have come to the Eastern dialects (and to those of the Midland) from the dialects of the West where they seems to have originated. They were early established in the Northern Indian *koinē* based on the Midland speech, which became the Pali language and their acceptance in the various forms of MIA. was due to the influence of this *koinē*.

278. Bengali [p].

[p] is a sound which tends very easily to be pronounced without contact of the lips, and in Old Bengali, some groups like « na + √pār » *not to be able* became নার « √nār » in MB. through a stage « *nawār- », which is preserved in Assamese as « nōwār- ». Apart from the spirant pronunciation of the aspirates [ph, bɦ], the stop [p] is pronounced as a bilabial open consonant or spirant, [ɸ], in the Eastern Vaṇga dialects; and in Noakhali and Chittagong, the lips are frequently so far apart as to reduce the [ɸ] into a sound almost like a voiceless [h]: *e.g.*, Sylhet Bengali পাপ « pāpa » = [ɸa:ɸ], পূজা « pūjā » = [ɸuza], পয়সা « pāysā » *pice* = [ɸəʃa]; Tipperah, Noakhali and Chittagong পুত « puta » *son* = [ɸu:t, hu:t], পোলা « pōlā » *child* = [ɸola, hola], পুটীমাছ « pūṭi-māchа » *a fish* = [ɸuḍiās, huḍiās], পেট « pēṭa » = [ɸɛ:ṭ, hɛ:ḍ], পাইয়াছি « pāiyāchi » *I have received* = [haisi], পলাইয়াছে « pālāiyāchē » *has run away* = [halaise], etc. One can compare the change of [p] to [ɸ, h] in Japanese, in Modern Kaṇṇaḍa, and in other languages.

Initially, [p] is from MIA. « p- », from—

OIA. « p- »: পড়ে « pāṛē » (patati); পা « pā » (pāda); পান « pāna », পান, পাণ « pāna, pāṇa » (pāna; parṇa); পিয়ে « piē » (pibati); পুত « puta » (putra); পিসি « pisi » (pitṛ-ṣvasṛkā); পুছে « puchē » (pṛcchati); পুআ, পুয়া « puā » (pūpa-); পোনে « pāunē » (pādōna-); পরে « pārē », MB. পহে, পহিরে « pāhrē, pāhirē » (paridhīyatē); পুকুর « pukura » *tank* (puṣkarin); পইতা « paitā » (pavitra-); MB. পহু, পহুঁ « pāhu, pāhũ » (prabhu); পাবড়ী « pābaṛī » *petal*

(parva-); পরখ « pårâkhꞑ » (parīkṣā); পুড়ে « puṛē » *burns* (puṭati); MB. পানই, ‡পানা « pānâi, pānā » (upānah-); etc., etc.

Also in *dēśī* words, *e.g.*, পেট « pēṭꞑ » *belly*, পোক, পোকা « pōk(ā) » *worm*, পাক « pākꞑ » *twist, whirl*, পোঁটা « põṭā » *entrails, exudation from nose*, পটোল « pâṭōlꞑ » *a vegetable*, etc.

OIA. « pr- »: পুতি « pũti » *leads* (*ponta-, prōta-); পিয়া « piyā » (priya-); পিয়াল « piyālꞑ » (priyāla); পর « pårꞑ < pårâ » (prahara); পহেলা, পয়লা « pâhēlā, pâẏlā » (pratha-illa); MB. পেখ « √pēkh » (prēkṣ-); পাঁচীল « pắcīlꞑ » (prācīra); পুঁটী < পুঁঠী « pũṭī < pũṭhī » (prōṣṭhikā); পোঁছে « põchē » (prōñchati); MB. পেম « pēmâ » (pĕmma, prēman); MB. পেলে « pēlē », NB. ফেলে « phēlē » (pĕllaï, prērayati); MB. পাউষ « pāuṣâ » (prāvṛṣa); পড়িশি « pâriśī » (prativēśin); MB. পড়ীছা « pâṛīchā » (pratīkṣaka-); পইশে > পশে « pâiśē > pâśē » (praviśati); পইঠা « pâiṭhā » *stairs, foundation* (pratiṣṭhā-); etc., etc.

In the interior of words, [p] is from—

OIA. « -tp- » > MIA. « -pp- »: উপজে « upâjē » (utpadyatē); উপাড়ে « upāṛē » (utpāṭayati);

OIA. « -p- » > MIA. « -mp- »: পিঁপড়া, পিঁপিড়া « pĩp(i)ṛā », OB. « pimpiḍā » (cf. Skt. pipīlikā); শাঁপ « sắpꞑ » *curse* (*sampa = śāpa : cf. abhisampāta);

OIA. « -pp- »: পিপুল « pipulꞑ » (pippalī); জলপিপী « jâlꞑ-pipī » *a kind of bird* (pippaka, pippikā);

OIA. « -py- » > MIA. « -pp-, -mp- »: রূপা « rūpā » (rūpya-); খোঁপা, খোপা « khõpā, khōpā » *hair done into a knot* (*kṣupya- ? or kṣumpa- ?); ঝাঁপান « jhắpānꞑ » (yāpya-yāna);

OIA. « -pr- » > MIA. « -pp- »: ছিপ « chipꞑ » *a fast boat* (kṣipra; or < *dēśī* sippa *shell* ?); বাপ « bāpꞑ » *father* (vapra);

OIA. « -mp- »: চাঁপা « cắpā » (campaka-); কাঁপ « kắpꞑ » (kampa); NB. সাঁপুড়া « sắpuṛā » *basket, pot* (samputa-);

Also in *dēśī* words: টোপর « ṭōpårꞑ » *crown, helmet*, টুপী « ṭupī » *hat*; চাপ, চিপ, চুপ « √cāp, cip, cup » *press* (cf. Śaur. Ap. campijjaï = ākramyatē); চাপড় « cāpâṛꞑ » *slap* (cf. Skt. carpaṭa < ?); ছাপ

« √chāp » *to print*; হড়পী « hàṛ̀pī » *basket, snake-charmer's basket*; শিপ « śipà » *libation-pot* (*dēśī* sippa = *shell, oyster shell*), etc. ;

OIA. « -rp- » > MIA. « -pp- » : কাপ, খাপ « kāpà, khāpà » *sheath* (*skarpa, karpa > MIA. khappa, kappa) ; কাপড় « kāpàṛà » (karpa-ṭa) ; খাপরা « khāpàrā » *tile* (khappara-) ; কাপাস « kāpàsà » (kārpāsa) ; OB. « kāpurà » (karppūra) ; দাপ « dāpà » (darpa) ; সাপ « sāpà » (sarpa) ; সঁপে « sãpē » (samarpayati) ; etc. ;

OIA. « -ṣp- » : ভাপ « bhāpà » (bhappa, *bâppha, bāṣpa), by transposition of aspiration.

OIA. « -tm-, -tv- » : আপন « āpànà » (appaṇ-, cf. Girnar Aśōkan atpa- = ātman) ; the affix -পন, -পনা « -pànà, -pànā » (MIA. « -ppaṇa- < -tvana ») ; ছাপর « chāpàrà » *bedstead with frame for curtains* (chatvara).

Cases of [p] by deaspiration of [ph] are rare intially in Bengali, but quite common intervocally and finally. Through unvoicing of [b] we get [p] in a few cases : *e.g.*, পাপড়ী « pāpàṛī » *petal* beside পাবড়ী « pābàṛī » (parva-) ; the curious *sts.* আদোপে « ādōpē » *at all, in the least* < *আদোবে « ādōbē » >< « ādōwē » for Sanskrit « ādāu » [ɑdou] + loc. aff. « -ē » ; etc.

[p] in *ts.* words is doubled in the groups « -pr-, -pl-, -py- ». In some *stss.*, « -sp- » has given [p] : *e.g.*, পরশ « pàràśà » (sparśa), পষ্ট « pàṣṭà » (spaṣṭa).

In foreign words, intervocal [p] frequently is from [f] of Persian, Portuguese, English : see *infra.*

279. Bengali ফ [ph, ɸ, f].

Initially, it is from OIA., MIA. « ph- » : ফল « phàlà » (phala) ; ফলার « phàlārà » *feast* (phalâhāra) ; ফলা « phàlā » (phalaka-) ; ফাগ « phāgà » (phalgu) ; ফাগুন « phāgunà » (phālguna) ; ফাল « phālà » (phāla) ; ফেনা « phēnā » (phēna-) ; ফু « phu » *sound of blowing with the mouth* (cf. phutkāra) ; ফুল « phulà » *flower* (phulla) ; ফাঁকি « phãki » *emptiness, laziness,* < *negligence* (phakkikā <?) ; ফাঁড় « phãṛà » *circumference* < *belly* (phaṇḍa < ?), etc.

Also from OIA. « p- », by aspiration : ফাতা « phātā » *float of quill in angling line* (? patra-) ; ফাঁস « phā̃sa » (pāśa) ; ফড়িঙ্গ « phāriṇ(g)a » *grasshopper* (pataṇga) ; MB. ফলঙ্গ « phālaṇgā » *jump, leap* (? plavaṇga : *sts.*) ; ফেলে « phēlē » < MB. পেলে « pēlē » (pĕllaï, prērayati) ; ফাউড় « phāuṛa » (*bamboo*) *stick with big joints* (? parva) ; etc.

OIA. « sp-, sph- » > MIA. « ph- » > Bengali [ph] : ফস্ as in ফস্কা « phāsa̤kā » *to slip away, to lose touch with* (conn. with √spṛś ?) ; ফুটে « phuṭē » (sphuṭyati) ; ফাটে « phāṭē » (*sphaṭyati, phaṭṭaï) ; ফাড়ে « phāṛē » (sphāṭayati) ; ফোড়া « phōṛā » (sphōṭa-) ; ফাল « phāla̤ » *jump* (sphāla) ; ফরশা, ফরছা « phārśā, phārchā » *clearing of darkness, dawning* (√sphar, √sphur) ; ফাউ « phāu » *excess, addition, extra on little articles sold* (sphāti—*sphāṭuka) ; *sts.* ফটিক « phaṭika̤ » (sphaṭika), ফুর্ত্তি « phurti » (sphūrti), etc.

[ph] in the middle of words is from—

OIA. « -mph- » : গোঁফ « gõpha̤ » (gumpha) ; লাফ « lāpha̤ » (lampha) ;

OIA. « -rph- » : MB. নাফাএ « nāphāē » for লাফাএ « lāphāē » *coquettes* (cf. √raph, rarphati, ramphati, raphati = *goes, moves*) ;

OIA. « -ṭuph- > *-ṭph- » > MIA. « -pph- » : OB. « kāphala » (kapphala, *kaṭphala, kaṭuphala) ;

OIA. « -sph- » > MIA. « -pph- » : MB. আফালে « āphālē » (āsphālayati).

Some words in [ph] are obscure in Bengali : *e.g.*, ফেরো < ফারুআ « phērō, phāruā » *goblet, water-pot* (*originally = with a broad brim?* cf. √sphāra) ; ফিকা, ফেকা « phikā, phēkā » *pale* ; ফিক্-ব্যথা « phik-byāthā » *sudden pain in the chest, side or stomach* (< pakṣa ?) ; গোফা « gōphā » *cave*, also গুম্ফা « gumphā » (cf. guhā) ; ফেউ « phēu » *jackal, jungle dog* (cf. phēru : onomatopoetic ?) ; ফির « √phir » *to turn* ; ফাল্‌তো « phāla̤tō » *excess* ; ফেঁসো < ফাঁসুআ « phẽsō < phā̃suā » *fibre* (conn. with « aṅśu » ?) ; ফিঙ্গা « phiṇ(g)ā » *a tiny bird* ; ফড়িয়া, ফ'ড়ে « phāṛiā > phōṛē » *middle-man, a dealer who buys up from the producer* ; ফাঁড়া « phā̃ṛā » *impending danger* ; ফাঁফর, ফাঁপর « phā̃p(h)ārа̤ » *confusion* (cf. OB. bhābharī-, Skt. bharbharā) ; etc., etc.

In the dialectal word লাফরা « lāphaṛā », beside লাবড়া « lābaṛā » *vegetable hotch-potch with pumpkin*, there is [ph] from « -p- < -b- < -u- » (« alābu, lāu, lāu + ḍā > *lābḍā » : cf. আদোবে « ādōbē » from « ādāu + ē », p. 511).

[ph] occurs in foreign words, for « f ».

280. Bengali [b]. Initially, it is derived from—

OIA. « dv- » > MIA. (non-Māgadhī) « b- » > OB. « b- » : বার « bārâ » (dvādaśa), বাইশ « bāiśa » (dvāviṅśati), etc. ;

OIA. « -p- » > Second MIA. « -v- » > OB. « b- » : বইসে, বসে « bâisē, bâsē » (*uvaïsaï, upaviśati) ; ‡বইঠা « bâiṭhā » *to sit down, a paddle for rowing*, বঁইঠী > বঁটী « bâĩṭhī > bõṭī » *large knife with a wooden seat-handle for slicing vegetables* (upaviṣṭa-) ;

OIA. « b- » : MB. বাহ « bāhâ » (bāhu) ; বকরা « bâkaṛâ » (barkara-) ; বুঝে « bujhē » (budhyati) ; MB. বুধী « budhī » (buddhi-) ; বেল « bēla » (bilva) ; বুঁদ « bũda » (bindu) ; বাহির « bāhira » (cf. bāhya) ; MB. বালা « bālā » *youth, boy* (bālaka-) ; বিচি « bici » (bīja ? ; vṛtya- ?) ; বিল « bila » *beel, marshy hollow* (bila) ; বাণ « bāṇa » (bāṇa) ; বাবুল, বাবলা « bābula, bābalā » *acacia tree* (barbula) ; বাঁধ « bãdha » (bandha) ; OB. « bāhira » (badhira) ; বহেড়া « bâhēṛā » (MIA. bahēḍaa, OIA. bibhītaka) ; etc. ;

OIA. « br- » : বামন, বামুন « bāmâna, bāmuna » (brāhmaṇa) ; বোলে, বলে « bōlē > bâlē » (bravīti, MIA. bollaï) ;

OIA. « m- » : বোল « bōla » (mukula) ; বুঁজ, বুজ « √bũj, buj » *close (as eyes), fill up* (√mudr-y- ?) ;

OIA. « v- » : বউ « bâu » (vadhū) ; বয়, বহে « bây < bâhē » (vahati) ; বা « bā » (vāta) ; বাঁ « bã » (vāma) ; বাঁক « bãka » (vakra) ; বাজ « bāja » (vajra) ; বান « bāna » (vanyā) ; বাউল « bāula » (vātula) ; বিয়া, বে « biyā, bē » (vivāha) ; বিশ « biśa » (vinśati) ; MB. বিসরে « bisârē » (vismarati) ; বেড় « bēṛa » (vēṣṭa) ; বনারসী « bânārâsī » (vārāṇasīya) ; etc., etc. Also in *sts.* and *ts.* words, Skt. « v- » becomes [b].

OIA. « vy- » : বাঁ, বাঁও « bã, bão » (vyāma) ; বাখান « bākhāna » (vyākhyāna) ; বাঘ « bāgha » (vyāghra) ; বেওড়া « bĕŏrā » (vyāpāra-) ; MB. বৌহারী « bâuhārī » *wife* (vyavahārikā *slave-*

woman), see pp. 345, 384; বেঙ « bēŋ∮ » *frog* (vyaŋga); *sts.* বাগড়া « bāg∮rā » (vyāghata-).

Interior [b] represents—

OIA. « -ḍv- » > MIA. « -bb- »: ছাব্বিশ, ছাবিশ « chā(b)bis∮ » (ṣaḍviṅśati);

OIA. « -mb- », mainly in *stss.*: নেবু « nēbu » (nimbuka), (see pp. 366, 367);

OIA. « -mr- » > MIA. « -mb- »: ‡ আঁব « ãb∮ » (āmra); ‡তাঁবা « tãbā » (tāmra-);

OIA. « -rb- » > MIA. « -bb- »: দুবল, দুবলা « dubal(ā) » (durbala-); আব « ab∮ » *tumor* (cf. arbuda);

OIA. « -rv- » > MIA. « -bb- »: গাবান « gābānā » *to vaunt, to boast* (garva); চাবান, চিবান « cābānā, cibāna » *to chew* (√carv); ডাব « ḍāb∮ » *round pot, green coco-nut* (cf. darvī); সব « sab∮ » (sarva);

OIA. « -v- » in *stss.*: নব্বই, নব্বুই « nabbāi, nabbui » (navati); MB. জোবন « jōbānā » (jŏbbana, yāuvana); etc.

Euphonic [b] from « ŵ »: আদোবে « ādōbē » *at all* (« ādōŵē = ādāu + -ē »: see p. 511).

[b] through deaspiration of [bh] is common in medial and final positions in NB.

By transference of aspiration, we have বোন, বহিন « bōn∮, bahin » (bhaginī).

In a few cases, there is an intrusive [b] after « m » in OB. and MB.: see p. 367.

Intervocal and final [b] in a few words has become vocalised to « u »: *e.g.*, ফাউড়া « phāuṛā » *a big stick* (< pāb∮rā < parva-); বাউরী as in বাউরী চুল « bāurī cul∮ » *long hair in curls* (Pers. « babr » *lion*, « babrī » *lion-like* = *with wavy mane*).

In *tss.* and *stss.*, [b] occurs for both « b » and « v »; and the sound as usual is lengthened (or doubled) before « r », and in the groups « -bhy-, -bhr- ».

For [b] in foreign words, see *infra*.

281. Bengali [bʱ].

Initially, [bʱ] represents—

OIA. « b- », by aspiration, spontaneous or transferred: *e.g.*, ভূসি « bhūsi » (busa-); ভুতড়ী, ভুতুড়ী « bhut(u)ṛī » *entrails, contents* (*as of the jack fruit*) (busta, MIA. buttha); ভুখ « bhukha » (MIA. buhukkha < bubhukṣā); ভাপ « bhāpɨ » (bāṣpa); cf. ভিস্তী « bhistī » *water-carrier*, from Persian « bihištī »;

OIA. « bh- »: ভাত « bhātɨ » *boiled rice* (bhakta); ভাল « bhālå » (bhadra-); ভিন « bhinɨ » *separate* (bhinna); ভাঁজ « bhãjɨ » (bhañja); ভিখ « bhikhɨ » (bhikṣā); ভাড়া « bhāṛā » *rent, hire* (bhāṭaka, √bhṛ); ভাঁড় « bhãṛɨ » (bhāṇḍa); ভূঁই « bhũi » (bhūmi); ভরসা « bhåråsā » *hope, reliance* (bharavaśa-); ভেল্‌কী « bhēlɨkī » *magic* (cf. Skt. √bhāl *see*, ‡ভেল √bhēl *see*); etc., etc.;

OIA. « -bhy- »: ভিতর « bhitårɨ » (abhyantara); ভিজ « √bhij » *be drenched* (abhyañj); ভিড় « bhiṛɨ » *crowd* (? abhyaṭ-);

OIA. « bhṛ-, bhr- »: ভোল, ভুল « bhōlɨ, bhulɨ » *mistake, confusion* (bhrama + MIA. -alla, -ulla); ভোমরা « bhōmɨrā » for *ভওঁরা « *bhåðrā » (bhramara-); ভাই « bhāi » (bhrātṛ-); ভাজ « √bhāj » *to fry* (√bhrajj); ভাজ « bhājɨ » (bhrātṛ-jāyā); etc.;

OIA. « m- », through the transposition of following « h »: ভৈঁষ bhāiṣɨ, ভয়ষা « bhåysā » (*mhaīsa, mahiñsa, mahiṣa); ভেড়া « bhēṛā » (*mhēḍa-, mēha-ḍa-, mēṣa-), beside মেড়া « mēṛā » *ram*.

In the interior of a word [bʱ] is derived from—

OIA. « -bhy- »: সাভার « sābhārɨ » *place-name in Dacca district* (sabhyâgāra); আভাঙ্গ « ābhāṇg » *smearing all over the body, as oil* (abhyaṇga);

OIA. « -bhr- »: ‡আভ « ābhɨ » *light cloud, mica*, আবছা « ābɨchā » for *আভছা « *ābhå-chā » *hazy* (abhra);

OIA. « -rdhv- »: MB. উভা « ubhā » *erect, standing* (ubbha, non-Māgadhī, < ūrdhva);

OIA. « -rbh- »: উভিয়া যাওয়া « ubhiyā jāwā » *disappear, as camphor when left in the air* (ubbhaa, udbhṛta); উভর « √ubhår » *be in excess, descend* (ud + √bhṛ, bhar); গাভুর « gābhurɨ » *youth*,

young man (garbha-rūpa); গাভীন > গাবীন « gābhīn৲, gābīn৲ », used generally of cattle (garbhiṇī);

OIA. « -rv- » > MIA. « -bb- » > « -bh- » in নিভায় « nibhāy » beside নিবায় « nibāy » (*nibbāvēi, nirvāpayati); MB. সভ « sâbhâ » beside সব « sâbâ, sarva » > « sabba » (influence of *ts.* « sabhā »: see p. 319);

OIA. « -hv- » > MIA. « -bbh- »: *জিভ, জিব « jibh৲ > jib৲ » (jibbhā, jihvā); বিভল « bibhâl৲ » (bibbhala, vihvala). The old traditional pronunciation of Skt. « -hv- » in Bengal was [bbfi], *e.g.*, [abbfian] = « āhvāna », now = [ăbfian], and [ʃʒibbfia] as a *ts.* word is now yielding to [ʃʒiufia].

OIA. « -mbh- » is reduced to [m] in Bengali; but an intrusive [bfi] after [m] is found in some cases in Bengali (see p. 367): cf. OB. (Sarvânanda) « bāmbhaṇa- » = NB. বামন, বামুন « bāmân৲, bāmun৲ » (brāhmaṇa); eMB. (ŚKK.) চাম্বেলী « cāmbhēlī » for চামেলী « cāmēlī » *a flower*, Hind. « camēlī »; Oṛiyā « āmbhē, tumbhē » = আমি, তুমি « āmi, tumi » (amha-, tumha-).

In ভিটা « bhiṭā » *homestead, mound, ruin-mound*, from « *bhiṭṭa », beside OB. « hiṭṭa, hiṭṭi, viṭi », etc. (see p. 66), the « bh » seems to be falsely restored, on the analogy of « √bhū > √hō », « -bhāṇḍa- > -hāṇḍī », etc., also probably influenced by the word « bhitti ». The word « bhāñji » *sneezing* in OB. (Sarvânanda), = NB. হাঁচী « hãcī » (from an earlier « *hāñcī », cf. Skt. « hañjī », which is onomatopoetic), also seems to show a falsely 'restored' « bh- ».

A number of « bh- » words in Bengali remain unexplained: *e.g.*, ভোঁদা « bhōdā » *a lumbering fellow, fat and foolish*; ভুঁড়ি « bhũṛī » *fat in the belly*; ভেকট, ভেকটী « bhēkâṭ৲, bhēkaṭī » *a fish*; ভড়ং « bhârāṇ », beside ভোরঙ্গ, বোরঙ্গ « b(h)ōrāṇ » *trumpet*; OB. « bhābhârī » *coquetry*, cf. Skt. « bharbharā » *confusion* = NB. ভাবড়ান « bhābaṛ৲rānâ » *to get confused*; ভাঁটী « bhāṭī » *wine-still*; ভাঁটা « bhãṭā » *a ball, the egg-fruit* (*baṭṭa-, vṛtta-?); ভাটী, ভাটা « bhāṭī, bhāṭā », beside ভাঁটী, ভাঁটা « bhãṭī, bhãṭā » *ebb-tide, low land, down country* (√bhṛ?); ভাউলিয়া « bhāuliyā » *a kind of boat*; ভুরা « bhurā » *powder*; ভেস্তা « bhēstā » *mix-up*, etc., etc.

[bfi] occurs in *ts.* words; and in foreign words, it commonly represents the [v] of Portuguese, and occasionally of English.

(6) Dropping of OIA. Intervocal Stops in MIA.

282. This has been described before, pp. 83-85, 252-253, 338-345, 433. In a very large number of cases, the genuine *tbhs.* with elision have been replaced by *tss.* and *stss.*, so that in most NIA., and especially in Bengali, the elision as a characteristic thing in the phonology of the native element is generally lost sight of. Examples need not be given here: they will be found in the pages referred to, and *passim.*

Loss of intervocal « -p- » in a case like নারে « nārē » *is not able*, Assamese « nōẁārē » (na pārayati), is Old Bengali, the « -p- » being changed to « -v- » or « -ẁ- » in Late MIA. Sporadic cases of loss of stops occur in MB. In a few words in MB., [ḍ>ṛ] is lost: *e.g.*, তাউল, চাউল « tāulā, cāulā » < earlier তাঁড়ুল « tāṛulā » (in the 'Śūnya-Purāṇa') (=taṇḍula); MB. পৈল « pāilā » *fell* for পড়িল « pāṛilā » (paḍia+illa, patita-), through the analogy of খৈল কৈল « māilā, kāilā », and cf. also 'Bihārī' « dhail » *caught* (dhṛta+ +alla); and হাঁড়ীশাল « hāṛīśālā » *room for cooking-pots, kitchen* > Late MB. হাঁস্যাল « hāsyālā = hāisālā » > NB. হেঁসেল « hēsēlā » *kitchen.*

Elision of intervocal consonants of NB. in the Chittagong dialect has been noted before, *e.g.*, at p. 454.

The reduction of the single intervocal aspirates to [fi] in Bengali is illustrated below: see under [fi].

[II] The Nasals: New Bengali [ŋ, n, m]; Old and Middle Bengali [ṇ, w̃, ɲ].

283. The five class nasals of Skt., « ঙ ñ, ণ, ন, ম, », as well as « anusvāra », figure in Bengali orthography, but in the language they have passed through many vicissitudes. OIA. and MIA. « anusvāra » has disappeared from Bengali or has resulted in a mere nasalisation (see pp. 358-359). In *tss.* and *stss.*, Skt. « anusvāra » figures, but it has taken up a [ŋ] pronunciation now: probably in Māgadhī Apabhraṅśa it had

become [w̃] (see p. 244). This [ŋ] or [w̃] pronunciation was current in Bengal in the 7th century : witness, for example, the spelling « saŋścāla » for « saṁścāla » in the Tipperah inscription of Lōkanātha, and also « vaŋśē » for « vaṁśē » in the inscription of Mādhava-varman of Kōŋgōda. The use of « ŋ » for the « anusvāra » occasionally crops up in inscriptions in other parts of India, but it seems that there it was only sporadic, and the [ŋ] value was the one which early became established in Bengal, and in Eastern India generally. The « anusvāra » thus having developed the [ŋ] pronunciation in the East, it ceased to be used in Bengali-Assamese and Oriyā orthography for class nasals, a practice which is continued elsewhere in India. A Bengali will read নংদ = নংদ as [nɔŋdɔ] and not as [nɔndɔ], পংডিত = পংডিত as [pɔŋḍit] and not as [pɔnḍit], কংবল = কংবল as [kɔŋbɔl] rather than [kɔmbɔl]; and a recent attempt at spelling-reform in Bengali by simplifying compound consonants like ন্ত, ন্দ, ণ্ড, ম্ব, ঙ্ক, ঞ্জ etc. to ংত, ংদ, ংড, ংব, ংখ, ংজ, according to the pan-Indian usage, has failed.

284. « -ŋ-, -ñ- » occurred only before their corresponding class consonants in OI \., and « -ŋŋ- » is also found. MIA. « ñ- » initial, « -ññ- » intervocal occur (*e.g.*, Pali ñāna = jñāna, añña = anya), but initial « ŋ- » and intervocal single « -ñ-, -ŋ- » as well as « -ŋŋ- » are not found. In Old Bengali, the sound of [ŋ] occurred only before the guttural stops and aspirates, and probably also for « anusvāra » in *tss.*; and « ñ » [ɲ] was found, only as a reduced nasal before the palatals in *tbks.*, and as a full sound in *tss.* In New Bengali, [ŋ] occurs in final and intervocal positions only : it is derived from MIA. « -ŋg- », and is written intervocally as ঙ্গ, ঙ, « -ŋg-, -ŋ- » and finally as ঙ্গ, ঙ, ং « -ŋg-,-ŋ, -ṁ ». What is ঙ [ŋ] in New Bengali was ঙ্গ, ঙ্গ [~g], [-ŋg-] or [~ŋg] in Middle Bengali (see pp. 360, 361, 363, 364).

The modern value of the letter ঙ is [ŋ]. But in MB., the value was that of a nasalised bilabial semi-vowel or spirant—of [w̃] or [~ʋ]. The Modern Bengali name for the letter ঙ, which is [ũã, ũõ, õã], is on the basis of this old pronunciation. In Musalmānī Bengali (see pp. 210-212), « wān > wã » in Persian words, and « w̃ » of Hindōstānī, are written ঙ, following the MB. usage : *e.g.*, নোশেরওঁা « nōśērāŋā = nōśērwã̄ », Persian

« Nōšērwān »; পাঙ « pāṇå = pãw̃ » = Hind. « pãw, pāw̃ ». This intervocal « w̃ » of OB. originated from a single intervocal « -m- » of MIA., in the Late MIA. period, and it is a development to be noticed in all NIA. languages except Sinhalese. In MB., this « w̃ » became a nasalisation of the contiguous vowel, and the glide element remained in Early MB. —a « w̃ » as before, when the contiguous vowel was a back sound, and a « ~y » sound when it was a front one. Possibly this palatal modification of the glide, from [w̃] to [j~, ~j] or [ɲ], took place as early as OB. times. The [w̃] pronunciation was not indicated by the historical spelling with ম « m » in OB.: *e.g.*, OB. সাঙ্কম « sāṇkama », = [ʃãkɒw̃ɒ], whence NB. সাঁকো [ʃãko], and OB. সামা « sāmī » = [ʃawi, ʃãɲi?], whence NB. সাঁই [ʃãi]. In Early MB., as in the ŚKK., either the « candra-bindu » was used, *e.g.*, কোঁঅরী, কোঁয়রী « kõỳårī (for য়, see p. 341), kõårī = kōw̃årī » (kumārī), কোঁঅলী, কোঁয়লী « kõålī, kõỳålī = kōw̃ålī » (kōmala-), সোঁঅর « sõårå = sōw̃åra » (sumara-, √smar), beside a Sanskritised স্মঅঁরী « smāårī- », and পোঁআর « põārå = *påw̃ārå » (prabāla); or ম « m » was used, following the old spelling, *e.g.*, সামী « sāmī = sāw̃i = sāñī » (svāmī); or the ঞ, ঞ্ « ñ, ñ~ » was introduced, as in সোঞর « sõñõr- » (sumara, √smar), গোসাঞি « gōsāñī » (gōsvāmī).

As yet there is no use of ঙ « ṇ » for the « w̃ » sound in the ŚKK. In MB. orthography from the 15th century, ঙ « ṇ » and ঞ « ñ » became established for the sounds of « w̃ » and « w̃ > ~y » respectively, in addition to the « candra-bindu », and the employ of ম « m » fell into desuetude. NB. has lost the glides entirely, and uses ঙ and ঞ no more, and simply employs the « candra-bindu ». Cf. Middle Oṛiyā of the 15th century, as in the inscriptions, « sāāntå » (« sāmanta »: also New Oṛiyā « sāntānī » *title of respect for ladies*), « cåårå » (cāmara).

Examples of change of OIA. single intervocal « -m- » to nasalisation, with or without the glide element, in Bengali:

আঁওলা « ãŏlā », beside আমলা « āmaḷā » (āmalaka-); আঁষ, আঁইষ « ãiṣ, ãïṣ » (āmiṣa); আঁচায় « ãcāy » *sips water* > *washes mouth after eating* (ācāmati); MB. (ŚKK.) উদাঁও « udāõ » (uddāma); the affix ঁও « -õ », as in MB. and dialectal Bengali (North), 1st person, present tense, < MIA.

« -ama, -amu=aw̃a, -aw̃u » = OIA. « -āmaḥ » : *e.g.*, করোঁ « kårõ » (karama, *karāmaḥ = kurmaḥ), চলোঁ « cålõ » (calāmaḥ), etc. (there may be some influence of হোঁ, হউঁ « hõ, *haũ » < « aham » in this); MB. কুঙর, কোঙর « kuw̃ârꝺ, kōw̃ârꝺ » *prince*, NB. কোঙার, কোঁয়ার « kōŋārꝺ, kõārꝺ » *a surname* (kumāra); MB. কোঁঅল, কোঙল « kōw̃âlâ- » (kōmala); MB. কাঙুর « kāw̃ur », OB. কামরু « kāmaru = kāw̃arū » (Kāma-rūpa); কাঙল, কাঙঁল, beside কামলা = কাঙলা « kāõlꝺ, kãõlā, kāmꝺlā » (kāmala-); MB. খুঞা, NB. খুঁয়ে « khuñā-, khũē » *a coarse silk stuff* (kṣumā, ksāuma-); গাঁ « gã » (grāma); গাঁই « gãi » (grāmika); MB. গোঙাএ « gōw̃āẽ » *passes* (*time*) (*gamāpayati); গোসাঁই « gōsãi » *lord, master, a Vaiṣṇava guru* (gōsvāmin); MB. চঙক, চৌক, চমক, NB. চমক « cåw̃akꝺ, cåũkꝺ (p. 348), cåmåkꝺ » (cf. Skt. camat-); জামাই « jāmāi », commonly pronounced [ʃʒãoɑi] (jāmātṛ); জোয়ান « jōānꝺ = jōãnꝺ » (yamānī); MB. (ŚKK.) ঝাঁওএ « jhãõẽ » *with a pumice-stone*, cf. NB. ঝামা « jhāmā », p. 480; ঠাঁই « ṭhãi » (sthāman); দাঁ « dã » *a surname* beside দাম « dāmꝺ » (< « -dāman » in personal names like « Rudra-dāman, Indra-dāman », etc.); ধুঁআ, ধোঁয়া « dhũā > dhõā » (dhūma-); না « nā = nã » *indeed* (nāma), *e.g.*, as in কে না বাঁশী বাএ বড়ায়ি সে না কোন জনা (p. 266), এসো না « ēsō nā » *do come in* (= āviśata nāma); নোঁয়া, নোঙা « √nõā, nōw̃ā » *to bend* (nāmaya-); MB. নেআলী « nēālī = nēw̃ālī » (navamallikā); OB. পউআ « pāuā = paũā » (Second MIA. paüma- < paduma = padma); পানী, পাইন, পান « pānī = pā(i)n = pãnī, pã(i)n » *a surname*, beside the Sanskrit form « prāmāṇika »; বাঁ « bã » (vāma); বাঁ, বাঁও « bã, bãŏ » (vyāma); ভূঁই « bhũi » (bhūmi); MB. ভূঞা, NB. ভূঁইয়া « bhũñā, bhũiyā » (bhāumika-); মো « mō = mõ » (mama); রোঁ « rõ » (lōman, rōman), beside রোঁয়া « rõā »; সঁপে « sãpē » (samarpayati); MB. সোঙরে « sōw̃arē » (sumaraï, smarati); MB. সাঙল « sāw̃âlâ » (śyāmala); সাঁকো « sãkō < *sãkõ », OB. « sāŋkama » (saŋkrama); সীঁতি, সীঁথি « sīt(h)i » (sīmanta-); সাঁতরা « sãtꝺrā » *a surname* (sāmanta-rāya); সাঁওতাল « sãotālꝺ » *a Santal* (sāmanta-pāla); সাঁই « sãi » *lord, God* (svāmin); MB. (ŚKK.) সোঁআ « sõā » (sama-) as in কানাসোঁআ « kānā-sõā » *touching the edge*; ‡হেঁওঁৎ « hēõt » (hēmanta); etc., etc. The « candra-bindu » is normally omitted when the word has a nasal: see p. 362.

There is loss of this nasalisation from « -m- » in some words. The reason for this cannot be determined, and the language is rather capricious:

e.g., কাদা, ‡কাদো « kādā, kādō » (kardama); the affix ই « -i » of the verb 1st person (< « -*iw̃i, *-imi = -ămi, -āmi »: চলি « cali » < « caliw̃i, calimi, calāmi »: see p. 351); আনাগোনা « ānā-gōnā » *coming and going*, OB. « awanā-gawanā » (āgamana-+gamana-); পাঁচই, সাতই, আটই > পাঁচুই, সাতুই, আটুই (see p. 372). Cf. বনওয়ারী, বেনোয়ারী « banwārī, bēnwārī » *a name* (vana-mālī), from the Hindī.

The reverse process of nasalising spontaneously a « -w- » sound, either original (i.e. = « -v- » in Skt.) or derived (*e.g.*, from « -p- » of OIA.) is also found, in both *tbhs.* and *stss.* This trait is one inherited from MIA. by NIA: see p. 368 ff. Examples: কাছিম « kāchimɸ » (kacchapa); MB. গিম « gimå » (grīvā); ছাতিম « chātimɸ » (saptaparṇa): an intermediate stage is found in MB. ছাঞিঁয়ণ, ছাতীঅন « chāñiyåṇå, chātīånå » (as in the ŚKK.); ছুঁয়ে, ছোঁয় « chũē > chõy » *touches* (*chuṁvaï, chuvaï = spṛśati); MB. ছামনী « chāmånī, chāw̃ānī » beside NB. ছাউনী « chāunī » *awning* (< *chāw̃anī, *chādāpanikā); চিঁড়া « cīṛā » *flattened rice* (* ciw̃iḍaa-, cipiṭaka-); OB. (Sarvânanda) « jamāla » for « *jōw̃āla = jōw̃āla », NB. জোঁয়াল, জোয়াল, জোল « jõālɸ, jōālɸ, jōlɸ » *yoke* (yuga+-ālā); MB. (ŚKK.) পোঁআর « põārå » (prabāla); *sts.* পিদীম « pidimɸ » (pradīpa: p. 357); *sts* বষ্টুম « bāṣṭumɸ » (vāiṣṇava); MB. শাঙন « śāw̃ånå » (śrāvaṇa); etc., etc. Cf. Western Hindī « puhamī = pṛthivī », Old Rājasthānī « gēmara, hēmara = gajavara, hayavara », Maithilī « nēñōcha = nēpathya » *adornment*, etc.

Intervocal « -m- » of NB., from MIA. « -mb-, -mm-, -mh- », even tends to be pronounced as « -w̃- » in NB., and the « -w̃- » sound is actually arrived at in a few instances (cf. 'Brief Sketch of Bengali Phonetics,' §31): *e.g.*, উষ্মান, উঙান beside উমান « ūānå, uw̃ānå, umānå » *heating, warming* (*umhāvaṇa, = Skt. uṣma). The Chittagong dialect characterises itself by changing the derived « -m- » of Common Bengali to a nasalisation: *e.g.*, আঁই [ãi] = « āmi » I, তুঁই [tũi] = « tumi » *you*, কোঁরা [kõra] = « kumɸṛā » *pumpkin*; etc.

In MB. there was also change of intervocal « -b- » to « -m- », for which see below, § 288.

ঙ « ŋ » is used for « w̃ » < « m » in MB.: this fact brings about the interchange between ং, ঙ [ŋ] and ম [m] in some cases in NB. Generally,

where an [m] or [ŋ] closes a syllable, one can be used for the other in NB., or a nasalised vowel can be used for either. Thus, আমলা, আঁওলা [amla, aõla] beside a rather rare আঙলা [aŋla] (=āmalaka-); আচমকা, আচংকা [aʧomka, aʧoŋka] *suddenly*; ঘোম্‌টা, ঘোঙটা [gʰomṭa, gʰoŋṭa] *veil*, cf. Hind. «ghuṇghaṭ»; ঘুমসী, ঘুঙসী [gʰumsi, gʰuŋsi] *coloured thread worn round the waist*; ঠুমরী, ঠুঙরী [ṭʰumri, ṭʰuŋri] *a kind of melody*; আপিম্‌, আপিং [apim, apiŋ] *opium* (Perso-Arab. «afyūm»); OB. কামনী «kāmanī» *a grain*, NB. কামনী, কাংনী [kamni, kaŋni] (Skt. kaṇgu); ঢেমচা, ঢেঙসা [ḍʰemʧa, ḍʰeŋsa] *a drum* (also with ধ «dh-»); ভিমরুল [bʰimrul] *hornet*, for *ভিঙ্গরুল [bʰiŋgrul] (=bhṛṇgarōla); etc. Cf. বোতাম, বোতাঙ [botam, botaŋ] *button* (Portuguese «botaõ» [butaũ]), etc.

285. The [ɲ] sound in Bengali.

Just as ঙ «ŋ» denoted the sound of «w̃» in MB., so ঞ «ñ» [ɲ] was used for the nasalised palatal glide, «~y», which, after all, is acoustically not very much different from the palatal nasal «ñ». ঞি «ñi «would stand for «ĩ», or «yĩ», as well as for «w̃» when fronted to «~y» in connexion with «e» or «i»: words like মুঁই «mũi», ভুঁই «bʰũi», সাঁই «sãi», খুইয়াঁ «kʰũiyā», গাঁই «gãi», would be written মুঞি «muñi», ভুঞি, সাঞি, খুঞা, গাঞি, as well as মুঁয়ি «mũyi», ভুঁয়ি, সাঁয়ি, খুঁয়া গাঁয়ি, etc. গায়েন «gāyēn♯» *singer* is also found spelt as গাঞেন «gāñēn♯». Even initially, we find, in rare cases no doubt, ঞ for এঁ, ই «ẽ-, ĩ-»: *e.g.*, in a 17th cen. MS. (VSP., p. 665), occur ঞেহারে, for ইঁহারে = NB. ইঁহাকে «ihãkē» *to him, he* (honorific); ডাঙ্গা [ḍaŋa] forms its adjective ডেঙ্গো [ḍeŋo], and the [ŋ] is first changed to the palatal [ɲ] through the influence of the preceding [e] to ডেঞ্গো, which is now written ডেঁয়ো and ডেঁও, pronounced [ḍẽo], *e.g.*, ডেঁয়ো পিঁপড়া «ḍẽyō pĩpṛā» *big black ants*. ভঁয়ষা «bʰāyʂā» *made of buffalo-milk*, from ভৈষ «bʰāiʂ♯» «mahisa», is found as ভঞ্ষা «bʰāñåṣā»; and we get even মিঞা «miñā» beside মিয়াঁ «miyã» *a title of respect, a common term of address for Mohammedans* from the Persian «miyān, miyã» *a title of respect*. The conjunctive participle affix ই «-i», ইয়া «-iyā» is nasalised in West Bengali; and one way of writing this «-ĩ, -iyã» is with ঞ—ঞি, ইঞা, ঞা, which spelling is plentiful in MB. MSS.: *e.g.*, খাঞা=খাইয়া *having eaten*, করিঞা=করিয়া *having done*, etc. The use

of ঞ « ñ » is a noticeable thing in the graphic system of the ŚKK., as of most MSS. from West Bengal: and we even find the « candra-bindu » superscribed on ঞ—*e.g.*, কাহ্নাঞিঁ « kānhāñī » for « kānhāi » (kṛṣṇa), where the syllable « āi » gets its nasalisation merely through the preceding « n ». সমে « sàmē » > « *sàw̃ē » > সঞে « sàñē » *instrumental post-position = with*, now occurs as সনে « sànē » [ʃɔne] in NB.; and ঠাঁইয়ে « ṭhāiyē » > ঠেঁয়ে « ṭhēỹē », ঠেঞে « ṭhēñē » *in the place near-by = with*, has become, by the reverse process, ঠেঙে « ṭhēŋē » in the Calcutta Colloquial.

In eMB., as it is clear, ঞ had lost its [ɲ] value, and had become a mere nasalised frontal vowel, or a nasalised frontal semi-vowel [ē, ī]. The name which the letter ঞ has in NB., namely [ĩ̄ɔ, ĩ̄ā], preserves its old value. The use of ঞ has all but disappeared in NB., being found only in a few words like মিঞা, and in some old-fashioned spellings like গোসাঞি « gōsāñi »; and in the *ts.* word যাচ্ঞা « yācñā », the unique and unfamiliar group চ্ঞ, চ্ঞ « cñ » is pronounced as « -ciŋ(g)ā » for « -ciñā » [ʃʒɑʧiŋ(g)ɑ,-e].

286. [ṇ] in Bengali.

The letter for [ṇ], ণ, is freely used in Bengali orthography, not only in *tss.* but also in *tbh.* and foreign words, although no Bengali can pronounce the sound properly without training. Its occurrence in *tbh.* words is due to two things. Firstly, it occurs as a relic of an earlier state of things when the [ṇ] pronunciation obtained in MIA., and probably also in Old Bengali; and secondly, where the ণ has been restored, with an eye to the spelling obtaining in the Skt. prototypes—*e.g.*, in words like কাঁকণ « kākàṇɨ », কাণ « kāṇɨ », সোণা « sōṇā », বাণান « bāṇānɨ » *spelling* (=kaṇkaṇa, karṇa, svarṇa, varṇana); and in a few instances, it is purely arbitrary, as in রাণী « rāṇī » *queen* (but cf. Oṛiyā « rāṇà, rāṇī », Marāṭhī « rāṇɨ »), beside রানী « rānī » (rājñī) (see pp. 226-227). In foreign words, supposed affinity or actual resemblance in form with native or *ts.* words having ণ is responsible for spellings like হয়রাণ « hàyrāṇ » *troubled*, ফরমাণ « phàrmāṇ » *royal order*, কোরাণ « kōrāṇ » *the Koran* (=Persian « hayrān, farmān », Arabic « qur²ān- »), নর্ম্মাণ « nàrmmān » (English *Norman*), etc. The fact that Bengali orthography is modelled on that of Skt., which allows only groups like « -ṇḍ-, -rṇ- », and not « -nḍ-, -rn- » (and « -ṣṭ- », but not

« -śṭ-, -sṭ- »), is responsible for our writing গভ(ব)র্ণমেণ্ট « gâb(h)âṛṇaṃmēṇṭa » *government*, ইঙ্গলণ্ড, ইংলণ্ড « iṇ(g)ḷâṇḍa » *England* etc. with « ṇ ».

In Late MB., there is always confusion between ণ and ন, as in NB., which indicates that the cerebral sound was lost. [ṇ] has been dentalised in the Bihārī dialects, as well as in Eastern Hindī and Typical Western Hindī (Braj-bhākhā, Hindōstānī); also in Assamese. The use of [˜ṛ] for [ṇ] is confined among scholars and Sanskritists in the Bihārī and Hindī tracts, and [˜r] with the audible flap is the result of an attempt to pronounce [ṇ] through Sanskrit influence. Oṛiyā alone of the Magadhan languages preserves this sound. It seems likely that Bengali possessed it in the Early MB. period. The Oṛiyā name for the letter « ṇ » is « âṇâ » and the Bengali « āṇâ » [ɑno] : the prothetic « â, ä » indicates the glide sound that came initially in pronouncing « ṇ ». The name « ānâ » is now getting to be old-fashioned in Bengal, the schools now teach the learned name « mūrdhânyâ ṇâ » which the Bengali-speaker ordinarily reduces to [moddɦɑnno no :] or [moddɦɑn(:)o].

It is difficult to determine when the [ṇ] pronunciation became obsolete in Bengali. There is no regularity in the matter of « ṇ » and « n » in the Caryāpadas; nor, again, in the ŚKK. But the MSS. of these works use « ṇ » with a persistence which is quite remarkable. The ŚKK., for instance, writes the Bengali equivalent of the « √jñā » with « ṇ »— জাণ « jāṇ », 124 times, and with « n », জান « jān », only 7 times. The Caryāpadas have the same root with « ṇ » 8 times, with « n » 3 times. Oṛiyā has the cerebral, « jāṇ ». Can it be taken to mean that in OB. and MB., to the end of the 14th century, the [ṇ] sound existed, but there was a general confusion in its employment, as a preliminary to its disappearance frem speech? Doubtless there was some established phonetic habit in the matter of the use of [ṇ] and [n] in OB. and MB., but the irregularity of the orthography in the MSS. misleads us. Sarvânanda spells a number of words with « ṇ »: this, as Rai Bahadur Yogesh Chandra Vidyānidhi suggests (VSPdP., 1326, pp. 87-88), most probably is in accordance with Old Bengali pronunciation. But no law regarding the occurrence of « ṇ » can be deduced from it: *e.g.*, « upalaṇi = udvartana »;

« kāmaṇa = *kāw̃aṇa=kaŋgu »; « jhaṁpāṇa=yāpya-yāna »; « tēlāvaṇī », but « pīṭhāvanī »; « trimaṇa » = NB. dialectal ତିଣ « tiŋ(g)âṇ⁄ »; « bābhâṇī-āṭhī = brāhmaṇika-yaṣṭi- »; « rasāuna = Skt. laśuna »; « tiṇa= tṛṇa »; « bīyaṇa = NB. ବେନା bēnā = Skt. vīraṇa »; besides a few other words.

In the absence of other evidence, Oṛiyā cerebralisation should suggest for us some clue as to the habits of OB. and MB., and certainly of Māg. Ap. But although Modern Oṛiyā is pretty definite, Middle Oṛiyā spelling, as in the 15th and 16th century inscriptions (see p. 107), is not fixed in this matter. Thus, for example, the word « māṇâ » = *plural affix* (<mān-ava), is mostly spelt with dental « n », but occurs with « ṇ » in the inscription of 1542; we have « śuni » *having heard* in inscr. of 1485, but « śuṇi » in one of 1499; and both « māṇiki, māniki » in that of 1466. Judging from Modern Oṛiyā, the principle of cerebralisation appears to have been this: intervocal « -ṇ-, -n- » of OIA. (in *tbhs.*) occur as « -ṇ- » in Oṛiyā; but where a double nasal of MIA. (from earlier consonant groups) results in a single intervocal nasal in Oṛiyā, it is a dental nasal, except in a few words like « rāṇâ, rāṇī » *king, queen*, where the cerebralisation appears to be irregular and obscure. Māgadhī Apabhraṁśa may reasonably be expected to have had the cerebral intervocally only. There is no indication of cerebralisation of OIA. « -n- » in Aśōkan Prakrit, or in Pali, or again in the Brāhmī and Kharōṣṭhī inscriptions. The cerebralisation of single « -n- » took place during the Second MIA. period when there seems to have been manifest a tendency towards it (as well as towards cerebralisation of « -l- ») in all Indo-Aryan. This tendency has died out now in Western and Eastern Hindī, in the Pahāṛī speeches, in the 'Bihārī' dialects, in Bengali-Assamese; but it is still present in Lahndī and Panjābī, Sindhī, Rājasthānī-Gujarātī, Marāṭhī and Oṛiyā. According to the grammarians of literary Prakrit, « n » in all positions became « ṇ » in most of the Pkts. But in the Apabhraṁśa stage, it would seem that initial « ṇ- » was once more dentalised, but introvocal « -ṇ- » remained. In some cases, through Sanskrit influence, *tbh.* forms of inherited words like « maṇa (manas), jaṇa (jana), dāṇa (dāna), diṇa (dina), thāṇa (sthāna), pāṇī (pānīya) », etc.,

would tend to have the « ṇ » 'corrected' to the dental, at least in spelling, and in later times even in pronunciation, as it seems to have happened in the case of the Oṛiyā « māṇā ». But so long as the cerebral normally continued to be the intervocal sound, popular speech would certainly treat *tss.* with intervocal « -n- » in the *tbh.* way ; just as at the present day, in Oṛiyā, in Marāṭhī, in Gujarātī-Rājasthānī, and in Panjābī, intervocal [n] in Sanskrit, Persian and even English borrowings frequently becomes [ṇ] in the speech of the uneducated masses (at least according to the observation of the present writer). Similar conditions can reasonably be expected to have prevailed in Early NIA.

It seems that cerebralisation as in Oṛiyā prevailed in OB. and Early MB. But this is a mere assumption ; and it cannot be said to have held good for all the forms of Early MB. It is very likely that only the Western Bengal area, including West Bengali and Oṛiyā, preserved cerebralisation in NIA. times. The genuine cerebral [ṇ] (and not its Upper Ganges Valley substitute [~ṛ]) seems to be still found intervocally in the dialects of extreme West Bengal (cf. LSI., V, Part I, pp. 91 ff. : in the transcriptions of specimens from this dialect, by Bengalis in the Bengali character, ড় « ~ṛ » has been used for [ṇ], just as ড় « ṛ » has been used for [l]—a common mistake found also in the Bengali attempt at representing phonetically the Oriyā [ṇ] and [l] : *e.g.*, মুঁড়িষ « mũriṣṭ » [muṇiʃ] *man-servant*, শুঁড়ি « śũṛi » [ʃuṇi] *having heard*, জিঁড়িস « jĩriṣṭ » [ʤiṇiʃ] *article* (= Persian « jins »), আঁড়া « ãṛā » [aṇa] *anna*, মাঁড়্‌স, মাঁড়্‌ষ « mãṛuṣṭ » [maṇuʃ] *man*, আপ্‌ড়াঁর « āpṭṛãṛṭ » [apṇar] *of self*, তখড়ঁ « tākhāṛā » [təkhəṇ] *then*, জঁড়ঁ « jāṛā » [ʤəṇ] *person*, শুঁড়্‌লেক « sũṛṭlek » [ʃuṇlek] *heard*, আঁড়ি- « ãṛi » [ãṇi] *having brought*, etc. ; so সকড় « sàkāṛṭ » [ʃəkal] *all*, আকাড় « ākāṛṭ » [akal] *famine*, নিকড়ি « nikṭṛi » [nikli] *having come out*, etc.).

In parts of Bengal, in the Proto-Bengali and OB. periods, [ṇ] seems to have developed a [ṇṭ] pronunciation. A form like « drōṇṭa » for « drōṇa » in the Lōkanātha Inscription from Tipperah probably indicates the presence of this pronunciation as early as the 7th century. The occurrence in NB. of [ṭ, ~ṭ] for [ṇ] in some *s/s.* words seems also to show

that: *e.g.*, *sts.* কিপটা « kipaṭā » *miser* (kṛpaṇa-); চিকটা, as in চিকটা মাটী « cikaṭā māṭī » (cikkaṇa mṛttikā); ফটা « phāṭā » (phaṇa-); কেষ্ট « keṣṭa » কালকিশ্‌টা « kāla-kiṣṭā » *deep black*, (also as a name কৃষ্টঁ « kriṣṭ(y)ā » (kṛṣṇa); তেষ্টা « tēṣṭā » (tṛṣṇā); বষ্টম [boʃṭum] < *[boiʃṭiɔ̃wo] (vāiṣṇava); বিষ্টুঁ « biṣṭũ, biṣṭu » (viṣṇu). In the pronunciation of *tss.*, the « ṇ » in « ṣṇ » becomes [ṭ̃] in the old-fashioned pronunciation, *e.g.*, তুষ্টী [tuʃṭī] (tuṣṇī), উষ্ণ [uʃṭɔ̃] (uṣṇa), etc.; and this leads to confusion between ষ্ট « ṣṭ » and ষ্ণ « ṣṇ » in writing—*e.g.*, the common enough inscription in tobacco-dealers' shops in Calcutta—বিষ্টুপুরের উৎকৃষ্ণ তামাক « biṣṭupurēra utkṛṣṇa tāmāka » for বিষ্ণুপুরের উৎকৃষ্ট তামাক « biṣṇu-..., utkṛṣṭa » *the best tobacco from Vishnupur*. The school is now changing the Old Bengali pronunciation [ʃṭī, ʃṭ̃, ʃṭ] to a new [ʃn]. (Cf. the common pronunciation of স্নেহ « snēha », স্নান « snāna » as [stẽɦɔ, stã:n]). Possibly [ṇ] is the source of the [ṛ] in সাড় « sāṛa » *consciousness* = OB. « sāṇa = sāna » (saṁjñā, MIA. saṇṇā) (but cf. NB. সান « sānda » *gesture*), and আনাড়ী « ānāṛī » *foolish, ignorant* (aṇṇāṇī, ajñānin) (but cf. আনাড় « ānāṛa » *infrequented, unknown, as a place*, which is probably from « aṇṇāa-ḍa-, ajñāta- »).

Taking all these facts into consideration, it would be allowable to think that [ṇ] existed as a phoneme in the Bengali language upto the middle of the eMB. period, at least in parts of West Bengal. From the beginning of the 15th century, probably, it ceased to exist as a cerebral.

287. Bengali 'dental' [n] is really an alveolar sound. The cerebrals in Bengali are rather advanced: they are retroflex palato-alveolar sounds, i.e. sounds produced with the curled tongue-tip on the hard palate slightly above the teeth-ridge, and not exactly on the dome or arch of the palate: so that the change of the nasal [ṇ] to alveolar [n] was a matter of course.

Initially, Bengali [n] comes from—

OIA. « n- »: না « nā » (na); না « nā = nã » (nāma *expletive*, see p. 519); নই « nāi » *I am not* (na + √as): MB. নখতা « nakhātā » (nakṣatra-); নাট « nāṭa » (naṭṭha, naṣṭa); নাতি « nāti » (naptṛ-); নাচ « nāca » (nṛtya); নাঙ্গা, নাঙা « nāṅ(g)ā » (nagga- < nagna-); নীঁদ « nīda » (nidrā); *sts.* নোতুন, নতুন « nōtuna », < MB. নৌতুন « nâutunā » (*nava-tana, nūtana); নয়া « nâyā » (nava-); etc., etc.

The OB. and eMB. spellings with initial ণ « ṇ- » seem only to be a practice taken over from MIA. orthography : the pronunciation was that of [n].

OIA. « jñ- » : dialectal Beng. নাইহর, নাইয়র, নায়র, নায়ের « nāihārɨ, nāi(y)ārɨ, nāyērɨ » (also লাইহোর, লাইওর « lāi(h)ōrɨ ») *married woman's father's house* (jñāti-gṛha) ;

OIA. « sn- » > MIA. « nh-, ṇh- » : না, নাহা « √nā, nāhā » (√ṇhā, √snā), cf. *sts.* নাপিত « nāpitɨ » (ultimately from « √snā », cf. Pali « nahāpita ») ; MB. নেহ « nēhå », NB. নেই « nēi » *affection, indulgence* (snēha) ;

Initial [n] in Bengali interchanges very frequently with [l], and occasionally intervocal [l], for which see under [l], below.

In the interior of a word, [n] is from—

OIA. « -jñ- » > MIA. « -ṇṇ- » : আনাড় « ānāṛɨ » (aṇṇāa-ḍa, ajñāta-ṭa) ; বিনতি « binåti » *petition* (viṇṇattia, vijñaptikā) ; সান as in হাত সান « hātɨ-sānɨ » *gesture with the hand* (saṇṇa, saṁjñā) ;

OIA. « -ṇ- » : often written ণ « ṇ » : নারাণ, নারান [narɑn] (nārāyaṇa) ; কিনে « kinē » (krīṇāti) ; কাণা « kāṇā » (kāṇa-) ; ক্ষণ, খন « kṣåṇɨ =khåṇɨ » (kṣaṇa) ; গুণে « guṇē » (gaṇayati) ; পণ « påṇɨ » (paṇa) ; লুণ, নুন « luṇɨ, nunɨ » (lavaṇa) ; ফণা « phåṇā » (phaṇa-) ; শণ « śaṇɨ » (śaṇa) ; শাণ « śāṇɨ » (śāṇa) ; শুনে « śunē » (śṛṇōti) ; শাঙন, সাঙন « śāw̃ånɨ, sā- », *sts.* ছাবন, ছাবন « ch(r)ābånɨ » (śrāvaṇa) ; etc., etc. ;

OIA. « -ṇḍ- » : see p. 365 ;

OIA. « -ṇy- » : ‡ পুন « punɨ » (puṇya) ;

OIA. « -n- » > MIA., OB. « -ṇ- » > lMB. « -n- » : আঙ্গন « āṇg(g)ånɨ » (aṇgana) ; আনে « ānē » (ānayati) ; জানে « jānē » (jānāti) ; পানী « pānī » (pānīya) ; ননী « nånī » (navanīta) ; ‡পানই « pānåi » (upānah) ; মন « månɨ » (manas) ; মানুষ, মুনিস « mānuṣɨ, munisɨ » (manuṣya) ; হেন « hēnå » (*aïhaṇa, aïsaṇa = *ētādṛśana) ; ননদ « nånådɨ » (nanandā) ; etc., etc. ;

OIA. « -nt- » > Late MB. « -n- » (through influence of pronominal forms in « -n- ») : করেন « kårēnɨ », চলেন « cålēnɨ », যান « jānɨ »

etc. (= MIA. karanti, yānti); এমন « ēmanʼ » beside এমত « ēmatʼ » *so, such, thus*, cf. Oṛiyā « ēmanta » ;

OIA. « -nd-, -ndh- » : modern reduction, see p. 366 ;

OIA. « -nn- » : আনাজ « ānājʼ » *greens* < *grain* (annâdya) ; উনুই, উনই « unui < unāī » *spring* (unna-) ; ছিনাল « chinālʼ » *woman of loose character* (chinna-) ; ভিন « bhinʼ » *separate* (bhinna) ; MB. সানা « sānā » *corslet* (sannāha) ;

OIA. « -ny- » : আন « ānʼ » (anya) ; ধান « dhānʼ » (dhānya) ; বান « bānʼ » (vanyā) ; মানে « mānē » *honours, obeys* (manyatē) ; MB. শূনা « śūnā » (śūnya-) ;

OIA. « -m- » > MIA. OB. « -w̃- » > OB. « -ñ- » : সনে « sanē » *with*, OB. « samē » = [ʃɒw̃e] (sama) ;

OIA. « -ṛṇ- » > MIA. « -ṇṇ- », often written ণ « ṇ » : কান, কাণ [ka:n] (karṇa) ; কানড় « kānāṛʼ » (karṇāṭa) ; চুন, চুণ [ʧu:n] (cūrṇa) ; পান, পাণ [pa:n] *betel-leaf* (parṇa) ; OB., MB. কণিআর, কলিয়ার « kaṇiārā, kaliārā » (karṇikāra) ; বানান, বাণান « bāṇānʼ, bānānʼ » *spelling* (varṇana) ; বিনান « binānā » *to make a plait of hair, to spin out a long tale* (*varṇāpana + vinyāsa), বিনুনী « binunī » *plait* (*varṇāpanikā + vinyāsa) ; সোনা, সোণা [ʃona] (svarṇa-) ; etc.

OIA. « -ṣṇ-, -sn- » > MIA. « -ṇh- » : কান, কানু, কানাই « kānā, kān-u, kān-āi » (kṛṣṇa) ; উনান « unān », উনানী « unānī » *oven* (*uṇhāvaṇia, *uṣṇāpanikā) ; জুনি, জোনাকী « juni, jōnā-kī » *moon-light* > *fire-fly* (jyōtsnā-) ; পানান « pānānā » *to cause milk to flow into the udder* (prasnava) ; etc., etc.

OIA. « -hn- » > MIA. « -ṇh- » : চিন « cinʼ » (cihna) ; and denominative চেনা « √cēnā » *to know, recognise*, adjectives অচিন, অচেনা « âcinʼ âcenā » *unknown*.

For the reduction of intervocal « -n- » to a nasalisation, see p. 373. ধুনী « dhunī » *fire place* (*of a yogī*) (*-dhūpanikā) has a form ধুঁই « dhũi » (= *dhūmikā ?). OIA. « -n- » is lost before « -t- » in « -ant- » of the present participle. Loss of « -n- » is noticed in পশুরী « pâśurī » < *পন্‌সেরী « *pânʼsērī » *five seers*, and পসারী « pâsārī » *shop-keeper*, cf. Hind,

« pansārī » (« paṇya-śālika »: dropping of « -n- » possibly through influence of « prasāra » *a spreading-out*).

In some unexplained words, we find « -n- », *e.g.*, নাড়া, নেড়া « nāṛā, nēṛā » *shaven-head*; টেনা, টেনা « tēnā, ṭēnā » *rags*; ঠোনা « ṭhōnā » *a blow under the chin* (cf. ঠোক, ঠুক « √ṭhōk, √ṭhuk » *to strike gently*); নড়ী « nāṛī » *stick*; নলেন, নলিয়ান « nōlēn৵ < nāliyān৵ » *fresh date-molasses* (navala- ?); নন্না « nānnā » *small, tiny*, cf. Hind. « nanhā »; নাজিনা « nājinā » = শজিনা « śājinā » *a tree* (śōbhāñjana-); নুলা « nulā » *forearm, paw, hand-less*; etc., etc.

Final « -n, -ŋ » occasionally interchange in foreign words: *e.g.*, সাবান, সাবাং « sābān, sābāŋ » *soap* (Portuguese « sabaõ »); এষ্টকিন « eṣṭākin » = *stocking*, টিকিন « ṭikin » *a kind of stout cloth* = *ticking*; আপিং, আপিন, আপিম « āpiŋ, āpin, āpim » *opium* (Perso-Arabic « afyūm »); etc.

[n] in foreign loan-words: see below.

288. Bengali [m].

Initially, [m] comes from—

OIA. « m- »: মা « mā » (mātā); মৌ « mau » (madhu); মন « mân৵ » (manas); মিতা « mitā » *friend* (mitra-); মড়া « mâṛā » (mṛta-); মাঝ « mājh৵ » (madhya); মিছা « michā » (mithyā-); মুনিস « munis৵ » (manuṣya): মু « mu » (mukha); মুগ « mug৵ » (mudga); etc., etc.;

OIA. « mr- »: মাখে « mākhē » *smears* (mrakṣati); মাখন « mākhân৵ » *butter* (mrakṣaṇa);

OIA. « śm- » > MIA. « hm- »: মশান « mâsān৵ » (śmaśāna); মোছ « mōch৵ » (śmaśru).

In the root মুছ « √much » *wipe*, [m] is probably from « pr- » (beside √পোঁছ « põch » = « pra-uñch »). Initial « b- » has become [m] in মিনি « mini » = বিনি « bini » *without* (< bihīna- = vihīna-; or binā = vinā). In মুচকিয়া হাসা « muc৵kiyā hāsā » *to smile*, probably we have the [m] from « sm- » in OIA. « √smi ».

In the middle of a word, [m] represents—

OIA. « -nm- »: MB. উমড় « umâṛâ » (unmarda); MB. উমান « umānâ » *to weigh* (unmāna, unmāpana).

OIA. « -p- » > MIA. « -v- » > MIA., OB. « -w̃-, -w̃- »: কাছিম « kāchimɨ » (kacchapa); ছাতিম « chātimɨ » (saptaparṇa); *sts.* পিদীম « pidimɨ » (pradīpa).

OIA. « -mb- »: OB. « kāmalī » *a name* (= Kambalâmbara-pāda); নিম « nimɨ » (nimba); জাম « jāmɨ » (jambu-); চুমে « cumē » (cumbati); *sts.* কদম « kādâmɨ » (kadamba); etc., etc.;

OIA. « -mbh- »; কুমার « kumārɨ » (kumbhakāra); কুমীর « kumīrɨ » (kumbhīra); খামার « khāmārɨ » (skambhâgāra);

OIA. « -mm- »: MB. ছাম্ « chāmu » (sammukha), whence NB. *sts.* সুমুখ « sumukhɨ » *in front of.*

OIA. « -mr- » > MIA. « -mb- »: আম « āmɨ » beside আঁব « ãbɨ » (amba-, āmra); তামা, তাঁবা « tāmā, tãbā » (tāmra-).

OIA. « -rm- » > MIA. « -mm- »: কাম « kāmɨ » (karma); ঘাম « ghāmɨ » *perspiration* (gharma); মামড়ী « māmɨ-ṛī » *crust* (marma-ṭa-); OB. « dhāma » (dharma); etc.;

OIA. « -ṣm-, -sm- » > MIA. « -mh- »: গুমট « gumāṭɨ » *stuffiness* (grīṣma ?); উমান « umānâ » *to be hot* (uṣmāpana); আমি, তুমি « āmi, tumi » (asma, yuṣma-);

OIA. « -hm- » > MIA. « -mh-, -mbh- »: বামন, বামুন « bāmânɨ, bāmunɨ » (brāhmaṇa);

OIA. « -v- »: see p. 521.

Intervocal « -m- > -w̃- », when turned preconsonantal in NB., became « -m- » optionally, beside « -ŋ-, -w̃- »: this has been noticed at pp. 521-522.

In MB., there are cases of change of intervocal « -b- » to [m], through an open nasal [w̃] stage. Thus, in East and North Bengali, the affix বুঁ, বোঁ « -bũ, -bõ », for the 1st person future of the verb, regularly becomes মু, মো, ম্ « -mu, -mō, -mɨ »: *e.g.*, Sādhu-bhāṣā করিব « karibâ » *I shall do*, earlier Bengali করিব *will, wilt, shall do*, করিবোঁ « karibõ » *I shall do* = East Bengali করিমু, করুম, করিম, করম, করমু « karimu, karumɨ, karimɨ, karâmɨ, karmu »; *sts.* বষ্টুম « bāṣṭum » = « vāiṣṇava », MB. form [bɔiʃṭ̪ɔb(ɔ)]; MB. সায়েমানী beside সায়েবানী, সাহেবানী « sāyēmānī, sāyēbānī, sāhēbānī » *canopy, umbrella* < Persian « sāyah-bān »; সব « sābɨ » (sarva) is found as সম « sāmâ, » সক্ষ « sāmâ » in MB. This change of « -b- » > « -m- » is found in Early Oṛiyā:

e.g., in the 15th and 16th century inscriptions, we have « nēmā=nēbā » *to take*, « bāïṣṇāmā < bāïṣṇābā » ; and Modern Oṛiyā has « -mi » for « -bi » in verb forms, *e.g.*, « dēkhimi=dēkhibi » *I shall see*. The Bihārī dialects also know this change: *e.g.* Magahī « calmā=calbā, lēmā = lēbā » *you will go, you will take*, etc.

[m] occurs in *ts.* and *sts.* forms: *e.g.*, পেন্নাম « pēnnāmą » (pranāma), MB. পুনিম, পুনমি « punimā, punāmi » (pūrṇimā), etc. For [m] in *ts.* consonant groups, see p. 373. The nasalisation in which this [m] results is frequently dropped.

In some compounds, there is an intrusive [m], which is euphonic in origin: *e.g.*, খোলা-ম্-কুচি « khōlā-m-kuci » *a pot-sherd* (< খোলা = *tile*, কুচি = *piece*); ফুল-ম্-পেড়ে (<পাড়িয়া) « phulā-m-pēṛē (< pāṛiyā) » *a dhōtī with floral* (phulą) *border* (pāṛą); মুঠ্-ম্-হাত « muṭ(h)u-m-hāta » *with closed fist*; মড়াঞ্চে, মড়ুঞ্চে « mårā-ñ-cē, mōṛū-ñ-cē » < « *måḍā-m-ciyā < *maḍa-m-avaccia- » (mṛta + m + apatya + -ikā) *a woman whose children always die*; English *bat+ball* becomes ব্যাটবল « byāṭ-bål » [bæṭbɔl], beside ব্যাটম্বল « byāṭå-m-bål » [bæṭombɔl] (probably here the [m] originates from English itself—*bat and ball* [bæt ənd bɔ:l, bæt ṇ bɔ:l, bæt ṃ bɔ:l]); Skt. « jalamaya » becomes জলম্ময় « jålå-m-måyą » *all covered with water* (here the 'doubling' may be through emphasis: see p. 448). In পাতম্চি, পাতঞ্চি « pātå-m-ci, pātå-ñ-ci » *mat*, we have influence of সতরঞ্চি « såtåråñci » *carpet, cotton rug* = Pers. « šatranjī » *chequered rug*. In reading multiplication tables in Bengali, [m, ŋ] is used, instead of the locative-instrumental [e]: *e.g.*, বার একে বার « bārå ēkē bārå », or বারক্কে বার « bāråkkē bārå » = *12 × 1 is 12*, বার দুগুণে চব্বিশ « bārå duguṇē cåbbiśą » *twice twelve are twenty-four*, but তিন বারম্ (বারং) ছত্রিশ « tiną bāråm (bāråŋ) chåttriśą » *3 × 12 are 36*, beside, rarely, তিন বারয় ছত্রিশ « tiną bāråy chåttriśa » ; so বার বারম্ (বারং) এক শ চুয়াল্লিশ « bārå bāråm (bāråŋ) ēką śå cuālliśą » *12 × 12 = 144*. This [m] recalls the euphonic « -n- » of Dravidian; and a similar euphonic [m] is noted in MIA.: *e.g*, Pali « ěkka-m-ěkka », « ēkañca jěyya-m-attānaṁ » *may conquer self alone*, Jaina Ardha-māgadhī « gōṇa-m-āī » *ox etc.*, « aṇṇa-m-aṇṇa » *reciprocally*, āhara-m-āīṇī » *food etc.*, « dīha-m-addhā » » *distant, lit. with a long way*, etc.

For [m] in foreign words, see below.

[III] The Semi-vowels [ĕ, ŏ].

289. OIA. « y » = [j, ĭ] and « v » = [ŭ, w, ʊ, v] when initial became respectively [ʃʒ] and [b] in Bengali, and medially between vowels they were dropped in Second MIA. Later they originated as glide sounds intervocally, to avoid hiatus: in Bengali the OIA. and MIA. values of semivowel [ĭ, ŭ] and of spirant [j, ɹ; ʊ, v] were replaced by those of semivowel [ĕ, ŏ]. These sounds did not have any phonemic value: their nature and origin between « udvṛtta » vowels has been discussed in pp. 338-342. The letter য (য়) « y » is much used in Bengali orthography, but it does not often indicate any sound, and য (য়) in MB. MSS. is only a vowel-bearing consonant in words like য়ঙ্গ = অঙ্গ « åṇgå », য়নন্ত = অনন্ত « ånântå », আমি = য়ামি « āmi » *I*, য়ুত্তম = উত্তম « uttâmå », ইহার = য়িহার « ihāraṅ » *its* etc. য় « yå » in the middle or end of words normally stands for the sound of [e] in NB.: *e.g.*, উপায় beside উপাএ [upae] (upāya), করয় = করএ [kərəe] (karaï, karōti), ময়নামতী = মএনামতী [məenaməti] *a name* (Mayanā- = Madanâvatī), etc.; the locative সময়ে [ʃ̈omərĕe, ʃ̈omɔe] is written সময় « sâmåyå », and বয়স, পায়স « båyåsâ, pāyåsâ » commonly become [bɔeʃ̈, paeʃ̈]. Final postvocalic [e] in *tbh.* words is ordinarily written য় in MB.: *e.g.*, খায় [khae] *eats*, চালায় [ʧ̈alae] *causes to go*, দেয় [dæe] *gives*, ঘোড়ায় [gʃ̈oṛae] *with, on or by a horse*, etc.

In NB., with a preceding or following [i] sound, the front glide য় [ĕ] is not audible, unless a distinct syllable is uttered. [ĕ] occurs in NB. finally after [ɔ, a, e, æ, o], and in the interior of a word between [ɔ] and [a] only: *e.g.*, হয় [hɔĕ] *is*, খায় [khaĕ] *eats*, সহায় [ʃ̈ɔhaĕ] *help*, নীচেয় [niʧ̈eĕ] *downstairs*, দেয় [dæĕ] *gives*, শোয় [ʃ̈oĕ] *sleeps*; দয়া [dəĕa] *mercy*, বয়স [bɔĕɔʃ̈] *age*, মায়া [maĕa] *illusion*, নায়ক [naĕɔk] *leader*. These are really diphthongs in NB.: see *supra*, under New Bengali Diphthongs.

The English or Persian sound of [j], as in *York* [jɔɹk, jɔ:k], *yes* [jɛs]; *Europe* [jʊɹɔp], Persian « yār » [ja:r, jɔ:r], etc. is unknown to Bengali, and the Bengali substitute is [i]: ইয়োর্ক [iork], ইয়েস্ [ies], ইয়োরোপ, ইউরোপ

[iorop, iurop], ইয়ার [iar] etc.: the Skt. spelling with য় = য, as য়োর্ক, য়েস, য়োরোপ, য়ার would not emphasise the initial semivowel.

The modification of post-consonantal « -yă, -yā » in *ts.* words has been discussed before: see under 'Epenthesis,' pp. 381 ff., and under 'Bengali [æ, æ:],' pp. 410 ff. A spelling like « prattarthī » for « pratyarthī » in the Manahali Grant of Madana-pāla (see p. 185) shows that the dropping the subscribed « -y- » in pronunciation of Skt. was the way in the beginning of the 12th century: but in the 7th century the « -y- » was fully pronounced: witu ess the spellings আর্য্য, বীর্য্য « ārrya, vīrrya » [ɑr:ĭɒ, bi:r:ĭɒ] in the Lōkanātha inscription of Tipperah, and not, as in MB. and NB., আর্য্য, বীর্য্য « āryya, vīryya » = [ɑ:rʃʒ(ĭ)ɒ, bi:rʃʒ(ĭ)ɒ].

290. [ŏ] has also been discussed before, side by side with [ĕ]. In MB., Skt. subscribed « -vă-, -vā- » was pronounced as [ŏɔ, oɑ], and this pronunciation came to be written as ওয়া, ওআ; but [ŏɔ, ŏɔ > ɔ:] and [ŏɑ] became to some extent interchangeable: *e.g.*, *sts.* সোয়াথ [ʃoath], beside *ts.* সোয়াস্তি, স্বস্তি [ʃoasti, ʃoɔsti, ʃɔ:sti] *peace* (svasti); সোয়াদ, স্বদ [ʃoad, ʃɔ:d] (svāda), see p. 403; সোয়ামী [ʃoami] (svāmī); দোয়াদশী [doadəʃi] (dvādaśī); আশোয়াস [aʃoaʃ] (āśvāsa), etc. These pronunciations are now old-fashioned and are getting out of use. Subscribed « -v » in initial syllables is now ignored, *e.g.*, স্বাদ [ʃɑ:d] (svāda), দ্বার [dɑ:r] (dvāra), স্বকীয় [ʃəkiɔ] (svakīya), etc.; and medially it becomes a simple consonant-doubler, in Skt. as well as in the spelling of Perso-Arabic borrowings: *e.g.*, স্বত্ব [ʃɔttɔ] (svatva), পক্ক [pɔkkɔ] (pakva), অশ্ব [ɔʃʃɔ] (aśva), etc.; মফস্বল, মফঃস্বল « mâphâ(ḥ)svâl » [mɔphɔʃʃɔl] *country-side, away from head-quarters* = Perso-Arabic « mufassil- ».

Skt. influence has restored the ব « -v- » subscribed to some *tbhs.* in Bengali orthography, which lost it in pronunciation long ago in the First MIA. Period: *e.g.*, জ্বল = জ্বল « √jval » = [ʃʒɔl] *to burn.* There has even been some scholastic attempt to restore the OIA. value of ব = « -v- » both inscribed and isolated, but it has proved a failure: *e.g.*, শ্বানেক, শ্বান্‌বেক « Śvānvēkṛ » = the German name *Schwanbeck*, which the uninitiated would read as [ʃannek] or [ʃanbek]; হ্বেন্থ সাঙ্গ « Hvēnthâ-sāṇgâ » = *Hwen Thsang* the Chinese pilgrim; বেবর « Vēvârṛ » = *Weber*; বলন্টিন ডুবাল « Vâlântinâ

Ḍuvāl̐ = *Valentin Duval*; স্বেন হেডিন « Svēn̐ Hēḍin̐ » = *Sven Hedin*, etc.

[ŏ] glide often in intervocal positions lost the vowel following it, and formed a diphthong with the preceding vowel: *e.g.*, আওতা [aŏta] *shade* from MB. [aŏɔ:ta] (*āẁātā < āavatta- < ātapatra-); sometimes it was changed to [u] through influence of following [i] (see p. 398); sometimes it was assimilated with a preceding vowel, *e.g.*, আনাগোনা [anagona] < [aŏ(ɔ)na gɔŏ(ɔ)na] *coming and going*; and in a few cases, it changed to [b]; *e.g.*, আদোবে [adobe] (see p. 511), হাবড়া beside হাওড়া [habṛa, haoṛa] *the town of Howrah*, etc. [ŏa] in the affix « -wālā » borrowed from Hindōstanī (= Bengali « -ālā ») became [o] in Bengali: গাড়ীওয়ালা [gaṛiŏala] > গাড়ীওলা [gaṛiola] *cabman*, beside native Bengali গাড়ীআলা [gaṛiala].

The glides in foreign loan-words: see *infra*.

[IV] The Bengali Alveolar Flapped or Trilled Sound [r], and Alveolar Lateral [l].

291. It has been surmised that the OIA. dialects fell into three groups in their treatment of [r] and [l] sounds, and that 'Prācya' or Eastern OIA., the source of Māgadhī and the modern Magadhan speeches, was an [l] dialect. (See p. 34, pp. 484-485.) Sanskrit shows its composite character as a literary language in its [r] and [l] words occurring side by side: *e.g.*, « rōhita : lōhita ; śrī-la : ślī-lā ; rōman : lōman ; rēkhā : lēkhā ; kṣudra : kṣulla ; rōcana : lōcana ; raghu : laghu ; rabh : labh ». This occurrence in Sanskrit of the same word in two forms is at the basis of the dictum of the Indian grammarians, « ra-la-yōr abhēdaḥ » *there is no distinction between* « r » *and* « l ».

This line of isogloss was present in OIA. and First, Transitional and Second MIA. periods, at least so far as the Māgadhī dialect is concerned, as it can be seen from the evidence of the inscriptions and of Vararuci. We can see from the inscriptions how the North-western dialect (which in the Vedic period was an « r » dialect) fared during the First MIA. period: it took up the « l » sound, apparently through 'down-country' influence. The Midland dialect (the source of Śaurasēnī), and the South-western dialects

(the sources of the ancient speeches of Malwa, Rajputana and Gujarat, and of Mahārāṣṭrī), seem to have always had both « r » and « l ». The modern representatives of all MIA. dialects show disagreement with Sanskrit at times; and developments in them in Second and Late MIA., and Early NIA. times, as well as the influence of sister and cousin speeches and of standard languages, have made it impossible to trace the continuity of the history in the matter of « r, l ».

Bengali as a Magadhan language ought to have only one sound representing the Māgadhī single liquid « l ». But Bengali has both « r » and « l » in *tbh.* words as well. Bengali has « r » words, *e.g.*, √ধর « dhâr », কর « √kâr », মর « √mâr » etc., in addition to what may be called its inherited Māgadhī forms in « l » and in « l- > n- » initially (= Skt. r), like শালিক « śālikā » (= sārikā, Māgadhī Pkt. *śālikka), পাঁচীল « pācīlā » (*pañcīla = Skt. prācīra), and MB. নাছ « nāchâ », OB. (Sarvânanda) « lāccha » (Māgadhī lacchā = rathyā).

The predominance of « r » forms over « l, l- > n- » ones in the Eastern Magadhan speeches would belie their Māgadhī origin. What are these « r » forms due to in Eastern Magadhan? Either it was the result of a tendency in East Magadhan, in the Apabhraṁśa and Early NIA. periods, (a tendency which characterised Central and West Magadhan also, and West as well), to change at a later time, Early Braj-bhākhā in the original, inherited « l » to « r »; or it was due to the presence in Bengal, during the formative period of Bengali, of speakers of « r » dialects from Northern India, who had a great influence in the evolution of the language. Both the factors may have been present together: but the « l > r » tendency does not seem to have been so wide-spread, as a number of original « l » words have survived: in any case, it had received a check quite early. Bengal had received settlements of Brāhmans from Northern India from the time of the Imperial Guptas, and probably even earlier, as we can see from inscriptions (see pp. 76-77). These Brāhmans, it may be expected, brought their own Prakritic speeches with the « r » sound, before they accepted the Māgadhī Ap. of the land where they settled: and their class dialects would certainly have the « r » sound. Above all, with the

Brāhmans came the tremendous influence of Sanskrit. The speech of the Brāhmans, as that of the aristocracy of culture, would certainly modify the language of those communities which accepted their lead. The influence of Skt. grew greater and greater. The result was that the « r » words from Skt., as the forms employed by the most intellectual classes, were largely established in Bengali at the time of its differentiation from the Central and West Māgadhī groups, i.e. before the 10th century. By that time, what may be called the 'lambdacism' of early Māgadhī, i.e. the habit of changing « r » to « l », which characterised it in the 6th or 3rd century B.C., or 4th century A.C., had worn itself out. « r » words are found in Old Bengali toponomy, as in the inscriptions, and in the remains of OB. prior to 1200 A.C., just the same as in NB. Initial « l », whether *tbh.* or *ts.*, tended to become « n- » in all Magadhan, probably at this juncture.

The 'Bihārī' speeches, however, although they possess both « r » and « l », are more faithful to their Māgadhī origin in preferring one sound only. The single « l » sound of Māgadhī (in non-initial positions generally) seems to have become an « r » in the Central and Western forms of Māgadhī Apabhraṅśa (see p. 96 ; Hoernle, 'Gaudian Grammar,' pp. ix, 13, 14, 63). Western Hindī (Braj-bhākhā), as well as the literary form of Eastern Hindī—the latter coming between Western Hindī and 'Bihārī'—also changed « l » (and « ṛ ») to « r » (see p. 156). Bengali-Assamese and Oṛiyā, on the other hand, never developed as a characteristic this tendency to confuse « r » and « l », or to have a special preference for « r ». Change of intervocal « -ḍ- > -ṛ- » to « r » in Western Hindī occurred in late times; the change of intervocal « l » to « r » seems to have been through a « -ḷ- » stage—« -l- > *-ḷ- > *-ṛ- > -r- ». This « -l-, -ḍ- > r » is not found in the Old Western Hindī of Canda Bardāī, nor is it much noticeable in Kabīr; but in the Braj-bhākhā of Sūra-dāsa and Bihārī-lāla, and the rest, it is very much in evidence. Modern Hindōstānī is not characterised by this, although it has some words with « r » for « l », mostly borrowed from Braj-bhākhā. It seems that intervocal « l » which became « ḷ » in most MIA., changed to « ṛ » and then this « ṛ », and « ḍ > ṛ » both became the « r » in the Braj-bhākhā, Bundēlī and Kanaujī tracts (Upper Gangetic Doab,

excepting the Hindōstānī area) : in Panjābī, Rājasthānī-Gujarātī, Marāṭhī, this remained « ḷ ». In the West and Central Magadhan area, this « -l- », or « -ḷ- », became « r ». Eastern Māgadhān kept the dental « l », but probably through Skt. influence, « r » was frequently brought in.

292. The « ḷ » sound is now absent in the Upper Ganges Valley ; it is not found in any of the Magadhan speeches, except Oṛiyā. In most Second MIA., single intervocal « l » of Early MIA., whether original (i.e., found in the oldest IA.) or derived (i.e., developed out of « r », as in Māgadhī) was cerebralised to « ḷ ». Māgadhī of the Second and Third MIA. periods probably had this « ḷ ». But it became a dental or alveolar « l » once more in all Magadhan of the NIA. period, excepting in Oṛiyā. Oṛiyā has cerebral « -ḷ- » which corresponds to OIA. single « -l- » (and « r »), and alveolar « -l- », which corresponds to MIA. « -ll- ». In the eastern alphabet which was current in the present-day Magadhan tracts prior to the 13th century, there was no separate letter for « ḷ ». Oṛiyā used the ordinary ল=ল for the « ḷ » which occurred intervocally, and developed as early as the 13th century a letter ল় with a diacritical mark, for the intervocal alveolar « -l-<-ll- ». It seems that in the Māgadhī Ap. stage, alveolar « l » occurred initially, and medially only when doubled ; and cerebral « ḷ » occurred singly intervocally only : the same letter apparently could do for both, as their position in speech was fixed, and together, they formed one phoneme. The same thing seems to have been the case in Early Marāṭhī (Jules Bloch, 'Langue Marathe,' p. 148). One can recall the usage in the orthography of Second and Transitional MIA. with regard to the representation of both the voiced stops and spirants by the same letter (see pp. 252-253). Bengali (as well as other NIA.) shows ড় « ṛ » for « l » in a few words, *e.g.*, তাড়ী « tāṛī » *fermented palm-juice* (=tāḷa, tāla), মিড় « miṛ » (√mil) : this « ṛ » is undoubtedly derived from the cerebralised « ḷ », and the « ṛ » formations can be called sporadic relics from the Māg. Ap. stage with the « ḷ ». In any case, judging from the evidence of other NIA. like Panjābī, Rājasthānī and Gujarāti, and Marāṭhī, as well as from Oṛiyā, the presence of « ḷ » in Māgadhī Apabhraṅśa can very well be assumed. One need not ascribe the « ḷ » sound in Oṛiyā to Dravidian

influences exclusively, as Beames has done in his Comparative Grammar (I, p. 245).

In Old Māgadhī, before the Aśōkan period, « l » before « y » was palatalised [lĭ, lj > ʎ > jj], which gave « -yy- » in Aśōkan Prakrit. There is no trace of it in Later Māgadhī : the resultant « -yy- » has become « j » in Bengali in a solitary example (see p. 476). A slightly palatalised « l » [lʲ] is found in dialectal NB. in cases where an original « i » is dropped (see p. 380) : *e.g.*, কাল [kalʲ] < কালি [kali] (kalya), গাল [galʲ] < গালি [gali] (garha-). In dialectal (West Bengali) forms like হার [hiaŕ, hiari] *loss*, মার [maŕ, mari] *a beating* < হারি, মারি [hari, mari], there is similarly a slightly palatalised [rʲ].

The cerebral « ḷ » is now absolutely a foreign sound in Bengali, so much so that a Bengali speaker confuses the Oṛiyā « ḷ » with his own ড় « ṛ ». To make fun of Oṛiyā articulation, specially on the stage, জড়, গোপাড়, বড়রাম, কড়কতা « jåṛå, gōpāṛå, båṛårāmå, kåṛåkåtā », etc., are used for the correct Oṛiyā forms with « ḷ » ; and this « ṛ » is further extended to words which do not have [ḷ]—*e.g.*, জগড়নাথ « jågåṛ(å)nāthå » (Jagannātha), অবধড় « åbådhāṛå » (avadhāna), সুভড়দড়া « subhåṛ(å)dåṛā » (Subhadrā), etc.

293. Sources of Bengali [r].

Initially, Bengali [r] represents Skt. « r- » which probably ousted Māgadhī « l- » in most cases : রাতি « rāti » (rātri) beside the dialectal *sts.* নাত্তির « nāttirɸ » = রাত্তির « rāttirɸ »—« nāttirɸ » being for « *lāttirɸ », influenced no doubt by a Māgadhī « *latti » > *tbh.* « *lāti » ; রাং « rāŋ » (raŋga) ; রূপা « rūpā » *silver* (rūpya-) ; রুই « rui » *a fish* (rōhita); রাঁড় « rãṛɸ » (raṇḍā) ; রা « rā » (rāva) : রীষে « rīṣē » (rīṣyati) ; রানী « rānī » (rājñī) ; রিঠা « riṭhā » (ariṣṭha-) ; রোয় « rōy » (rōpayati) ; রেড়ী « rēṛī » (ēraṇḍa-) ; etc., etc.

The words রোঁ, রোঁয়া « rõ, rõā », cf. Skt. « lōman », NB. *ts.* লোম « lōmɸ » ; রশুন « råsunɸ », OB. (Sarvânanda) « rasāuṇa », beside Skt. « lasuna » ; রাঢ়, রাঢ় « Rāṛ(h)ɸ [1] », beside Jaina Ardha-māgadhī « Lāḍha »,

[1] The Skt. 'Rāḍha' is probably based on a vernacular form with 'r' occurring side by side with the from in 'l' (attested from the Ardha-māgadhī and Tamil) in the Second MIA. period.

Tamil (Tirumalai inscription, 1024 A. C.) « Ilāḍam »; and a few others, probably seem to be due to an « r- » tendency in some tracts at least of West Bengal.

In the middle of a word, [r] corresponds to—

Skt. « -r- », either through the influence of Skt., or through spontaneous change within the language itself: *e.g.*, আখর « ākhaṛ্ » (akṣara); আর « āṛ্ » *and* (Māg. avala=apara); আরসী « āṛ্sī » (*āalaśī, *āarasī=*ādaraśa-, ādarśa-); ইদুর « īduṛ্ » (indura); MB. উর « √ur » *come down, descend* (ava-tar-, √tṛ); উতরে « utārē » (uttarati); the affix র, এর « -rā, -ērā » for the genitive (-kara, -kēra=kārya); ‡কেরা « kērā » *clerk* (kīraka-); কেরাণী « kērāṇī » *clerk* (kīraka+karaṇika); করে « kārē » (karōti); কেয়ারী « kēyārī » *bed round a plant* (kēdārikā); খয়ের « khāyēṛ্ » (khadira); MB. গহির « gāhiṛ্ » (gabhīra); গেরুয়া « gēruā » (cf. gāirika); গোরা « gōrā » (gāura-); ঘর « ghāṛ্ » (gṛha); চরে « cārē » (carati); চুর « cūṛ্ » (cf. cūṛṇa); চোর « cōṛ্ » (cāura); ডুমুর « ḍumuṛ্ » (udumbara); তেরছ « tērāchh » (tiraśca-); নায়র « nāyāṛ্ » (nāgara); পরে « pārē » (paridhīyatē); পূর « pūṛ্ » (cf. pūrṇa); বীর « bīṛ্ » (vīra); সায়র « sāyāṛ্ » (sāgara); etc., etc.

Skt. « -l- »: নঙ্গর, লঙ্গর « nāṅgāṛ্, lāṅgāṛ্ » *anchor* (=lāṅgala); নিহার, নেহার « √nihār, nēhār » *to see* (ni+√bhāl); MB. পোঁআর « pōāra » (prabāla); ফরকা « phāṛ্kā » *blade, shield* (phalaka-); মেহার, মেহারী « mēhār(ī) » *a palace, a place-name* (mahâlaya-); etc.

It represents also—

OIA. « -ṭ- » > MIA. « -ḍ- »: পারুল « pārul », OB. « pāralī » (pāṭalī); জারুল « jārulṛ্ », OB. « jāralī » (jāṭali); জড়ুল, জরুল « jaṛulṛ্, jaṛulṛ্ » (jaṭula);

OIA. « -ḍ- »: বেরাল « bērālṛ্ » (viḍāla);

OIA. « -t-, -d- » > Second MIA. « -ḍ- », in the numerals esp.: বার « bārā » (dvādaśa); সত্তর « sāttāṛ্ » (saptati); সরেশ « sārēśṛ্ » *best, good* (*śaḷiśa, *śaḍiśa, sarisa=sadṛśa).

Change of [ḍ > ṛ] to [r] is characterstic of East and North Bengali, and also of forms of West Bengali. The standard dialect has a few words showing interchange of [ṛ] and [r] : *e.g.*, লাবড়া, লাফরা « lābaṛā, lāphaṛā » (see p. 513) ; কাঠড়া, কাঠরা « kāṭhaṛā, -rā » *lumber* (kāṣṭha) ; টুকরা « ṭukaṛā » *piece*, beside Hind. « ṭukṛā » ; পেঁটড়া, পেঁটরা « pōṭaṛā, -rā » *box* (*pĕṭṭa, *pĕṇṭa- = pēṭaka-) ; OB. « kaḍakaca », NB. করকচ « kāṛa-kāca » *rock salt* ; কড়চা, করচা « kāṛācā, kāṛācā » *biographical notes* (cf. Hindī « kaṛkhā » *war-song, song of heroism* : kaḍakkha = kaṭâkṣa ?) ; MB., West Bengali মারুলি « māruli » *mopping the front of the house-door* (? মাড়লী « māṛālī » < √maṇḍ) ; etc.

294. Bengali phonetics is still Prakritic enough to drop a pre-consonantal [r] and double the following consonant by way of compensation, in both *tbh.* and *ts.* words (see pp. 448-449). This habit is present throughout the history of the language : *e.g.*, in the OB. period, in the Kamauli grant of Vaidya-dēva (p. 184), we have the *sts.* and *tbh.* spelling « nninaya » for « ninnaya » (= nirṇaya). These modified *stss.* occur principally in the speech of the masses, and frequently they are written as pronounced, especially in the drama and in the conversational passages in fiction : *e.g.*, কম্ম « kāmmā », beside *ts.* কর্ম্ম « kārmā », *sts.* করম « kārāmā » and *tbh.* কাম « kāmā » ; সমত্ত, সোমত্ত « sāmāttā, sōmāttā » *grown-up* (*as of a girl*) (? samartha) ; কত্তা « kāttā » *master*, '*governor*' (kartā) ; গিন্নি « ginni » (*girṇi = gṛhiṇī) ; চন্নামেত্ত « cānnāmēttā » (cāṛaṇāmertā = caraṇâmṛta) ; MB. নত্তা « nāttā » < ন-রাতিয়া « nā-rātiyā » *festival on the 9th day after birth of child* ; পুষ্কন্নী « puṣkānnī » (puṣkāraṇī, puṣkariṇī) ; উত্তীন্ন « uttinnā » (uttīrṇa) ; পোক্কের [poʃker] *clear* (pōrṣkēra < *pāirṣkāra < pariṣkāra) ; বন্ননা « bānnānā » (varṇanā) ; মাল্লে [malle] beside মার্‌লে [marle] = Standard Bengali মারিল « mārilā » *he struck* ; ক'চ্ছে [kocʃ(h)e] beside ক'র্‌ছে [korʃ(h)e] *is doing* = Standard করিতেছে « kāritēchē » ; Persian « šīrīnī » > শিরনী « śirnī », শিন্নি « śinni » *sweets offered to a saint* ; etc., etc. Cf. the assimilation of « ṛ » in MB. *stss.*, p. 357. Exceptions, where the [r] resists assimilation, have been indicated at p. 449.

This dropping of [r] characterises the speech of the uneducated classes, of women and of children ; and for common words, educated

speech is not unaffected by it. As there is the impression that the [r] forms are the learned ones, we find, in the attempt to be learned, forms like সাহার্য্য [ʃaɦarʃʃo] (sāhāyya), চিন্তার্ণিত [ʧintarnito] (cintânvita), চির্ণ [ʧirno] (cihna), etc., in both writing and speech. MB. has a false restoration জর্ম্ম « jârmâ » for জন্ম « jânmâ »: see p. 376. The Perso-Arabic « muqaddamah » has given the Bengali মোকদ্দমা « mōkâddâmā », beside a 'learned' মোকর্দ্দমা « mōkârddâmā » *law-suit*; and বেহদ্দ « bēhâddâ » *beyond limit*, Persian « bē-ḥadd », at times figures as বেহর্দ্দ [beɦordo]; and Ar. « bāqī » > বাকী « bākī » *remainder* has even been Sanskritised to বক্রী « bâkrī ».

Intervocal [r] as a rule is not dropped in Bengali, except, of course, the NB. dropping of an original intervocal [r] which becomes pre-consonantal through epenthesis: *e.g.*, করিতে « kâritē » *to do* > ক'ত্তে « kōttē » (through কইর্‌তে « kâirtē »). But in a few instances, intervocal [r] seems to have been dropped without being pre-consonantal: cf. OB. (Sarvânanda) « bīyaṇa », NB. বেনা « bēnā » (vīraṇa-); মরাই « mârāī » *store for rice, corn-loft* (Late Skt. marāra); ছাই « chāi » *ashes* (? kṣāra); ফেউ « phēu » *jungle dog* (phēru), etc. On the other hand, euphonic [r] to prevent hiatus is sometimes met with: *e.g.*, কারুর « kā-r-u-rɨ » beside কাউর « kāurɨ », কারু « kāru » = কারো « kārō », genitive of indefinite pronoun কেহো, কেহ, কেউ « kēhō, kēhâ, kēu » *some-body*; বিরাশী « bi-r-āsī » (dvi + aśīti); বিরান(ব্ব)ই « bi-r-ā-nâ(bbâ)i » (dvi + navati); হাটুরে « hāṭ-u-r-ē » from হাটরিয়া = *হাটইয়া « hāṭ-â-r-iyā, *hāt-â-iyā » *belonging to the market*; so কাঠরিয়া, কাঠুরে « kāṭhâriyā, kāṭhurē » *wood-cutter* (the last two through the analogy of নগরিয়া « nâgâriyā » *belonging to town*, পাথরিয়া « pāthâriyā » *stony*, etc. ?).

But initial [r] is sometimes dropped, and there is equally a prothesis of [r]. This omission, as well as prothesis of [r], is found pretty frequently all over Bengal, but in the speech of the masses in North Central and North Bengal this seems to be most common: *e.g.*, রামের অস « rāmērɨ âsɨ » for আমের রস « āmērɨ râsɨ » *mango-juice*; আজা for রাজা « ājā < rājā » », etc. One or two words in Standard Bengali seem to have this prothetic [r], *e.g.*, রোজা « rōjā » *snake-doctor, witch-doctor* for ওঝা « ōjhā » (upādhyāya); and

in the Calcutta Colloquial, ইটে = « iṭe » is frequently heard for রীঠা, রিঠা « rīṭhā, riṭhā » *soap-nut*.

For [r] in foreign words, see *infra*.

295. Bengali [l] : initially, [l] in all cases may be said to go back to Māgadhī « l- » which corresponds to—

Skt. « l- » : লহে, লয় « lâhē, lây » *takes* (labhatē) ; লাগ « lāgʌ » (lagna) ; লা « lā » (lākṣā) ; লাখ « lākhʌ » (lakṣa) ; লাজ « lājʌ » (lajjā) ; লুঠ « √luṭh » (√luṇṭh) ; লুন « lunʌ » (lavana) ; লোহা « lōhā » (lāuha-) ; also লাউ « lāu » (alābu) ; etc.

Skt. « r- » : OB., eMB. লাছ « lāchâ », MB. নাছ « nāchâ » (ratḥyā) ; *লাতি « lāti » > *নাতি « nāti », which influenced a dialectal *sts.* নাত্তির « nāttirʌ » (rātri) ; লেজুড় lējuṛʌ » *tail* (*of paper kite*) (cf. rajju) ;

Skt. « y- » : লাঠি « lāṭhi » (yaṣṭi- ?) ;

In the interior of words, [l] < Māgadhī « -l- » (or « -ḷ- »), and « -ll- » equating—

Skt. « -ḍ- » : কোল « kōlʌ » (krōḍa) ; চুল « culʌ » (cf. cūḍā) ; ডালিম « ḍālimʌ » (dāḍimba) ; ষোল « ṣōlâ » (ṣōḍaśa) ; cf. খেল « khēlʌ » (√*skrīḍ, krīḍ) ;

Skt. « -dr- » > MIA. « -ll-, -ḍḍ- » : ভাল « bhālâ » (bhadraka) ; মাল « mālʌ » *wrestler, fighter* (malla, madra) ;

Skt. « -r- » : চাল্লিশ « cāliśʌ » (catvāriṅśat) ; পাঁচীল « pãcīlʌ » (prācīra) ; পালায় « pālāy » (palāyatē, parāyatē) ; পেলে, ফেলে « pēlē > phēlē » (pĕllaï, prērayati) ; শালিক « śālikʌ » (sārikā) ; হালি as in হালি মুগ « hāli mugʌ » *green moong pulse* (hārita-) ; হলুদ « hâludʌ » (haridrā) ;

Skt. « -rṇ- » > MIA. « -ll- » : ঘোল « ghōlʌ » (√ghūrṇ) ; চোল, চুল « √cōl, cul » *to distil* (cūrṇa-) ; etc. ;

Skt. « -ry- » > MIA. « -ll- » : পালা « pālā » *turn* (paryāya), Hind. « pārī » ; পালং « pālaṇ » (paryaṇka) ; পালট « pālâṭʌ » (paryasta)

Skt. « -rh- » : গালি « gāli » (garhā-). শিলট, শিলেট « śilâṭʌ, śilēṭʌ » *Sylhet* (« *śīrhaṭṭa = śrīhaṭṭa » : in DeBlaeu's map, 16th century, we find « Sirote ») ;

Skt. « -l- »: আগল « āgalꝺ » (argala); আঙুল « āṇulꝺ » (aṇguli); আঁওলা « ãŏlā » (āmalaka-); আউল « āulꝺ » (ākula); আলতা « ālꝺta » (alakta-); আলি, আইল « āli, āil » (āli); আলস « ālåsꝺ » (ālasya); উখ্‌লী « ukhꝺlī » (ŏkkhala-, udūkhala-); ওলা « √ōlā » *descend* (ava-labh); কলা « kålā » (kadala-); কাজল « kājålꝺ » (kajjala); গিলে « gilē » (gilati); MB. ছেলি « chēli » (chagala-); থালা « thālā » (sthāla-); তূলা « tūlā » *cotton* (tūlaka-); দুবল « dubålꝺ » (durbala); পিতল « pitålꝺ » (pittala); পাখালে « pākhālē » (prakṣālayati); MB. মাউলানী « māulānī » (mātulānī); মাল « mālꝺ » (mālā); শালা « śālā » (syāla-); শিল « śilꝺ » (śilā); লাঙল, নাঙল « lāṇålꝺ, nāṇålꝺ » (lāṇgala); *sts.* পিলা, পিলে « pilā, pilē », পিলিহা « pilihā » (plīhā), etc., etc.;

Skt. « -ly- »: কলি « kāli » (kalya); কুলা « kulā » *winnowing fan* (kulyaka-); MB. মূল « mūlꝺ » (mŏlla, mūlya); শেল « śēlꝺ (sĕlla, śalya);

Skt. « -ll- »: করেলা « kårēlā » (karavēlla); কোল « kōlꝺ » *Kōl tribe* (Kōlla, *dēśī*); ছাল « chāl » (challi); *sts.* ভালুক « bhāluk꞉ » (*bhallukka, cf. Skt. bhalluka); মাল « mālꝺ » (malla < madra);

Skt. « -lv- »: ওল « ōlꝺ » (ōlva); বেল « bēlꝺ » (bilva).

In borrowings from Hindōstānī, « -lh- » becomes [-l-] in Bengali: *e.g.*, কোলু, কলু « kōlu » *oil-presser* (Hind. kōlhū = *oil-mill*); জোলা « jōlā » (*Mohammedan*) *weaver* (Hind. « jōlhā », beside « julāhā » < Persian « julāh »: the Bengali word may have been borrowed straight from the Persian).

[l] occurs in words of *dēśī* origin: *e.g.*, পিলা, পিলে « pilā, pilē » as in ছেলেপিলে, -পুলে « chēlē pilē, -pulē » *children* (cf. Tamil « piḷḷai », Oṛiyā « pilā »: or is it the *tbh.* form পোলা « pōlā » *child*, as in East Bengali, < « pōta-la- »?); পালান « pālānꝺ » *udder of cow* (cf. Telugu « pālu », Tamil « pāl » *milk*); পালঙ, পালম « pālåṇ, pālåm » *spinach*; etc.

[l] figures in onomatopoetics.

There is dropping of [l] in পোয়াল, পোহাল « pō(h)ālꝺ » *straw* (= palāla); also in চ' [ʧɔ:] for চল্ [ʧɔl] (= Skt. cala) *come thou.*

Intrusive [l] occurs in তালুই « tālui » beside তাউই « tāui » *brother or sister's father-in-law* (< *তাঅই, *তাঅউ « *tāāï, *tāāü » < « tātagu »), to prevent hiatus.

[l] in foreign words is discussed below.

296. [l] becomes [n], mainly initially. This tendency is common to all Magadhan speeches, and probably characterised the Apabhraṅśa Māgadhī dialects. Conversely, there is change of [n] to [l]. Examples:

[l] > [n]: MB. নাছ as in NB. নাছদোয়ার « nāchꞏ-dōārꞏ » *street door* (lācha, lacchā, rathyā); নাঙল « nāṇgalꞏ » (lāṇgala); নাউ « nāu » (alābu); নুচী « nucī » *thin wheaten cakes fried in butter* (cf. Hind. « lucuī »); নাড়ু « nāṛu » (laḍḍuka); নুন « nunꞏ » (lavana); নেজ « nējꞏ » *tail* (cf. lañja); *sts.* নক্‌খী « nākkhī » (lakṣmī), নখিন্দর « nākhindārꞏ » *a name* (Lakṣmîndra); *sts.* নোক « nōkꞏ » (= lōka; nakha); নাটাই « nāṭāi » *reel for thread*, নাট্টু, নাটিম « nāṭṭu, nāṭim » *top*, beside forms with লা- « lā- »; নাল « nālꞏ » beside লাল « lālꞏ » *red*; etc., etc. The forms with initial [n], rather than [l], are used, so far as the Standard Colloquial is concerned, more among women and children than among men, and are not regarded as standard forms.

The plural affix গুল « -gulꞏ » becomes গুনো « gunō »; and -লুম « -lum », affix of the past tense first person in the Standard Colloquial, is found in certain West Bengal districts (*e.g.* Hugli) as নু « -nu », *e.g.*, কন্নু « konnu » *I did* < ক'রনু « kornu » < করিনু « kårinu » = করিলুঁ, করিলুম « kårilũ, -lum », 'sādhu-bhāṣā' করিলাম « kårilām »; so চন্নু « connu » *I went* < চলিনু « cålinu » = চলিলাম « cålilām », etc. This « -inu » affix is much employed in poetry.

[n] > [l]: ‡লা « lā » (nā, nāva = nāu); লাট « lāṭꞏ » (naṣṭa); লাঙ্গা « lāṇ(g)ā » (naṇgga-, nagga-, nagna-); ‡লাইহোর, লাইহর « lāihōrꞏ, lāihārꞏ » beside নাইয়র, নায়ের « nāiyārꞏ, nāyērꞏ » *married woman's father's home* (*nāïhara, jñātigṛha); লড় « √lārꞏ » for নড় « √nārꞏ » *to move* (see p. 497); ‡লয় « lāyꞏ » for নয় « nāyꞏ » *nine* (nava), *is not* (nā + hāy); etc., etc. It is found also in a few

foreign words; লোকসান « lōksān » *loss* (also লোসকান « lōskān » by metathesis) (= Perso-Arabic « nuqṣān »); লক « lâkʃ » *line, thread* (Persian « nax »); ‡লোট « lōṭ » = English *note, bank-note*, ‡লুটিশ « luṭiśʃ » = English *notice*, লম্বর « lâmbârʃ » = English *number*, etc. This change of [n] to [l] is looked upon as a rustic trait, and although one or two [l] forms have been accepted as standard, *e.g.*, লাঙ্গা and লোকসান, they are generally regarded as vulgar. Certain tracts, especially in Central Rāḍha, are noted for the preference among the masses for the [l] sound initially.

[V] The Sibilants: the Palatal [ʃ], and the Dental [s].

297. Bengali has one sibilant phoneme, the palato-alveolar [ʃ] and the dental or alveolar [s] is only a subsidiary form of it—[ʃ] normally becoming [s] when occuring before [t, d, n, r, l]. In East and North Bengali, of course, [c͡ʃh] is reduced to [s]. The pure palatal sibilant is preserved in Bengali only among the Magadhan speeches (see pp. 58-59, 92, 215): in Oṛiyā, the [ʃ] has been slightly dentalised and is very like [sĭ] rather than like a pronounced [ʃ] sound. In the 'Bihārī' speeches, the palatal is not used now, only dental [s], although spelling (in the Kaithī script) employs « ś », which possibly shows the occurrence of the palatal pronunciation in early times. The dentalisation of the sibilant in the Western and Central Magadhan tracts probably is due to the overwhelming influence of Upper India under which these tracts have been for some thousand years: and besides, the [s] sound was probably never absent in Magadha itself, at least dialectally. In Early Assamese, intervocal [ʃ] became [ɦ], and in recent Assamese single [ʃ] initial or intervocal is pronounced as the guttural spirant [x], although written শ, ষ, স « ś, ṣ, s ». East Bengali partly agrees with Assamese in turning [ʃ] to [ɦ] (see p. 79). It is only in West Bengali that the original Māgadhī value is kept intact. In this point, more than in anything else, Bengali has remained faithful to its Māgadhī character. It is not impossible, however, that the dental sound

occurred in class dialects even in the Western Bengali area itself, among communities originally of Kōl speech, and among other communities which immigrated from the contiguous Bihar. In fact, [s] rather than [ʃ], is still found among certain communities in Western Rāḍha and elsewhere, although it is regarded as very vulgar in the Standard Colloquial speech.

In writing [ʃ], Bengali orthography has always employed all the three letters শ, ষ, স. In Old Bengal epigraphic records, « ś, ṣ, s » are confused, demonstrating their levelling to one sound which was that of [ʃ] : *e.g.*, in the Bangarh inscription of Mahīpāla (p. 183) occur spellings like « sāila-sikhara, sāulkika, puṇya-yasō, parāsara, madhuśūdana-sarmma-, viśuva-saṇkrāntāu »; in the Kamauli grant of Vaidyadēva (p. 184), « santi = śānti, visayilla = viṣayilla, śīmā, vāyavya-disa », etc. ; also in other inscriptions similar interchanges are found. In Early Bengali and Assamese MSS., as well as in the Oriyā epigraphical records, interchange between the sibilant letters is very common, and there is ordinarily no deference paid to the *ts.* or foreign words. But in the hands of educated scribes, *ts.* words generally would be spelt as in Skt., and the *tss.* would exert a certain amount of guidance in spelling the easily recognisable *tbh.* derivatives : *e.g.*, ষোল « ṣōlà » (ṣōḍaśa) ; বাঁড় « ṣāṛà » (ṣaṇḍa) ; ষাঁঠ « ṣāṭhà » (ṣaṣṭhi) ; আউষ « āu-ṣà » (ā-vṛṣ) ; আঁ(ই)ষ « ā̃(ī)ṣà » (āmiṣa) ; শিকল « śikālà » (śṛṇkhala); শরা « śarā » (śarāva) ; শ « śa » (śata) ; শেঠ « śēṭh » (śrēṣṭhin); সই « sai » (sakhī) ; হাঁস « hā̃sà » (haṁsa) ; বাঁশ « bā̃sà » (vaṁśa) ; etc., etc. A similar modelling of *tbh.* spelling on that of the *tss.* also took place in Oriyā.

Padre Assumpçam uses only « x » = [ʃ] in his transcription of East Bengali : *e.g.*, আইসে « aixe » *comes*, সুয়া « xurzio » *sun*, সতা « xoito » *truth*, বাইশ « baix » *twenty-two* (also = বাসি *stale*), ষোল « xolo » *sixteen*, সাঁচা « xansa » *true*, শুইয়া « xoia » *having slept*, আস্থা « axtha » *faith*, সান্ত্বনা « xantona » *condolence*, শাস্ত্র « xaxtro » *scripture*, etc It would be seen that Padre Assumpçam uses « x » [ʃ] for the sibilant before « t, th » also, as in « axtha, xaxtro » ; in NB. in this position we have [s] normally (see p. 297) ; but « s » is used in the works of the Padre for চ, ছ = [ʦ, s] only : see *supra*, pp. 464-465.

298. Sources of Bengali [ʃ].

OIA. « ś, ṣ, s » regularly changed to « ś » in all cases in Māgadhī > Bengali, and it is not necessary to give further examples. Groups of « ś, ṣ, s » + a semivowel, or groups of « -rś-, -rṣ- », etc., become « ś-, -śś- » in Māgadhī, which remained as [ʃ] in Bengali, written শ, ষ, স. Examples—

« -rś- »: আরশী « ārʂśī » (ādarśa- : see p. 256);

« -rśv- »: পাশ « pāśʂ » (pārśva);

« rṣ, ṛs »: চাষ « cāṣʂ » *tilth* (? carṣ = √kṛṣ); ঘষ « √ghâṣ » *rub* (√ghṛṣ); আউষ « āuṣʂ » (ā-vṛṣ); MB. পাউষ « pāuṣʂ » (prāvṛṣa-);

« -śm- » > « -śś- »: রাশ « rāś » *rein* (raśśi, raśmi);

« śy »: শালা « śālā » (śyāla-, syāla-); শাম « śāmʂ » (śyāma); MB. শাঙল « śāṽâlâ » (śyāmala); OB. « dīsaï » (dṛśyatē); বেসাতি « bēsāti » *commerce* (< vāiśya-);

« śr »: MB. শাঙন « śāṽânâ » (śrāvaṇa); শেঠ « śēṭh » (śrēṣṭhin); মিশাল « miśālʂ » (miśra-); শাশুড়ী « śāśuṛī » (śvaśrū-);

« śv »: MB. শুনা « śunā » *dog* (śvan); শ্বশুর, *ts.* spelling, = [ʃoʃur], (śvaśura); শোয়াস, শস [ʃoɑʃ, ʃɔ:ʃ] (śvāsa); শাশুড়ী « śāśuṛī » (śvaśrū-ṭī); পরশু « pārʂśu » (paraśvaḥ);

« -ṣy- »: মানুষ, মুনিস « mānuṣʂ, munisʂ » (manuṣya); রীষ « rīṣʂ » (rīṣya-, īrṣyā); তুষে « tuṣē » (tuṣyati); রুষে « ruṣē » (ruṣyati);

« -sm- » MB. বিসরে « bisârē », পাসরে « pāsârē » *forgets* (*viśśalaï, *paśśalaï = vismarati, prasmarati).

« -sy- »: আলস « ālâsʂ » (ālasya); কাঁসা « kãsā » (kāṁsya-); লাস « lāsʂ » (lāsya); হাস « hāsʂ » (hāsya); শাঁস « śãsʂ » (sasya);

« sr, sṛ »: আস as in আস পাস « āsʂ pāsʂ » (asrā): পিসী, মাসী « pisī, māsī » (pitṛṣvasṛ, mātṛṣvasṛ); সোঁতা « sōtā » (sŏnta-, srōtas);

« sv »: সাঁই « sãi » (svāmī); গোসাঁই « gōsãi » (gōsvāmi); সুর « surʂ » (svara);

« -ḥśv- »: MB. নিশাস « niśāsʂ » (niḥśvāsa);

« -ḥsv- »: MB. নিসান, নিশান « nisānʂ, niśānʂ » *music* (niḥsvāna).

A sibilant preceded by « anusvāra » is preserved (as a palatal sibilant as usual) in Bengali: *e.g.*, মাস « māsʂ » (māṁsa), বীস « bīs » (viṁsati), ডাঁশ

« ḍāśʼ » *gnat* (daṅśa), শিশু « śiśu » (śiṁśapā), বাঁশ « bāśʼ » (vaṅśa), হাঁস « hāsʼ » (haṁsa), etc., etc.

299. Bengali, in common with other NIA. languages, presents cases of change of single intervocal sibilants to « -h- ». This change is a MIA. one, and came in vogue in the Second MIA. period, and was rather prominent in the Apabhraṅśa stage, and is carried down to recent NIA. The nature and extent of this modification are not clear. It affects a special group of words and inflections, *e.g.*, the numerals (the decades and the septuagintades), the genitive affix (« -asya > -āha » : but cf. « -s » in Kaśhmīrī, and in European Gipsy), the future affix (« -iṣyati > -ihaï », etc. : but cf. « -s- » in Rājasthānī-Gujarātī and in Western Panjābī). Isolated words in all NIA. also show this change : for Bengali examples, see below under [ĥ], §302. The change of the genitive « -sya » to « -ha » in Late MIA. may have been due to the influence of the locative and instrumental plural affixes « -hi, -hī » ; and for the change of the future « -iṣy- » to « -ih- », there may have been the influence of a periphrastic form like « dātâham » > Second MIA. (Ardha-Māg. and Jaina Mahārāṣṭrī) « dāhaṁ ». (See below, *Morphology*, under 'Noun Inflexions : Genitive,' and under 'Verb : Future Precative and Future Tense'). The « -h- » form for these inflections is found in a fairly wide tract, and came to be well-established only in the Third MIA. period, although a few cases of this change occur sporadically in earlier Pkts. The Southern Pkt. of the Transitional MIA. Period, as in the Andhra country, shows this change initially as well as intervocally, *e.g.*, « hiru = śrī, Hādakaṇi = Śātakarni » (E. J. Rapson, 'Catalogue of Coins of the Andhra Dynasty in the British Museum,' London, 1908, p. xx). But this seems to be isolated, and not to have had any connexion with the change in the Northern Indian Prakrits. The « -h- » words, including the numerals, possibly originated in some Panjab dialect, whence they were early adopted into a *koinē* like Pali, and then were passed on to other forms of IA. : witness Panjābī forms like « hāṛ = āṣāḍha, pōh = pāuṣa, dah (also « das ») = daśa, vīh = viṅśati, tīh (trīh) = triṅśat, cāḷīh = catvāriṅśat, pañjāh = pañcāśat, ikahaṭṭh = ēka-ṣaṣṭhi, tra(i)h = √tras, baih = upa√viś, pīh = √piṣ, sauhrā = śvasura-, nūh = snuṣā », etc., as compared

with other NIA. forms in « s », *e.g.*, Hindī « asāṛh, pōs, das, bīs, tīs, cālīs, pacās, iksaṭh, (taras), bais, pīs, sasurā » etc. In Bengali *tbh.* forms which have normally evolved from OIA., intervocal [ʃ] is kept : *e.g.*, আইসে, আসে [aiʃe, aʃe] *comes* (āviśati) ; MB. উলাস « ulāsā » (ullāsa) ; আঁইষ, আঁষ [ãiʃ, ã:ʃ] *meat* (āmiṣa) ; আঁকুশী, আঁকশী [ãk(u)ʃi] (aṇkuśikā) ; দশ « dāśā » beside OB. (Caryās) « daha », NB. দহলা « dāhālā » *card of ten* (daśa) ; চলিস, ‡চলস্ [cʃoliʃ, tsoloʃ] (calasi) ; পড়িশী, পড়শী [poṛ(i)ʃi] (prativēśī) ; বাসর [baʃor] (vāsa-gṛha) ; নিষুতি [niʃuti] (niṣupta-) ; মশা [moʃa] (maśaka-) ; the emphatic enclitic particle সি « -sī » as in MB. (ŚKK.), *e.g.*, সে-সি « sē-si » *that indeed*, NB. স্ « -s » as in ভাগ্যিস্ « bhāgyi-s » [bʰaggiʃ] < ভাগ্যে সি « *bhāgyē-si » *luckily indeed*, ‡NB. সিন « sin » < earlier সিনি « *si-ni » *rather* (cf. Vedic « sīm ») ; etc., etc.

The occurrence of « -h- » in Assamese, *e.g.*, « hãhi » *smile, laughter* (√has), « bãhī » *flute* (vaṅśī), « mānuh » (mānuṣa), « Ahâm » *Ahom*, written অসম « åsåmå », is isolated, and connected with it is the change of both intervocal and initial [ʃ] in East Bengali dialects (see p. 79) : and the « -h- » words in Bengali, noted in §302 below, are not at all connected with Assamese or East Bengali specially : they are mostly pan-Indian. The East Bengali tendency to use « h » for [ʃ] is noted in Bengali literature as early as the 16th century, and it can only have arisen considerably earlier. But in West Bengal it has always been ridiculed. Kavi-kaṇkaṇa in the ' Caṇḍī-kāvya ' (c. 1580) makes the ' Bāṇgāl ' or East Bengali sailors say « hârbâ » for সর্ব্ব « sârbâ » *all*, « hâkâlâ » for সকল « sâkâlâ » *all*, « hukutā » for শুকুতা « sukutā » (*dried*) *condiment*, beside deaspirated forms like « bāi » for ভাই « bhāi » *brother*. Earlier, we learn from the biographies of Caitanya that he used to make fun of the East Bengali pronunciation after his return from Vaṇga (East Bengal) to Nadiyā. The old Sanskrit verse describes this character of East Bengali articulation—

« āśīrvādaṁ na gṛhṇīyāt pūrva-dēśa-nivāsinām :
' śatâyur ' iti vaktavyē, ' hatâyur ' iti bhāṣiṇām. »

Accept not the blessings of the dwellers in the Eastern lands ;
When satâyuḥ (*may you live a hundred years*) *is to be said, they say*
hatâyuḥ (*may your life be ended*) *!*

This pronunciation is not noticed by Padre Assumpçam, and I have not found it represented in the Perso-Bengali MSS. from Chittagong (pp. 228 ff.), where only ش is found for শ, ষ, স: although the « h » pronunciation is fairly common.

The Upper Indian pronunciation of « ṣ » as « kh » is found in a few Bengali borrowed words: see pp. 460-461.

300. The use of the palatal [ʃ] for « ś, ṣ, s » is the crux of Bengali articulation: the Skt. word « saviśēṣa », in a Standard New Indian pronunciation [sʌviʃeːʃə], but in Bengali [ʃobiʃeʃ], is quite a good Shibboleth to find out a Bengali speaker. Bengali [ʃ] tends occasionally to pass into the aspirated palatal affricate « ch » [c͡ʃh]: see pp. 465, 472, 473. A pronunciation of [ʃ] as [c͡ʃ(h)] is a common speech defect in Bengali, found especially among the masses. Cf. also MB. (ŚKK.) ছছন্দ « chåchånda » (svacchanda); *sts.* ছান, চান « c(h)ānā » (snāna); *sts.* ছক্কড় « chåkkåṛā » *hackney carriage* (śakaṭa); মিছরী « michrī » *sugar candy* (= Perso-Arabic « misrī »); Calcutta Coll. মোচোরমান [mocʃormɑn] for মুসলমান [muʃolmɑn] (musalmān); Portuguese « pires » [piriʃ] > পিরিচ « piric » *saucer*; Hindī « alag-sē » *remaining distinct, without touching* > আলগোছে « ālgōchē ».

Conversely, there are a few cases of [ʃ] for « c, ch »: OB. « kacchu »: NB. খসু > খউস, খোস « khåsu > khåus > khōs » *itches*; MB. (ŚKK) নিশিবোঁ « niśibõ » *I shall offer, shall sacrifice, shall cast away as a sacrifice* (see p. 266, *supra*) for « nichibõ » (cf. Hindī « nichāwar » *sacrifice, offering*, MB. নিছা « nichā », নিছনি « nichåni » *offering or casting something to avert the evil eye*: < ?: cf. « ni-kṣip » *throw*, or « ni-kṣap » *fast, do penance*, or « niścātaya » as in the 'Atharva Veda' = *to scare or drive away*); OB. (Sarvânanda) « śukra » for « *śūka » *vinegar* (cukra).

301. An intrusive sibilant occasionally characterises the vulgar pronunciation of some *ts.* words: *e.g.*, দুষ্খু [duʃk(h)u] (duḥkha); উশ্চারণ [uʃc͡ʃɑrən] (uccāraṇa); তুশ্চ [tuʃc͡ʃə] (tuccha); একস্ত্র, একস্তর [ækɔstrɔ, -tər] (ēkatra); গঙ্গাস্তীর [gɔŋgɑstir] (gaṅgā-tīra); ‡ North Bengali জ্ঞাস্তা [gæ̃stɑ] (jñāti); etc. In certain parts of East Bengal, the form আষ্ট « āṣṭå », doubtless a similar form with intrusive « ṣ », and influenced no doubt by

the Skt., for *th*. আট « āṭʂ », is much used. These groups, « ṣk, śc, ṣṭ, st » recall the existence of similar groups in Māgadhī Pkt. Nothing can be more against the trend of MIA. phonetics than such groups: and it cannot be known whether the « śk (sk), śc, śṭ, śt » of the Prakrit grammarians were in actual agreement with spoken Māgadhī. « śc » might be only a way of indicating the affricate sound of [c͡ʃ], like « yc͡ » (see p. 248). Or it may be that the « ś » forms were actually heard in Māgadhī, as in present day Bengali, as 'learned' ones, in folk-speech: in NB., the forms with the sibilants are certainly due to a desire to appear learned. Cf. the intrusion of « r », p. 542, *supra*. So it may have happened that the attempts of some Māgadhī speakers to emulate the Skt. gave rise to forms like « gaścadi, laskaśe, pĕśkadi, puścadi, maśtagē, bhaśṭālagē » etc. for « gacchati, rākṣasa, prĕkṣatē, pṛcchati, mastaka, bhaṭṭāraka », which were generalised in the West as Magadhan peculiarities.

In the form জাস্তুত « jāstutā » for জেঠ্‌তা, জাঠতুতা « jēṭhutā, jāṭhʂtutā » (see p. 503), the intrusivs sibilant is due to the analogy of similar forms like মাসতুতা « māsʂtutā », পিসতুতা « piśʂtutā » etc.

[ʃ, s] in foreign words: see *infra*.

[VI] The Glottal Fricatives, Voiced [ɦ], Unvoiced [h].

302. Bengali [ɦ] is a voiced sound, as in OIA. Initially the [ɦ] of OIA. has generally been preserved in NIA., except in certain dialects, *e.g.*, in East and North Bengali and occasionally in Assamese. Intervocal [ɦ] of OIA. is in origin always a derived sound, having been weakened from Indo-Iranian « *gh, *źh », and also partly from « *dh, *bh ». In MIA. of the Second Period, all OIA. single intervocal voiced aspirates except « -ḍh- » became [ɦ], and this [ɦ] fell together with the OIA. [ɦ]. Medial [ɦ] continued undisturbed down to eMB. times: after which it tended to drop off.

Initially, Bengali [ɦ] in *tbhs.* comes mainly from OIA. « h- », *e.g.*, হাত « hātʂ » (hasta); হাঁস « hãsʂ » (haṁsa); হামা « √hāmā » *to crawl* (MIA. dial. « √hamm » *crawl*); হিং « hiṇ » (hiṇgu); হীরা « hīrā » (hīraka-); হিয়া

« hiyā » (hṛdaya-) ; হলুদ « hâludʒ » (haridrā) ; MB. হুনে « hunē » *sacrifices* (√ hu) ; etc., etc.

« bh- » in some words gives [fi] in Bengali. An early example is « √bhū »>« √hō », found already in Aśōkan MIA. It seems that « bh-> h- » first originated in the middle of a sentence, and in compounds where it would be in an intervocal position. Then from occurrence in compounds etc., the resultant « h- » would be established initially. Thus, হাঁড়ী « hãṛī » *pot*, beside ভাঁড় « bhãṛʤ » (-bhāṇḍa) ; হঠ « √hâṭh » *recede* < « bhraṣṭa- » ; হুড়ী « huṛī » *a sailing ship* beside ভড় « bhâṛʤ » *a large boat* (? bhṛta) ; OB. « hēla-ka » beside Skt. « bhēlaka » *raft* ; OB. « hādusa » beside « bhādusa » *food half-dressed* ; NB. হোঁদল « hõdâlʤ » *pug-faced, ugly and uncouth* beside ভোঁদা « bhõdā » *fat and ugly* ; হাপর « hāpârʤ » *smith's bellows*, beside ভাপ « bhāpʤ » *steam*. Similar change of « kh-, gh- » seems to occur in হেঁড়াল « hẽṛâlʤ » *crocodile* beside ঘড়িয়াল « ghâṛīyâlʤ » ; হাম « hāmʤ » *measles* beside ঘাম « ghāmʤ » *sweat* < *sun-shine* ; হামার « hāmārʤ » *farm, granary* beside খামার « khāmārʤ » (skambhâgāra, ? harmyâgāra).

In the middle of a word, [fi] comes from—

OIA. « kṣ- » : লা « lā » <লাহ « lāhâ » (lākṣā) ; কে « -kē », dative post position (*kahi, *kakhi, *kakkhi, kakṣē ?) ;

OIA. « -kh- » : in some cases the [fi] is dropped early in MB. : *e.g.*, OB. « ahēri », MB. আহেরি « āhēri » *hunter* (ākhēṭika) ; মু « mu » (muha, mukha) ; নরুন « nârun » (naha-haraṇī, nakha-haraṇa-) ; MB. রেহ « rēhâ » (rēkha) ; MB. লিহে « lihē » (likhati) ; শিওর « śiōrʤ » (śihara, śikhara) ; সই « sâï » (sahī, sakhī) ; OB. « suha » (sukha) ;

OIA. « -gh- » : হালকা « hālkā » (laghu : cf. p. 315) ; MB. বাহুড়ে « bāhuṛē » (vyāghuṭati), also OB. « bahuḍaï », printed বহু উই in Caryā 8 ; OB. « thāhī », NB. থই, থাই « thâï, thāï » *bottom* (stāgha-) ; also in দেহরা, বাসর < বাসহর, নায়ের < নাইহর « dēhârā ; bāsârʤ < bāsâ-hârâ ; nāyērʤ < nāïhârâ », respectively = *temple, chamber for bride and bridegroom, a married woman's father's home* (dēva-ghara, vāsa-ghara, jñāti-ghara, < -gṛha) ;

MIA. « -ḍh- », in MB. (ŚKK.) আহঠ « āhuṭhā », lMB. আউট « āuṭ্ » 3½ (aḍḍhuṭṭha, ardha-caturtha) ;

OIA. « -th- » ; কহে, কয় « kāhē, kāy » (kathayati) ; কাহিনী « kāhinī » (*kathinikā) ; গু, গূ « gu, gū » (gūha, gūtha) ; the imperative affix হ, হু as in MB. চলহ, চলহু « cālāhā, cālāhu » = NB. চল, চলো « cālā, cālō » (OIA. « -atha » of the present indicative + « -ata » of the imperative, 2 plural) ;

OIA. « -dh- » : [fi] frequently dropped : MB. আইহ > এয়ো « āihā » > ēyō » (avidhavā) ; গম « gāmd্ » for *গউ, *গহুঁ, *গোহুঁ « *gāũ, [gow̃u], *gāhũ, *gōhũ » (gōdhūma) ; দই « daï » (dahi, dadhi) ; বউ, বৌ « bāu » (bahū, vadhū), মউ, মৌ « māu » (mahu, madhu) ; মউরী, মৌরী « māurī » *anise* (madhurikā) ; রাই < রাহী « rāi < rāhī » (Rādhikā) ; সা, সাহ, সাহা « sā, sāhā, sāhā » *merchant* (sādhu) ;

OIA. « -ph- » : *শিহলী > NB. শিউলী « *śihālī > śiulī » (śēphālikā) ; OB. শিহড় « sihaṛa » (> NB. শিকড় « śikāṛd্ ») (cf. Skt. śiphā, see p. 457) ; OB. « maṇahala » (maaṇahala = madanaphala) ;

OIA. « -bh- » : গহীর « gāhīrd্ » (gabhīra) ; MB. নিহারে, নিহালে « nihārē, -lē » (nibhālayati) ; পঁহুছ « √pāhũch » *reach* (pra + bhū + ccha : see p. 473) ; MB. পহু, পহুঁ « pāhu, pāhũ » (prabhu) ; পোহায় « pōhāy » *dawns* (prabhāti, *prabhātāyatē) ; বহেড়া « bāhēṛā » (MIA. bahēḍaa-, vibhītaka-) ; বিহান, ব্যান « bihānd্ > byānd্ » *dawning* (vibhāna) ; লহে > লয় « lāhē, lāy » (labhatē) ; লা, লাহা « lā(hā) » *a surname* (? lābha) ; সুহা > সুও, সো « suhā > suō, sō » (subhagā) ; similarly দুহা > দুও, দো « duhā > duō, dō » (< *dubhaga = durbhagā) ; সোহাগ « sōhāgd্ » *affection, husband's love* (sāubhāgya) ; হিলান « hilānd্ » *leaning* (abhilagna) ; etc. It is lost in forms like আমি, তুমি « āmi, tumi » (amhahi, tumhahi = asmābhiḥ, yuṣmābhiḥ) ;

OIA. « -h- » : generally lost to NB. : আহার « āhārd্ », OB. « ahāra » (āhāra) ; বাহির « bāhird্ » (MIA. bāhira, cf. Skt. bahiṣ, bāhya) ; MB. বাহ « bāhā » (bāhu) ; বহে, বয় « bāhē, bāy » (vahati) ; বহুত « bāhutd্ » (*bahu-vant-) ; MB. (ŚKK.) বাঁহুক « bāhukā », NB. বাঁক, বাঁক « bāĩkd্, bākd্ » *carrying pole*, Hindī « bahaṅgī »

(vihaṇgga-); রুই « rui » *carp fish* (rōhita); লোহা, নোহা, নো « lōhā, nōhā, nō » (lāuha-); সহে, সয় « sahē, sây » (sahatē);

OIA. « -ś-, -ṣ-, -s-; -ṣy-, -sy- »: this change has been discussed before, p. 549. Examples: the numerals এগার, বার, তের, চৌদ্দ, পনের, ষোল, সতের, আঠার « ēgārā, bārā, tērā, cāuddā, pānērā, ṣōlā, sātērā, āṭhārā » = *11, 12, 13, 14, 15, 16, 17, 18* respectively (< -aha < OIA. -aśa); একাত্তর, বাহাত্তর, তিয়াত্তর, চুয়াত্তর, পঁচাত্তর, ছিয়াত্তর, সাতাত্তর, আটাত্তর « ēkāttārḍ, bāhāttārḍ, tiyāttārḍ, cuāttārḍ, pācāttārḍ, chiyāttārḍ, sātāttārḍ, āṭāttārḍ » = *71, 72, 73, 74, 75, 76, 77, 78* (< ēka- etc. + hattari, = -saptati), but cf. উনসত্তর « unā-sāttārḍ » *69*, which preserves the sibilant; the genitive affix, তাহ, তা « tāha, tā » *he, it* (tasya); এহ, এ « ēhā, ē » *this* (*ēaha, ēdaśśa, ētasya); ওহ, ও « ōhā, ō » *that* (*ōaha, *avuha, *aw̃uha, amuśśa, amuṣya), etc., etc.; the OB. locative affix হি, হিঁ « -hi, hĩ » represents probably a blend of a Māgadhī « *-aśśi, *-aśśiṁ < -asmin » + an OIA. « *-dhi, *-dhim », attested from the Greek locative affixes « -thi, -thin »; the future precative affix ইহ « -ihā- » (-iṣyatha); the verb substantive হ « √hā = √*āh » (√as), confused with হো « √hō » < « √bhū », *e.g.*, « asti, *asati > *ahaï > হয় « hây », « na + *ahaï » > নহয় « nâhây » > নয় « nây » *is not*, « na + āsīt » > নাহী « nāhī » > নাই « nāi » *was not* > *does not exist* (cf. সে করে নাই « sē kārē nāi » *he did not do*), etc.; the pronominal adjectives হেন, কেন, যেন « hēnā, kēnā, jēnā » < এহেন, কেহেন, জেহেন « ēhēnā, kēhēnā, jēhēnā », cf. Maithilī « aihan, kaihan, jaihan », beside other NIA. « aisan, kaisan, jaisan » = « ētādṛśa-, kīdṛśa-, yādṛśa- » etc.; and a number of isolated words, like কাহন « kāhāṇḍ » (Pali kahāpaṇa, Skt. kārṣāpaṇa); গোহাল « gōhālḍ » (gōśāla); MB. (Śūnya-Purāṇa) *sts.* বিহরাম « biharāmā » (viśrāma); মেড়া « mēṛā » *ram* (mēha-ḍa- = mēṣa-); OB. (Caryās 35, 50) « daha-diha » (daśa-diśa). Cf. Maithilī, Hindī « puhup » (puṣpa), and « dihaṛā, dahāṛā » *day* (Saur-Ap. diaha-ḍa- = divasa-), found in Hindī, Rajasthānī-Gujarātī, Panjābī. In the present-day Bhōjpuriyā,

« -st-, -sṭ- » becomes [-fit-, -fiṭ-], *e.g.*, [ɑfite] = « āstē » *slowly* (Pers. « āhistah »); [dɑfituri] *customary commission* = Persian « dasturī »; [ifiṭisɑn] = English *station*; [mifitiri] = « mistrī » *mason, artisan,* from the Portuguese.

The reverse process, changing « -h- » to « s », seems to characterise the Caryā (no. 19) word « kaśālā » for « kāhāla, kāhala », NB. কাহল « kāhāl্a » *drum.*

The groups « -śn-, -ṣṇ-, -sn- » became « nh, ṇh » in MIA., and their resolution in NB. has been to [n], the aspiration being dropped: see p. 529. OIA. « -ṣm-, -sm- » > MIA. « -mh- » have become [m] in NB.; see p. 531.

303. A prothetic [fi] occurs in Bengali. The eastern dialect of Aśōka has a similar prothetic « h- »: *e.g.*, « hēvaṁ, hida, hēdisa » (« evam, idha idṛśa »: the second one by metathesis?). Examples from Bengali: হাকুলি « hākuli » *be full of anxious fear* (ākula-); হাঁটু « hā̃ṭu » *knee* (cf. OB. « aṇḍu », Skt. « aṣṭhīvant- »); OB. « hariṭha » *soap-nut* (ariṣṭa); MB. হাইবাস « hāibāsa̤ » *yearning* (? adhi-vaś: by metathesis); MB. *sts.* হাবিলাষ « hābilāsa̤ » = « habilax » in Assumpçam (abhilāṣa); MB. হুল্লাস « hullāsā » (ullāsa); হেথা « hēthā » *here* (cf. ĕttha, atra); হেঁচকা « hẽcɑ̤kā » *pull,* Hindī « aīcnā » *to pull* (= « ā-kraks- », acc. to Hoernle); হোথা « hōthā » *there* (amutra); MB. হারামদ « hārāmāda̤ » *Portuguese pirate-ship* (Portuguese « armada »); etc. South-Eastern Bengali of Chittagong has a large number of words with this intrusive initial « h- ».

For euphonic [fi] in MB., see p. 341. Cf. Skt. « vikaṇka », MIA. « *viaṇka », but OB. « baheñci », MB. বইচী « bāĭcī », NB. বোঁচ « bōca̤ » *a fruit.*

[fi] occurs in a number of words of obscure origin: হাঁট « √hā̃ṭ » *walk, trudge* (cf. Gujarātī « hẽḍvũ », Skt. « √hiṇḍ »); হড়কা « hāṛɑ̤kā » *slippery* (? bhraṣṭa); হোড় « hōṛa̤ » *competition*; হুড়া « √huṛā » *push*; হুড়কা « huṛɑ̤kā » *bolt* (= *that which is pushed in ?*), also *timid*; †হুড়ুম « huṛuma̤ » *puffed rice*; হুতোম « hutōm » *screeching or hooting owl*; হুল « hula̤ » *sting of wasp or bee*; হাঁদা « hā̃dā » *foolish, idiotic*; হালি, হাল « hāli, hāĭl » *helm,* also *group of four* (*or five*); হাঁফ « hā̃pha̤ » *deep breath* (onomatopoetic?);

« √hāg » *pass stools*; হাজা « hājā » *made rotten through being placed in water*; হাঙ্গর « hāŋ(g)ôrɖ » *shark*; হুলান « hulānå » *to push about*; « hōlɖ » *testicles*, « hulā » *male*; হাঙ্গলা « hāŋ(g)ɖlā » [fiæŋla] *glutton, famished*; হোঁৎকা « hõtka » *ugly and cruel*; হোমরা, হোমরা-চোমরা « hōmɖrā, hōmɖrā-cōmɖrā » *big, big people*; etc., etc.

304. [fi] cannot occur in Bengali as a final sound in a syllable: it must either have a vowel to prop itself up, or it must be dropped: and occasionally, it is changed to a semivowel [ĕ], or to [i], when it terminates a syllable: *e.g.*, « sādhu > sāhu > sāh > সা « sā », beside সাহ « sāhå », or সাহা « sāha » *a merchant, a wine-dealer*; বরাহ « bårāhå » > « *barāh » > বরা « bårā » *boar*; « snēha » > নেহ « nēha » > নেই « nēi »; পহিলা « pâhilā » > « *pah-lā » > পয়লা « pâĕlā »; « mukha > muha > মু mu »; « dēha » > MB. দে « dē »; « grahaṇa- » > গহনা, গয়না [gɔfiɔna, gɔena] *ornaments*; « pitāmaha » > পিতেম « pitēmå » for « * pitēmåhɖ »; etc., etc. The same thing also happens in foreign words: *e.g.*, Persian « jāhgāh, jāi- » > জায়গা [ʃʃɑegɑ] *place*; « šāh » > শা, শাহা, সা, সাহা [ʃɑ, ʃɑfiɑ] *king*; « dar-māh » > দরমা, দরমাহা [dɔrmɑ, dɔrmɑfiɑ] *monthly pay*; « dih » > ডি, ডিহি [ḍi, ḍifii] *district*; « taḥsīl » > তশীল, তহশীল [tɔʃil, tɔfiɔʃil] *cash office, treasury*; « pahlwān » > পালোয়ান [pɑlɔɑn] *wrestler*; « Aḥmad » > আমেদ, আহম্মদ, আহাম্মদ [ɑmed, ɑfiɔmmɔd, ɑhɑmmɔd] *a name*; « Raḥmān » > রহমান [rɔfiɔmɑn] *a name*; etc., etc.

The loss of intervocal [fi] and deaspiration of aspirated stops characterise Late MB. and NB. This has been noted in connexion with the NB. diphthongs. In interjections, however, intervocal [fi] is retained: *e.g.*, আহা, হিহি, ওহো, উহু [ɑfiɑ, fiifii (hihi, çiçi), ofiɔ (oʀɔ), ufiu(uʀu)].

In *ts.* groups, « -hm-, -hl-, hn-, -hṇ-, -hr- (= hr, hɽ) », the [fi], if it obtains in pronunciation, comes *after* the [n, m, l, r]; but generally it is dropped, with accompanying doubling of the consonant: *e.g.*, ব্রাহ্মণ [brɑmfiɔn, brɑmmɔn], আহ্লাদ [ɑlfiɑd, ɑllɑd], চিহ্ন [cʃinfiɔ, cʃinnɔ], হৃদয় [rfiidɔe, ridɔe], হ্রস্ব [firɔʃʃɔ, rfiɔʃʃɔ, rɔʃʃɔ]. হ্ম « hm » has become a convenient ligature for writing [mm] in present-day Bengali orthography as it obtains among Musalmans, *e.g.*, মহম্মদ = [mofiɔmmɔd], আহম্মদ [ɑfiɔmmɔd], and even কম্মর [kɔmmɔr] = কোমর [komɔr] *waist*, etc.

305. Unvoiced [h] in Bengali: this, however, is found at the end of a syllable, after a vowel, when it would be written with the « visarga » (also after an unvoiced stop or affricate, [kh, c͡ʃh, ṭh, th, ph], forming an aspirate). This voiceless [h] is like the English sound in *hat, happy* etc. It is found in a few exclamatory words, and is optionally changed to the voiceless velar, palatal or bilabial spirant according to the nature of the preceding vowel = *e.g.*, আঃ: [ɑh:, ɑx:], ইঃ [ih:, iç:] (also ইশ্ [iʃ:]), এঃ = [eh:, eç:], ওঃ = [oh:, oɾ:], উঃ = [uh:, uɾ:].

The final « visarga » in Skt. words has the proper unvoiced [h] value in Bengali: « rāmaḥ, sumanāḥ, muniḥ, sādhuḥ, kaveḥ, gurōḥ, rāïh, gāuḥ », etc. are pronounced by Bengali speakers as [rɑ:məh, ʃumənɑ:h, munih, ʃɑ:dhuh, kəbe:h, guro:h, roih, gouh], and not as [rɑ:məfᵊ, sumʌnɑ:fᵘ, munifi, sɑ:dfiufiᵘ, kʌve:fiᵉ, guro:fiᵒ, rʌifi, gʌufiᵘ], as for example in Northern India. Final « visarga » in a number of naturalised *tss.* is not now pronounced in Bengali: *e.g.*, বহুশঃ [bohuʃo], for [bohuʃəh]; চক্ষু [c͡ʃokkhu] rather than চক্ষুঃ, জ্যোতি [ʄ͡ʒoti] rather than জ্যোতিঃ = « cakṣuḥ, jyōtiḥ ». « Visarga » in Skt. words merely 'doubles' the consonant following: *e.g.*, দুঃখ [dukkho], অন্তঃকরণ [ɔntəkkərɔn], পুনঃপুনঃ [punəppunə], নিঃশ্বাস [niʃ͡ʃɑʃ] (niḥśvāsa), etc.: hence in writing Perso-Arabic words, instead of using a double consonant ligature, or two consonants, the « visarga » is sometimes employed (or the group of consonant + « -v- ») generally before sibilants: *e.g.*, মফঃস্বল (also মফঃসল, মফস্বল) « mâphâḥsvâlâ » = [məphoʃ͡ʃəl, məfəʃ͡ʃəl] *country district* = Perso-Arabic « mufassal »; তমঃসুক [təmoʃ͡ʃuk] *bond, receipt* = « tamassuk », etc.

In foreign names, « visarga » is occasionally used for the unvoiced [h] at the end of a syllable: *e.g.*, নামঃ « nāmâḥ » = Persian « nāmah », ইউয়ান্ শিঃ কাই « Iuyān Śiḥ Kāi » *Yuan Shih K'ai* etc. Foreign [h, fi,] (as well as [ħ] of Arabic) become [fi] in Bengali.

CHAPTER VI

PHONOLOGY OF THE FOREIGN ELEMENT: PERSIAN

306. Arabic words have come into Bengali through the medium of Persian,[1] after these were naturalised in that language and had conformed to its phonetics: as such, they are to be treated as Persian words.

Some Turkī words were no doubt borrowed in India direct from Turkī during the early years of the Mohammedan conquest, in the 12th and 13th centuries, and a few more may have come in with Bābur in the 16th. But a large number of Turkī loan-words occur in Persian also, and subsequent accretions of Turkī words seem to have been through the medium of Persian, as the Turkī speech quickly fell into disuse in India, but Persian maintained its predominance all along.

The sound system of Persian as a living speech now is not what it was in the 13th and 14th centuries. In Persian itself there are dialectal differences. Standard Persian as spoken in the western and central provinces of Persia—especially Fārs and 'Irāq-'Ajamī—has deviated considerably in its phonetics from 'Classical' Persian of 400 years ago. The literary form of New Persian which was brought to India by the

[1] Bengal was never settled in by any considerable body of Arabs from whom Arabic words might be borrowed by the people of the land. The article 'al,' so characteristic of Arabic nouns and adjective formations, was dropped when Arabic words were borrowed in Persian: and Persian received most of its Arabic element more through books than through contact with Arabic speakers. Arabic words in Bengali and other Indian languages have not preserved the 'al.' The people of Spain, for instance, came in intimate touch with the Arabic-speaking Moors, and loan-words from the Arabic in Castilian and other speeches of the Peninsula have the Arabic article, and the orthography indicates an attempt to represent the Arab pronunciation: thus, the Arabic 'al-qāḍī, al-qur'ān, al-qurbān, aṭ-ṭabal, al-qal'ah, al-burg (burj)' are found in Spanish (Old and Modern) as 'alcayde, alcoran, alcorban, atabal, alcala, Alborge,' while the Bengali (and Hindostānī) forms are কাজী 'kājī' *judge*, কোরান 'kōrān' *the Koran*, কোরবান 'korbān' *sacrifice*, তবলা 'tablā' *drum*, কেল্লা 'kellā' *fort*, বুরুজ 'buruj' *turret, bastion*.

Turks and the Tājīks (see pp. 193, 202) was New Persian as spoken in Eastern Iran; and the dialects current here, especially the Tājīk dialect of Afghanistan, at the present day show the least divergence, both in phonetics and grammar, from 'Classical' New Persian, i.e., New Persian as used by the Islamic writers of Persia, from the 10th century downwards. The Tājīkī dialect specially is but a local from of literary Persian and not an independent Iranian dialect (cf. 'Grundriss der iranischen Philologie,' Part I, Vol. II, p. 407: 'Bemerkungen über Tādschikī'). Tājīk pronunciation will be regard as archaic in Western Persia. The archaic pronunciation is still followed in India, and in studying the phonology of the Persian element in Indian languages, we are to take that into consideration.

Turkī pronunciation modified Persian phonetics to some extent in India because in the dissemination of Persian, Turkī speakers had some hand: 'as the kings of India were for the greatest part Túránians, the immigration of Túránian Mohammedans was constantly kept up. It is for this reason that we find so many Túránian peculiarities among Indian speakers and writers of Persian. We may in fact say, that the Persian of Indian writers is Túránian.' (H. Blochmann, 'The Prosody of the Persians according to Saifi, Jāmī and other Writers,' Calcutta, 1872, pp. xv, xvi; cf. also H. Blochmann's notes on 'Isti'mál-i- Hind,' or Indian peculiarities in the use of Persian, in the JASB., Vol. XXXVII, No. I for 1868, pp. 32-38.) Turkī words in India, again, came to be pronounced in the Persian way when actual contact with that speech was at an end. The pronunciation of the two languages thus affected each other in India to some extent.

A large percentage of the Persian words in Bengali has been borrowed from Hindōstānī, including many of the hybrid forms, half-Persian, half-Indian, or Persianised Indian, like « kōtwāl » with dental « t » = Indian « kōṭwāl » (in Hindōstānī), কোটাল « kōṭāl » (in Bengali) = *head of city police*, which sprang up in Northern India during the Mohammedan rule. But it would be a mistake to suppose that most Persian words in Bengali came through Hindōstānī. Persian was brought to Bengal before Hindōstānī had developed into a *lingua franca*, much less as a culture language, after becoming the home-language of the Mohammedan ruling houses and town

people of Northern India. Persian was widely studied in Bengal. But it is now impossible to determine what words were directly borrowed from Persian and what words were borrowed through Hindōstānī: specially when Hindōstānī (when exactly we do not know, but probably from the time it became the language of the Moslem emperor and his court in Delhi) adopted the foreign sounds of [q, x, ɣ, z, f]. In the present study, Perso-Bengali words will be taken in connexion with the Persian originals, without any reference to Hindōstānī (or Turkī): and the pronunciation in the Calcutta dialect, as well as transliterations following the pronunciation in the original language in early times, will be indicated.

307. 'Early Persian,' by which term the older phase of the New Persian or Post-Islamic Persian can conveniently be indicated, had the following sounds:

VOWELS.

	Front	Central	Back
High ...	i:, i		u:, u
Mid ...	e:, e	(ə)	o:, o
Low ...	a	(a)	ɑ:
Diphthongs...	aĭ		ɑŭ

CONSONANTS.

	Glottal	Uvular	Velar	Palato-alveolar	Dental	Denti-Labial	Bi-labial
Stop ...	(ʾ)	(q)	k g		t d		p b
Affricate ...				t͡ʃ d͡ʒ			
Nasal ...			(ŋ)		n		m
Lateral ...				l			
Trilled ...				r			
Fricative ...	h		x, xʷ, ɣ	ʃ ʒ	s, (θ), z, ð	f v	
Semivowel				j			w

The sound system of New Persian is not much different from that of Middle Persian (Pahlavī). Of the consonants, it may be remarked that the uvular stop [q] possibly existed in Early Persian as an imposition from Arabic (and also from Turkī). [t͡ʃ, d͡ʒ] = چ ج, were probably tongue-tip alveolar or palato-alveolar affricates, as now; [t, d] were interdental stops; and [ŋ] occurred only before [k, g], being written ں «n»; and [m] was written ں «m», as well as ں «n» before «b», *e.g.* [gumbaz, ʃamba(h)] being written «gnbð, šnbh» = *tower, sabbath*. About the fricatives, [h] was probably an unvoiced sound, but intervocally it was probably voiced; [x, ɣ] = خ غ were the velar spirants, and [xʷ], written خ̇, was a [x] pronounced with rounded lips, which has become a simple [x] in Modern Persian pronunciation. And the fact that in the traditional Indian pronunciation [xʷ] is frequently [x] shows that this simplification is some centuries old. [θ] probably existed in the earliest form of New Persian (witness a name like «Gayōmarθ»), but by the time that Persian was introduced into India, it was altered to [s] or to [t]. [ð] developed afresh in New Persian in intervocal or final position from an earlier [d]: it occurred in Early Persian of the 13th century, but from the 14th century, however, this [ð] tended to be reduced to [z], and in verb forms it was frequently restored back to [d] (cf. P. Horn, 'Neupersische Schriftsprache,' p. 81, in 'Grundriss der iranischen Philologie'; JRAS., 1895, p. 237). The Persian words borrowed in India show both a [ð] and a [z] basis in their modifications.

In Modern Persian as now spoken in Persia proper, esp. Western Persia, some innovations have come in which are not found in India. The velar stops [k, g] have advanced considerably, and have become the palatal stops [c, ɟ]; except when they occur before back vowels [o, u], when they retain their old values. The New Persian unvoiced stops are now-a-days very strongly aspirated, پ, ت being pronounced [ph, th], and چ [kh, ch]; and the voiced stops ب, د, ج [b, d, g(ɟ)] as a consequence are often unvoiced, becoming almost [p, t,] and [c, k], paralleling what has happened in some Germanic languages, and in most forms of Chinese. The Arabic sound of [q] has become a voiced guttural spirant, intermediate between the uvular and

the velar sounds, which can be conveniently represented [ɣ]. And the Arabic ع = [ʕ] occurs as the « hamzah » or glottal stop, [ʔ], in Persian (cf. 'L'Ecriture phonétique internationale,' 2e édition, International Phonetic Association, London, 1921, p. 15).

As regards the Persian vowels, it is to be noted that the short « ă » is a front sound, [a], even approaching the South English [æ], in Modern Persian of Persia; and the long « ā » is a back vowel very much withdrawn: it is an [ɑ:] which resembles in acoustic quality the English [ɔ:]; and before [m, n], it even becomes [u] (cf. JRAS., 1895, p. 238; Platts and Ranking's Persian Grammar, Oxford, 1911, p. 13). Modern Persian short « ă » [a] has developed a long form [a:], which occurs side by side with [ɑ:], and this [ɑ:] in its turn has developed a short [ɑ] in some cases. In Early Persian, the short sound was probably equally a frontal [a], or perhaps a central sound, and the long [ɑ:] was a back vowel. The short vowels « ĕ, ŏ, ĭ, ŭ » were found in Early Persian, as they are in Modern Persian of Persia. The long vowels [e:, o:] existed in Early Persian: they were very close sounds, and in Modern Persian of Central and Western Persia they have been altered respectively to [i:, u:], thus having fallen together with the original [i:, u:] of Early Persian. The [e:, o:] sounds are known as « majhūl » or *unknown* sounds, and the [i:, u:] sounds « maᶜrūf » or *known*, as the former did not occur in literary or Classical Arabic. [e:, o:] still obtain in Eastern Iran, in the Tājīk dialect (cf. T. W. H. Tolbort, ' Rábinsan Krúso ' in Persian, in the Roman character, London, 1878, pp. xi, xii): thus the original Early Persian distinction between « šēr » *lion* and « šīr » *milk*, and similar forms, is still preserved the Eastern Iran, whereas both have become « šīr » in Central and Western Persia. Persian of India has faithfully retained the « majhūl » sounds of Early Persian. The diphthongs [ai, au] of Early Persian roughly corresponded to the similar groups in medieval Skt. pronunciation (see p. 242): in Modern Persian, they are pronounced as [ei, ou].

Stress in Modern Persian is ordinarily on the final syallable (cf. F. Rosen, 'Modern Persian Colloquial Grammar,' London, 1898, p. 8); and in all likelihood, the final stress obtained in Early Persian also (cf.

P. Horn, 'Neupersische Schriftsprache,' § 47, where we have cases of loss of initial syllable in New Persian). The initial stress system of Bengali has had its way with Persian loan-words, ignoring their original stress.

308. The sounds which were peculiar to Arabic were altered to their nearest equivalents in Persian, and only Persianised Arabic words are found in the Indian speeches. A study in detail of the sounds of Arabic is out of scope here. Arabic presents a literary form, based on the old speech of Hijaz (specially of the Quraỿš tribe of Mecca), and modified later by scholars on the model of the purer dialects of the Bedouins of Nejd or Central Arabia: and besides, there are the dialects, extending from Iraq to Morocco. It was the dialect of Iraq with which Persian came in contact mainly, and some peculiarities of 'Irāqī pronunciation are possibly to be found in Persian (*e.g.*, the Modern Persian pronunciation of the Arabic ق « q » as that of the voiced velar spirant [ɣ], —Arabic of Iraq turned the [q] to a voiced sound, the uvular stop [ɢ], quite early). But Arabic words seem to have been borrowed into Persian more from books than from contact with Arabic speakers: so that a consideration of the phonetics of Arabic would not be so very important in the study of the Arabic loan-words. Still, some points will be of interest as the Arabic element is said to take up over two-thirds of the vocabulary of New Persian, and consequently of the Persian loan-words in Indian languages.

Classical Arabic, as in the pre-Islamic literature of Arabia, in the Koran, and in the literature of the first few centuries of the Hegira, has preserved more faithfully than any other Semitic language the sounds and forms of the Primitive Semitic speech, although its oldest document does not go beyond the 4th century A. C. (barring a few insignificant and problematic remains some centuries earlier in date). The sounds of Classical Arabic, as spoken in Hijaz, and in Central and Northern Arabia in the 7th-8th centuries, were in all likelihood the following,[1] using the symbols of the International Phonetic Association:

[1] The sound-system of Old Arabic of the 6th-8th centuries can be reconstructed through a study of (*i*) the Phonetics of spoken forms of Arabic of the present day, *e.g.*, of

	Glottal	Uvular	Velar	Palatal	Palato-alveolar	Alveolar or Dental: Velarised	Alveolar or Dental: Simple	Inter-dental	Denti-labial	Bilabial
Stop ...	ʔ	q (ʔg)	k (ʔg)	(ʔc) ɟ		ṭ (ḍ)	t d			b
Nasal ...		(N)	(ŋ)	(ɲ)			n			m
Lateral ...					l	(ɬ) ɮ				
Trilled ...					r					
Fricative...	ħ,ʕ,ʢ	χ[1] ɣ[1]	(x ɡ)		ʃ	s, z(ðʷ)	s z	θ ð	f	(ʔr)
Semivowel.				j						w
Vowels ...	ɑ, ɑ: (a, a:); i, i:; u, u:; (ɛ, e, ɔ, o).									

About the above sounds, the following points may be noted.

[ʔ], the glottal stop, is the sound of the « alif-hamzah » of Arabic. As a rule it was dropped in Persian, but was retained only between two similar vowels. Only in learned pronunciation the glottal stop is sought to be retained in Perso-Arabic words in Urdū.

Arabia Proper (Hijaz, Nejd, Oman, Hadramaut, Yemen) and of Iraq, of Syria, of Egypt, and of Tripoli, Tunis, Algeria and Morocco; (ii) the phonetic theories of the medieval grammarians of Arabic, beginning from the 8th century, as embodied in treatises on pronunciation and rules for intoning the Koran (qirā'at, tajwīd), as well as the traditional method followed in reading the Koran by professional readers (qārī) among Islamic peoples; (iii) early transcriptions of Arabic names and words in foreign languages (Greek, Persian etc.) and *vice versa*; and (iv) comparative phonology of the various Semitic speeches. Cf. 'Encyclopædia of Islam,' article 'Arabia (Arabic Language)'; 'Comparative Grammar of the Semitic Languages' by De Lacy O'Leary, London, 1923; Grammars of different dialects of Modern Arabic; W. H. T. Gairdner, 'Egyptian Colloquial Arabic,' Cambridge; Lumsden's Arabic Grammar, Calcutta, 1805 (for Old Arabic phonetic theories); cf. also the papers to the VSPdP. for 1324 and 1325 by S. K. Chatterji and Muhammad Shahidullah.

[1] The symbol [χ] is used in the IPA. script for the unvoiced uvular fricative. For the voiced uvular fricative, the IPA. symbol is a modification of [ʁ], indicating its connexion with the (French) trilled uvular [ʀ]: in this table, the Greek letter [γ] has been employed instead.

The unvoiced uvular stop, [q] = ڤ, is also pronounced dialectally (in Arabia proper and in Iraq) as the *voiced* uvular stop, [ɢ]. It is described by Arab phoneticians as a voiced sound (majhūrah), apparently taking into consideration this [ɢ] value. In New Persian of Western Iran, [q] is commonly modified to a voiced velar spirant, [ɣ], based on the stop [g] value: *e.g.*, [iqrɑ:r-] *agreement* = [eɣrɑ:r]. In India, the normal value is a velar [k], though the uvular [q] is heard in Urdū among city peoples through the influence of Arabic scholars.

[k] = ك : this sound has become the affricate [t͡ʃ], like the sound of *ch* in English *church* [t͡ʃ ɜ:t͡ʃ], in Syria and in parts of Arabia proper, as well as in Iraq. A voiced affricate value, [d͡ʒ] is also known. It is not unlikely that in Hijaz in the 7th century its value was that of the palatal stop, [c]: the change apparently from the oldest Arabic [k] to the modern dialectal affricate sound of [t͡ʃ] was through this [c] stage. In Early Persian, the [k] value was the one that was adopted, and this [k] has now become [c] as in native Persian words. The voiced velar [g] was in all probability the sound of ڭ in Muhammad's time, but by the 8th century it seems to have been advanced to the palatal stop [ɟ] in Arabia proper and Iraq. Old transcriptions of Greek words in Arabic employ ڭ (as well as غ = [ɣ]) for the Greek « gamma ». The [g] sound is still preserved in Egypt. The palatal stop [ɟ] has further become the affricate [d͡ʒ] over a great part of the Arabian world, including Arabia proper, Syria and Iraq. It is the [d͡ʒ] value which obtains in Persian, and in India also it is [d͡ʒ (ʃ͡ʒ)].

For [ɬ], and other velarised sounds, see next page.

[t, d] were blade-alveolar or blade-teeth sounds. An aspirate [th] = ث, seems to have occurred as the feminine affix: it became normally [fi] in a final position.

The nasals: [ɴ] and [ŋ], as well as palatal [ɲ] occurred before their corresponding stops, and were represented by the letter for [n] = ن.

The fricatives: [ħ] = ح, is the characteristic 'whispered h' of Arabic. [fi] = ذ, was a voiced sound. Both fell together and became one common « h » sound, an unvoiced sound in Persian, [h], and a voiced one in the Indian languages, [fi].

[ˤ] = ʕ, the 'intermittent voice,' is *the* special sound of Semitic, about the exact organic character of which there is difference of opinion. It is a continuant sound produced in the glottal region. Many Arab dialects are now dropping it. In Persia, a check in the voice, or the glottal stop, is substituted for it, *e.g.*, [جمع gamˤ > ǯamˤ] *collection* became [dʒ̂amˀ]. In India, [ˤ] is ignored: it simply lengthens a connected «a» vowel: but Arabic scholars often affect it in Urdū, and many merely substitute the glottal stop for it.

The letters خ, غ respectively had the *uvular spirant* sounds [χ, γ], and these are the values commonly found at the present day; but the more advanced *velar spirant* sounds of [x, ɣ] are also found dialectally, and probably they existed side by side with the uvular ones as variants of the latter in Old Arabic.

[ʃ] = ش, like the English *sh*. [s, z] = س ز, as in English. [θ, ð] = ث ذ, respectively = the *th* in English *thin*, *then*: in Persia and India, they become [s] and [z]. [f] = ف, denti-labial spirant as in English, but it is likely that in Muhammad's time its value was that of a bilabial [ꜰ], coming as this sound does from Primitive Semitic [p].

The sounds of [ṯ, ẓ, s̈, ḏ] = ط ظ ص ض, the so-called 'emphatics,' form a characteristic group of Arabic. They are distinguished from the ordinary dentals by their [ŭ] or [w] quality. The old Arabic grammarians called them 'covered' letters (muṭbaq), apparently referring to the raising of the back of the tongue towards the soft palate in pronouncing them: this gest gives to these sounds their 'thick' or 'dark' quality, as compared with the simple dentals. Of these, ط is commonly the stop sound (šadīdah), unvoiced, [ṯ]; but it has also a voiced stop pronunciation, a [ḏ] sound, from early times. The Arabic grammarians call it *voiced* (majhūrah): ط therefore agrees with ق = [q, ɢ] in representing both a voiced and an unvoiced stop. In Persian, in Turkī, and in the Indian languages, the 'dark' or 'emphatic' quality of ط is ignored, and its voiced from is unknown, so that ط = [ṯ] has become a simple dental [t], indistinguishable from ت = [t]. ص [s̈] is an [s] with the [w] quality: in Persian and in the Indian languages, it becomes a simple [s], the same as س. ض, ظ are two Arabic letters

the exact sounds of which in Old Arabic cannot be determined for certain. ظ seems originally to have been a 'covered' or 'velarised' form of the spirant [θ]—a sort of [θʷ], but it had become a voiced sound (majhūrah) by the 8th century, as we can see from the old Arabic grammarians: it probably became a velarised [ðʷ]. ظ is the spirant (rixwah) form of ط, and like ط, it apparently had in Old Arabic both a voiced and an unvoiced value [θʷ, ðʷ]. Both of these are now heard in dialects of Arabia proper. A common modification of ظ in Arabic-speaking lands is to a velarised [ƶ], =the voiced form of ص [s]. The Persian (and Indian) approximation of ظ is a simple [z], and this is apparently based on the [ƶ] value. The nature of ض in Old Arabic is difficult to make out. It was a voiced sound (majhūrah), velarised (muṭbaq, mustaʿliyah), spirant or continuant (rixwah), *not* a sibilant (safīrah): it was a unilateral alveolar, pronounced by striking or placing the tongue against the alveolar region to the left or right: ض would thus be a kind of unilateral velarised [ɬ], as in English *well* [wɛɬ]. This value is not unknown even at the present day in Arabia itself (Hadramaut), and the Malay pronunciation of ض as [l, dl] points to the same thing. But the dialectal pronunciation now in the Arabic-speaking lands makes ض (in addition to the [ɬ]) either a spirant [ðʷ], or [ƶ] (like ظ); or a mere stop [d̡] = the velarised form of the dental [d]; or a 'sulcal' sound, the tongue being made into a groove (through which the air passes) and the blade advanced beyond the edge of the teeth; or makes a unilateral, *alveolar* continuant, a sort of combined [d͡ɬ], for which the single letter [d̡] also can conventionally be used. This last was apparently its value in Old Arabic. Persian turned it to a simple [z], which was thus based on a dialectal [ðʷ] or [ƶ] pronunciation. [z] is the basis of Indian forms of the Perso-Arabic words with ض. Recently some Arabic scholars in India tried to introduce the pure Arabic sound (non-sibilant alveolar unilateral) of this letter in reading the Koran, but ordinarily it results only in an approximation [dw].[1]

[1] Some time ago there was a heated controversy among Indian Mohammedans on the proper pronunciation of ض in reciting the prayers in Arabic, one school declaring that the pronunciation of this letter as 'z,' as in the word ضالّين, would make the prayer

[l] was the ordinary 'clear l,' as in Southern English *lean, land*; but it is very likely that a subsidiary form of the phoneme, a velarised 'dark l' [ɫ], occurred in Old Arabic, as it does in some of the modern dialects.

The semivowels [j, w] were like English *y* and *w* in *yes* and *wet* [jɛs, wɛt].

About the vowels, there were three types in the Oldest Arabic, [ɑ, i, u]: [ɑ] probably also occurred as a central or palatal [ä, a]; and [ɑ, a], [i] and [u] were modified respectively to [ɛ, e, ɔ], [e], and [o], taking their colouring from the contiguous consonant. The long forms, [ɑ: (a:), i:, u:], originated in Old Arabic (specially in the Hijāzī dialect) from earlier combinations of [ɑ, i, u] with [ʾ]. Modifications of the vowels in Arabic need not be discussed. Diphthongs like [ai, ei, oi, ou, eu] etc. were unknown; but the combinations [ɑj (aj), ɑw] resulted in the diphthongs [ai, au], which are preserved in Persian.

The special Arabic sounds which were modified or suppressed in Persian were thus [ʾ, q, ɟ, ŧ, z (ðʷ), ħ, ɦ, ʿ, χ, γ, s, d̂ (d̂ŧ), θ, (ð)], which became respectively [zero, ɡ (or k), d͡ʒ, t, z, h, h, ʾ, x, ɣ, s, z, s, z (ð)].

Influence of Arabic affected Persian orthography to some extent by bringing in the use of ص, ث, ذ, ظ and other pure Arabic letters in writing some native Persian words: but this of course did not in the least affect the pronunciation.

309. The sounds of Turkī may also be briefly reviewed, as Turkī influenced the Persian of India to some extent. Turkī of the West, Osmanli Turkī of Asia Minor and Constantinople, is a younger dialect with which India has had nothing to do. The Turkī of the Mohammedan conquerors of India of the House of Ghazna, of the House of Ghor, and

faulty and so null and void before God, and that the faithful should try to pronounce ض properly, which was as 'dw,' according to the notions of many. Bengali Mullās and Maulavīs had their share in this 'd(w)āllīn-zāllīn' controversy, which has now been set at rest by making 'z' allowable for the unlearned; but it of course had no bearing on the pronunciation of Bengali loan-words from Perso-Arabic, which show জ 'j' for 'z' in the place of the original sound or letter.

of the Slave Kings like Qutbu-d-dīn Ībek and Iltutmiš, of the early rulers of Bengal like Bakhtyār-i-Khaljī, Hašāmu-d-dīn Euez Sulṭān Ghiyāšu-d-dīn, Nāṣiru-d-din Maḥmūd, Ṣaifu-d-din Yaghantāt, Malik 'Izzu-d-dīn Toghril Tughan Khān, Qamaru-d-dīn Tamur Khān, Mughišu-d-dīn Ozbek, 'Izzu-d-dīn Balban, and of personalities like Ulugh-i-'Aẓam Zafar Khān Bahrām Ītagīn (one of the earliest patrons of Musalmān learning in Bengal and India, in the 13th century), as well as that of Sulṭān Bābur and his Moghals, was the Eastern or Chagatai (Caqatai), or so-called Uigur dialect, which is now spoken in Central Asia (Turkistan, Balkh, Herat, Khorasan). Typical Central Asian Turkī of the 10th-13th centuries, as spoken by a large percentage of the Mohammedan invaders of Northern India, seems to have possessed the following sounds (cf. A. Vambéry, 'Cagataische Sprachstudien,' Leipzig, 1867; R. B. Shaw, 'A Sketch of the Turkī Language,' Calcutta, 1878; the 'Kudatqu Bilik,' a Turkī didactic poem of c. 1069, editions by A. Vambéry and by W. Radloff; Vilhelm Thomsen, 'Inscriptions de l'Orkhon,' Helsingfors, 1896; I. Nemeth, 'Türkische Grammatik,' Leipzig, 1916; the works of W. Radloff on Turkī Linguistics; Gibb, History of Ottoman Poetry, Vol. I; etc., etc.):

CONSONANTS.

	Glottal	Uvular	Velar	Palatal	Palato-alveolar	Alveolar or Dental	Bilabial
Stop ...	ʼ	q (ɡ)	k g			t d	p b
Affricate ...					t͡ʃ d͡ʒ		
Nasal ...		(N)	ŋ			n	m
Lateral ...					l		
Trilled ...					r		
Fricative ...			x ɣ	ʃ (j)		s z	(F)
Semivowel ...	h			j			w

Vowels

Front: unrounded, [i, e, ɛ, a]; rounded, [y, ɸ], commonly written in the Roman character as « ü, ö » respectively;

Back: rounded, [u, o, ɔ, ɑ]; unrounded, [ɯ], commonly indicated in Roman script by « y »; and probably also [ʏ]=an unrounded [o].

There were properly no long vowels.

These sounds of Turkī need not be described fully: they are simple enough. The [f] of Persian and Arabic normally became [p] in Turkī, but the bilabial [ꜰ] probably existed as a Turkī approximation. The special vowels of Turkī were easily simplified in Persia and India to [a, i, u, e, o, ʌ]. Turkī words in Indian languages in later times, even when they were borrowed direct from Turkī, conformed to the Persian way of pronunciation (*e.g.*, [ordu] > [urdu:], [ɸzbek] > [uzbag]); and some Turkī words seem to have come by way of Persian. They will be regarded as Persian words in all cases (see pp. 212, 213).

310. From the 17th century, after Hindōstānī took shape and grew in importance, Persian words entered into Bengali through that language, and older borrowings direct from Persian were probably made to conform to Hindōstānī forms. The sounds of Hindōstānī were the following:

Verals: [k, kh, g, gɦ, ŋ];

Patatal affricates: [c͡ʃ, c͡ʃh, ɟ͡ʒ, ɟ͡ʒɦ], or Palato-alveolar affricates—[t̠͡ʃ, t̠͡ʃh, d̠͡ʒ, d̠͡ʒɦ];

Cerebrals: [ʈ, ʈh, ɖ, ɖɦ];

Dentals: [t, th, d, dɦ, n];

Labials: [p, ph, b, bɦ m];

Liquids: [r, l];

Sibilant: [s]; Aspirate: [ɦ (h)];

Semivowels or Fricatives: [j, w (ʋ)].

Vowels: [ʌ, ə, ɑ: ; i, i: ; u, u: ; e:, o: ; (e, o)]; Diphthongs—[ʌĭ, ʌŭ], which became respectively [æe, æ:, ɛ:] and [ɔo, ɔ:, ɔ̀:]. The vowels can all be nasalised.

The sounds of Persian (including Perso-Arabic, and Turkī) which did not have equivalents in Western Hindi (Hindōstānī) (and in other

Indo-Aryan), were therefore [q, ɣ; x, xʷ, ɣ; ʃ, ʒ; z; ð; f]. The normal equivalents in naturalised words were [k] for [q], and very rarely [g]; [g] for [ɣ, ɣ]; [kh] for [x, xʷ]; [s] for [ʃ]; [ʃʒ] for [z, ʒ]; [ʃʒ, d] for [ð]; and [ph] for [f]. The OIA. श, ष [ś, ṣ] were lost to Western Hindī (including Hindōstānī) in the MIA. period: in reading Sanskrit, [s] was normally substituted for श [ś, ç], and [kh] for ष [ṣ] in all Northern India excluding Bengal (see p. 243), according to the medieval tradition. But through the influence of Persian, its [ʃ] sound, slightly different from both the [ś] and [ṣ] of Indo-Aryan, was engrafted on Hindōstānī, as well as on Sindhī and on the Panjābī dialects: and it is this [ʃ] which is now employed by speakers of Hindōstānī and Western Hindī generally, as well as of Panjābī etc., for both the [ś] and [ṣ] of Sanskrit, as a newer and seemingly more correct pronunciation than the older [s, kh]. [ʃ] is used in Persian words as well,—but the unlearned masses frequently turn it to [s]. Like [ʃ], the sounds of [f] (or its approximation [ᶠ]), [x], [ɣ] and [z], may be said to have been introduced into Hindōstānī, through the presence of a large number of Persian words with these sounds; and what is more, [f, x] are actually found to have been imposed on some native Indian words, in Hindōstānī and in Panjābī.

311. In Hindustan proper, Persian words have generally remained faithful to their original forms, in the matter of the vowels, making allowance for the slight alterations necessitated in naturalising words into a foreign language. The words have in the main preserved their full forms. But the peculiar phonetics of Bengali, especially its system of accentuation, has wrought a sad havoc with the Persian sounds, both consonantal and vocal, and with the Persian forms as a whole. Thus it would be difficult to recognise Persian « sarrištah » in শেরেস্তা [ʃeresta] *court office*, « xarīdār » in খ'দ্দের [khodder] *buyer*, « bunyādī » *with a basis* in ব'নেদি, ব'নিদি [bonedi, bonidi] *well established, respected* (*as a family*), « qissah » *story* in কেচ্ছা [kecʃha] *scandal*, « ẖuqqah » in হুঁকো [ẖũko] *a hookah*, « muharrir » in মুহুরী [muẖuri] *clerk*, « bē-wuqūf » in বেকুব [bekub] *fool*, « taṣarruf » in তছরূপ [tocʃhrup] *tampering* (*as with money*), etc., etc. Certatin irregularities in phonetic alteration from the Persian to the Bengali forms, however, are to be

noticed: this is due to the intermediary influence of Hindōstānī in most instances.

In the transliteration of the Perso-Arabic and Persian words (given within brackets as source-forms of the Bengali words), the following is the system employed: ء, أ, ا = ʾ (Persian ا = a); ب = b; پ = p; ت = t; ث = θ (Persian = s); ج = j (International Phonetic Association symbol = [ʤ], for Arabic); چ = c; ح = ḥ (IPA. symbol: ordinarily « h̤ » is used); خ = x; د = d; ذ = ð (Persian = ð, z); ر = r; ز = z; ژ = ž (IPA. symbol = [ʒ]); س = s; ش = š (IPA. symbol = [ʃ]); ص = s̤; ض = ḍ (Persian = z̤); ط = ṭ; ظ = z; ([s̤, ḍ, ṭ, z] for ص, ض, ط, ظ are the IPA. symbols used here in transliteration also: in transcribing Arabic, « ṣ, ḍ, ṭ, ẓ, » are employed commonly, and in this book, in the narrative, these, as well as « h̤ » for ح, have been used); ع = ʕ (IPA. symbol); غ = g̱ (in Arabic, an uvular guttural spirant, the IPA. symbol for which is [χ]); ف = f; ق = q; ک = k; گ = g; ل = l; م = m; ن = n; و = w; ū, ō; ه = h; ی = y, ī, ē; ے = ay (Arabic), ai (Persian); ۓ = aw (Arabic), au (Persian).

Treatment of the Persian Sounds in Bengali. The Vowels.

312. Persian final vowels, as a rule, whether long (ā, ī, ū), or short (ă), normally are not dropped in Bengali, as Persian words came in mainly in the Late Middle Bengali period.

Vowels in initial syllables are also preserved without much modification. It is the vowels in the interior of words which suffer from the greatest alterations.

[I] Short vowels.

(1) Short « ă ».

313. Short « ă » of Early Persian was probably a central vowel, with leanings towards the frontal [a], and possibly it was [ə] when unstressed. The normal North Indian value of Persian « ă » is [ʌ], and [ə] in unstressed positions.

(i) In Bengali, Persian «ă» when initial became [a], written আ (see p. 314). Words with initial «hamzah» from the Arabic drop the «hamzah». Examples: আকছার [akʧhar, ‡ aksar] *always* (aksăr < Ar. ʾakθar); আচকান [aʧkan] *loose coat, tunic* (ackan); আঙ্গুর, আঙুর [aŋur] *grape fruit* (angūr); আঞ্জীর [anʤir] *fig* (anjīr); আন্দাজ [andaʤ] *casting, determining, deliberating* > *approximation* (andāz; but cf. তীরন্দাজ [tirandaʤ] *archer* < tīr-andāz); আমানৎ [amanət] *deposit* (amānat); আপশোশ, আফসোস [ap(h)ʃoʃ] *sorrow, regret* (afsōs); আবলুস [abluʃ] *ebony* (abnūs); আবোয়াব [aboab] *heads (of taxation)* (abwāb); আমীর [amir] *prince, nobleman* (amīr); আনার [anar] *pomegranate* (anār); আলব(ৎ)ৎ [albət, albat] *certainly* (albattah); আল্লা [alla] *God* (Allāh); আশরফী [aʃrop(h)i] *a gold coin* (ašraf+ī); আসল [aʃol, aʃol] *genuine* (asl); আসামী [aʃami] *(one in a list of) names* > *a rent-paying cultivator; a culprit* (asāmī); আসবাব [aʃbab] *furniture* (asbāb); আহাম্মক, আহাম্মুক [ahammək, -muk] *fool* (aḥmaq-); আমেজ [ameʤ] *shade, faint trace, nuance* (amēz); etc., etc.

When in Arabic words the ع [ʿ] occurred initially, it was changed to the «hamzah» = [ʾ] in Persian; and in Bengali [ʿa > ʾa:, a:] normally became আ = [a]: *e.g.*, আক্কেল [akkel] *wisdom* > *sense* (ʿaql); আজব [aʤob], *strange* (ʿajab); আরজ [arəʤ] *petition* (ʿarz̤ < ʿarḍ-); MB. আর্দাস, আদ্দাশ [ardaʃ, addaʃ] *petition* (ʿarz̤-dast); আবা [aba] *a loose coat* (ʿabā); আয়েস [aeʃ] *comfort, luxury* (ʿayš); etc.

(ii) Persian «ă» in initial syllables after a consonant generally becomes [ɔ] in Bengali. This [ɔ] is umlauted to [o] through influence of a following [i] or [u] (see pp. 396-397). *E.g.*, কদম [kədɔm] *foot-print, step, pace (of a horse)* (qadam); কদর [kədɔr] *merit, value* (qadr); কবজ, কবচ [kəboʤ, kəbɔʧ] *receipt, voucher* (qabz̤ < qabḍ-); কবর [kəbɔr] *grave* (qabr-); খবর, খপর [khɔbɔr, khəpɔr] *news* (xabr); করার, করাড় [kərar, -ar] *condition* (qarār); খরগোস [khɔrgoʃ] *hare* (xar-gōš); কর্জ্জ [kɔrʤo] *debt, loan* (qarz̤ < qarḍ); খরচ [khɔrɔʧ] *expense* (xarc); কম [kɔ:m] *less, small quantity* (kam); গজ [gɔ:ʤ] *yard (measure)* (gaz); গজল [gɔʤol] *a metre, a kind of melody* (ġazal); গরজ় [gɔrɔʤ] *interest, concern* (ġaraz̤ < ġarad); গর্দ্দা [gɔrda] *dirt, lees* (gardah); চকমকী [ʧɔkmoki]

flint-stone (Turkī caqmāq); জখম [ʤɔkhɔm] *wound* (zaxm); জবান [ʤɔbɑn] *word* (zabān); জলদ [ʤɔlɔd] *quick movement in music* (jald); জমা [ʤɔmɑ] *gathering* (jam' < ɟam'); তকমা [tɔkmɑ] *badge* (Turkī tamɣa); তক্ত [tɔktɔ] *throne* (taxt); তনখা, তংখা [tɔnkhɑ, tɔŋkhɑ] *pay, honorarium* (tanxwāh); তদারক [tɔdɑrɔk] *arrangement, enquiry* (tadāruk); তবলা (tɔblɑ) *small drum* (ṭablah); তরফ, তরপ [tɔrɔp(h)] *side* (ṭarf); নকাশী [nɔkɑʃi] *carver, engraver* (naqqāš+ī); নগদ [nɔgɔd] *cash* (naqd); নহর [nɔɦɔr] *channel* (naɦr); নমাজ [nɔmɑʤ] *prayer* (namāz); পর্দা [pɔrdɑ] *screen* (pardah); পশম [pɔʃɔm] *wool* (pašm); ফতে [phɔte] *victory* (fatḥ); বরকন্দাজ [bɔrkɔndɑʤ] *matchlock-man, armed attendant* (barq-andāz); বখেয়া, বকেয়া [bɔk(h)eɑ] *back-stitch, sewing with long stitches, stitched and repaired cloth* > *something not new and good* (baxyah); বজায় [bɔʤɑe] *in place, intact* (ba-jā-ĕ); বজ্জাত [bɔʤʤɑt] *vicious* (bad-żāt < -ðāt-); বহর [bɔɦɔr] *ocean, extent* (baɦr); মতলব [mɔtlɔb] *intention* (maṭlab); রফা [rɔphɑ] *arrangement, finishing* (raf'); শহর [ʃɔɦɔr] *city* (šahr); সর্দার, সদ্দার [ʃɔrdɑr, ʃɔddɑr] *chief, headman* (sardār); হক [ɦɔ:k] *truth* (ḥaqq); হরফ, হরপ [hɔrɔp(h)] *letter of the alphabet* (ḥarf); etc., etc.

Cases of change of « ă » > [ɔ] to [o]: কম [kɔm] *less*, but কমী [komi] *smallness in quantity* (kamī); কবুল [kobul] *admitting* [qabūl]; খরিদ [khorid] *buying*, খ'দ্দের [khoddɔr] *buyer* (xarīd, xarīdār); খলীফা [kholip(h)ɑ] *caliph*, (slang) *a clever man* (xalīfah); গরীব [ɠorib] *poor* (ɠarīb); চর্বী [ʧorbi] *grease* (carbī); জমী [ʤomi] *land* (zamīn); জরী [ʤori] *gold lace* (zarī); জল্‌দী [ʤoldi] *quick* (jaldī); তফসীল [top(h)ʃil] *details* (tafsīl); তম্বী [tombi] *threatening* (tanbih, tambih); দলীল [dolil] *document* (dalīl); দস্তুর [dostur] *order, order of business* (dastūr); নজীর [noʤir] *precedent* (nazīr); ফতুই [photui] *a short coat* (fatō'ī); বকরীদ [bokrid] *the Baqr-'Īd festival* (baqr-'īd); বন্দুক [bonduk] *rifle* (bandūq); হকুক [ɦokuk] *truth, facts of a case* (ḥaqūq); etc., etc.

Also words with initial [m], like মহল [moɦol] *suite in a large house, quarter* (maɦl), occasionally have [o] for [ɔ] although there is no following [i] or [u].

Post-consonantal « ă » in initial syllables, however, becomes আ [ɑ] and not অ [ɔ] in some cases. We have [ɑ] when one of two consonants

following is dropped: *e.g.*, খাসী [khaʃi] *a castrated goat* (xasī, xassī); চাঁদা [ʧãda] *subscription* (candah); নাগরা, নাকরা, নাকারা [nagra, nak(a)ra] *kettle-drum* (naqqārah); মামুদ [mamud] *a name* (maḥmūd-): পালোয়ান [palŏan] *wrestler, professional athlete* (pahlwān); কাওয়ালী [kaŏali] *a tune* (qawwāl+ī); খাতা [khata] *note-book, blank-book* (xaṭṭ-hā); মাল্লা [malla] for *মালা (mālā) *sailor* (mallāḥ); দালাল [dalal] *broker* (dallāl); তাঁবু [tãbu] *tent* (tambū); সানক [ʃanɔk] *china or pewter dish used by Mohammedans* (saḥnak); etc.

But quite a number of other words show [a] instead of [ɔ]. These [a] words are due, either to the influence of native words of similar sound with [a]; or to post 18th century influence of Hindōstanī: Hindōstānī [ʌ] now is normally represented by আ [a] in NB., but in Late MB., অ [ɔ] would be used. [a] forms in Bengali thus are generally recent. Examples: কামান [kaman] *bow >cannon* (kamān); কাবাব [kabab] *roast meat* (kabab); বাদাম [badam] *almond* (badām); চাপকান [capkan] *tunic* (capkan); জাহাজ [ʤahaiʤ] *ship* (jahāz); জাহান্নম [ʤahannɔm] *hell* (jahannum); তাকিয়া [takia] *bolster* (takyah); তামাম [tamam] *all, end* (tamām); তালাক, also তাল্লাক [talak, tallak] *divorce* (talāq); তামাদী, তাঁবাদী [tamadi, tãbadi] *barred by limitation* (tamādī); তর, তারা [tɔra, tara] *manner* (tarah); দামামা [damama] *drum* (damāmah); সাজা [ʃaʤa] *punishment* (sazā); খালাস [khalaʃ] *freed* (xalāṣ); মানা [mana] *prohibition* (mana'); কালন্দর [kalɔndɔr] *mendicant* (qalandar); কানাৎ [kanat] *awning* (qanāt); লাগাম [lagam] *rein* (lagām); হাবেলী, হাবলী, হাউলী [haba(e)i, haali] *palace* (ḥawēlī); হারাম [haram] *forbidden* (ḥarām); হাজার [haʤar] *thousand* (hazār); হালুয়া [halua] *a sweetmeat, pudding* (ḥalwā حلوى); হাওয়া [haŏa] *wind, air* (hawā); হাবশী [habʃi] *Negro, Abyssinian* (ḥabšī); বাহার [bahar] *spring > beauty* (bahār); বাহাদুর [bahadur] *brave* (bahādur); হাঙ্গামা [haŋgama], (also হেঙ্গামা [hæŋgama], see p. 322) *disorder, riot* (hangāmah); etc., etc.

The frontal [a] pronunciation of Persian is represented by [e, æ], written এ, in some words; but these [e, æ] forms are rare, and occasionally they are brought about through influence of a contiguous [e, i], Examples: সেলাম, স্যালাম, ছালাম [selam, sælam, ʃelam] *salutation* (salām);

রেজাই beside রাজাই [reʒʒai, raʒʒai, raʒʒai] *quilt* (razāī); ফেসাদ, ফেসাদ, beside ফাঁসাদ [phæ̃ʃad, phæ-, phã-] *difficulty, turmoil, troubled situation* (fasād); ফেরেব [phereb] *deceit* (farēb); মেরামৎ [mæramət] *repairs* (marammat); জেরা [ʒʒera] *a little* (żarā < ðarā?); রেজা [reʒʒa] *a name* (raẓā < raðā?); কেরামৎ [kæramət] *miracle* (karāmat); সেরেস্তা [ʃeresta] *court office* (sarrištah); হেস্তনেস্ত [ʃestonesto] *final settlement* (hast-nīst); নেমাজ beside নমাজ, নামাজ [nemaʃʒ, næmaʃʒ, nɔmaʃʒ, namaʃʒ] *prayers* (namāz); নেকরা [nækra] *trickishness, coquetry* (naxrah); জেনানা [ʒʒenana] beside জানানা [ʒʒanana] *women's apartments, women* (zanānah); MB. একব্বর beside NB. আকবর [ekɔbbɔr, akbɔr] *Akbar* (Akbar: cf. the Portuguese transcription of the Moghal Emperor's name, « Ecquebar »); এজিদ [eʒʒid] *a name, Yazīd* (Yazid).

« ă- » in initial syllables also occurs as [i, e]: *e.g.*, কিঙ্খাব [kiŋkhab] *brocade* (kam-xwāb); কিল্লা > কেল্লা [killa > kella] *fort* (qal'ah); নেমক [nemək] *salt* (namak); মিহি [mihi] *fine* (mahīn); শিরপেঁচ [ʃirpẽʧ] *crest worn on turban* (sar-pēc); ইসবগুল [iʃɔbgul] *seed of the fleawort* (asb-gōl, isb-gōl); রিপু [ripu] *sewing* (rafū); etc. Also as [u, o] in হুজুর [huʒʒur] *presence* (ḥaẓūr < ḥuḍūr); পুলাও > পোলাও [pulɑo, polɑo] *dish of rice and meat with butter* (Early Pers. palāw, Modern Pers. [philɑ:v]); and in a few other words, which thus show a special modification of the « ă » of Persian in India. Cf. also রোমজান [romʒʒan], beside রমজান [rɔmʒʒan] *the Ramadan month* (ramaẓān < -ḍān); বোগদাদ [bogdad] *Bagdad* (Bagdād); মকবুল [mokbul] *a name* (maqbūl); কোমর [komor] *waist* (kamar), etc., which show [o] in NB.

(iii) Interior « ă » normally becomes [ɔ] in Bengali, and owing to the phonetic habits of Bengali (see p. 100), this [ɔ] is liable to be changed to [o]: ওকালৎ [okalət] *advocacy* (wakālat); বগল [bɔgɔl] *arm-pit* (bagal); কমর > কোমর [kɔmɔr > komor] *waist* (kamar); মস্করা [mɔʃkɔra] *joke* (masxarah); রসদ [rɔʃɔd] *supplies* (rasad); মৌলবী [moulobi] *Persian and Arabic scholar* (maulavī); হলফ, -প [ɦɔlɔp(h)] *oath* (ḥalaf); রিশবৎ [riʃbət] *bribe* (rišwat); কাগজ [kɑgɔʒʒ] *paper* (kāgað), etc., etc. But in a few instances, through the influence of a preceding [ɑ], we find [ɑ] rather than the expected [ɔ] in the interior of words: *e.g.*, আচকান [ɑʧkan] *loose*

tunic (ackan); আলবাৎ beside আলবৎ [albat, albɔt] *certainly* (albattah); আমদানী [amdani] *importation* (āmadanī); রপ্তানী [rɔptani] *export* (raftani), on the model of the preceding word.

« ă » connected with [ʔ] figures as [a] in the interior of words in Bengali: দাবী [dabi] *claim* (daʔwī); সাদী [ʃadi] *a name* (*the celebrated Persian poet*) (Saʔdī): নাল [na:l] *horse-shoe* (naʔl); লাল [la:l] *ruby* (laʔl); কাবা [kaba] *temple at Mecca* (kaʔbah); বাদ [ba:d] *subtraction*; *after* (=post position) (baʔd); জাল [ʤa:l] *forgery* (jaʔl); তাজিয়া [taʤia] *shrine* (taʔzyah); তাজ্জব [taʤʤab] *strange* (taʔjjab); তালিম [talim] *instruction* (taʔlīm); মানে [mane] *meaning* (maʔanī); তালিকা [talika] *list* (taʔliqah); etc., etc.

Influence of « y » changes « ă » to [e]: কায়েম [kačem] *established, fixed* (qāyam, qāʔim); আয়েন্দা [ačendа] *coming* (āyandah, āʔindah); কেফায়েৎ [kephačet] *sufficiency, profit* (kifāyat), etc.; in ইহুদী [ihudi] *Jew* (yahūdī), we have [i] for « ya ». Initial « wă- » similarly becomes [o, ɔ, u]: *e.g.*, ওক্ত [oktɔ] *time* (waqt); অজেদ [ɔʤed] *a name* (Wazīd); উকীল [ukil] *pleader* (wakīl), etc. « ă » in connection with [xʷ] changes to [u, o] in Bengali: *e.g.*, আখুঞ্জী [akhunʤi] *a Mohammedan title* = *teacher* (āxʷand-jī).

A preceding [i, e, e:], through Vowel Harmony, modifies « ă » to [e] (cf. p. 400): সেকেন্দর [ʃekendɔr] *a name*, also সিকন্দর [ʃikɔndɔr] (Sikandar = Alexander); রেবেনচিনি [rebenʧini] beside রেবনচিনি [rebɔnʧini] (*China*) *rhubarb* (rēvand-ĕ-cīnī), etc. Through Vowel Harmony, we have change of interior « ă » to [u]: *e.g.*, মৌলুবী beside মৌলবী [moulubi, moulobi, moulɔbi] *Mohammedan scholar* (maulavī) (see p. 392); হুনুর [hunur] *art, cleverness* (hunar); চাকুরী beside চাকরী [ʧakuri, ʧak(ɔ)ri] *service* (cākarī); মুহুরী [muhuri] *clerk* (muḥarrir); উজবুক [uʤbuk, uzbuk] *idiot, fool* (uzbak); মোকরুরী মৌরুশী [mokruri mouruʃi] *permanent and hereditary tenure* (muqarrarī, maurūsī < mawrūθ-); মুরুব্বী [murubbi] *patron* (murabbī); মুচ্ছুদ্দী [mucʧhuddi] *accountant, controller of a firm* (mutasaddī); etc., etc. In তাগুৎ, তাউৎ [tagut, taut] *strength*, beside তাকৎ [takɔt] (ṭāqat), and MB. সগোল্লাদ [ʃɔgollad], সকলাত [ʃɔkɔlat] *a costly stuff* (saqalāt), we have [u, o] for [ɔ] in the place of « ă ».

There is loss of interior « -ă- » through the dominant initial stress of Bengali: see below, under 'Dropping of Vowels.'

(iv) Final [a] of Persian, written with the « hā-i-muxtafī » (i.e. the imperceptible final « h »), becomes আ [a] in Bengali: *e.g.*, বান্দা [banda] *slave* (bandah); কিনারা [kinara] *edge* (kināra); খাজ(ঢ়)না [khaʒ(a)na] *tax* (xazānah); খলীফা [kholip(h)a] *Caliph; a clever man* (xalīfah); বেচারা [beʧara] *pitiable person* (bēcārah); খাজা [khaʒa] *a title* (xwājah); etc., etc. This « hā-i-muxtafī » frequently represents the Old Arabic feminine forms in ـَة (-at-, -ath- ?). Persian « -ah, » [a] > [a] is the normal change in Bengali which is found by the score—no other change being admitted.

Final « ʿ, -aʿ » of Arabic words, pronounced [aʾ] in Persian, normally becomes [a] in Bengali: *e.g.*, জমা [ʒoma] *collection* (jamʿ); মানা [mana] *prohibition* (manʿ); মশাল [moʃal] *torch* (mašʿal); তাবিজ [tabiʒ] *amulet* (taʿwīð), etc.

Apocope of « -ă »: see below.

(2) Short « ĭ, ĕ » of Persian (=kasrah, zēr).

314. The « kasrah » in Early Persian, as in Modern Persian, had the sounds of both short [i] and short [e]. Modern Hindōstānī prefers the [i] sound. In Modern Bengali, there is occasionally an attempt to bring in the close sound through Hindōstānī influence, but in the bulk of the words naturalised, we find [e]. Examples: এজার, ইজার, ইজের [eʒar, iʒar, iʒer] *trousers* (izār); ইজারা, এজারা [iʒara, eʒara] *lease* (ijārah); ইজ্জৎ [iʒʒot] *honour* (ʿizzat); এনাম, ইনাম [enam, inam] *present, gift* (inām); এন্সাফ, ইন্সাফ [enʃaph, inʃaph] *justice* (insāf); ইমাম [imam] *religious guide* (imām); এরাদা, ইরাদা [erada, irada] *desire* (irādah); এলাহি [elahi] *God* (ilāhī); ইল্লৎ [illot] *filth* (ʿillat); ইশাদী [iʃadi] *witness* (išhādī); ইশারা [iʃara] *beckoning* (išārah); এস্তেমরারী [estemrari] *permanent* (istimrārī); এস্তফা, ইস্তফা [estɔpha, istɔpha] *resignation* (istaʿfā); নিশান [niʃan] *banner* (nišān); মিছিল [miʧhil] *procession* (misl < miθl); জিঞ্জির [ʒinʒir] *chain* (jinzir); কিস্তী [kisti] *boat* (kištī); কেতা [keta] *section, measure* (qitʿah); কিশমিশ [kiʃmiʃ] *dried raisins* (kišmiš); নিকা(হ্) [nika(ho)] *marriage* (nikāh), also নেকা(হ্) [neka(hɔ)]; এক্তিয়ার > এক্তার [ektiar, ektar] *command, power* (ixtiyār); এজলাস [eʒlaʃ] *court* (ijlās); একরার [ekrar] *agreement* (iqrār);

এজাহার, এজেহার [eʒʒahar, eʒʒehar] *deposition* (izahār); এত্তেলা, এতেলা [et(t)ela] *news, information* (iṭalāʿ); এলাকা [elaka] *jurisdiction* (ʿilāqah); কেতাব [ketab] *book* (kitāb); কেচ্ছা [kecchha] *story* > *scandal* (qissah); খেলাৎ [khelat] *present, robe of honour* (xilʿat); খেসারৎ [khesarat] *damages* (xisārat); জেলা [ʒʒela] *district* (ẓilaḥ <ḍilaḥ); দেমাগ, -ক [demag, -k] *brain, intellect, pride* (dimāg); পেয়ালা [peala] *cup* (piyālah); বেলোয়ারী [beloari] *crystal, glass* (billaurī); মেজরাব, -প [meʒʒrab, -p] *plectrum* (miẓrāb < miḍrāb); স্রেফ, সেরেফ [sre:ph, ʃerep(h)] *unmixed, only, merely* (sirf); হিঁদু [hĩdu] *Hindu* (hĕndū), beside হিঁদু, হিন্দু [hĩdu, hindu] (hindū); হেনা [hena] *the Hennah plant* (ḥinā); চেহারা, চেহেরা [cʃehara, cʃehera] *portrait, figure* (cihrah); মেহেরবাণী [meherbani] *kindness* (mihrbānī); ভিস্তি [bhisti] *water-carrier* (bihištī); etc., etc.

ওয়াকিফ, ওয়াকিব [oakiph, -b] *knowing* (wāqif); ওয়ারিস [oariʃ] *heir* (wāriš < wāriθ); কুর্ণিশ [kurniʃ] *salutation* (kūrniš); খাতির [khatir] *regard, respect* (xāṭir); তারিখ [tarikh] *date* (tārix); ‡হারেছ [hares] *a name* (ḥāriθ); সালিস [ʃaliʃ] *third party, arbitrator* (šāliš < θāliθ); দাখিল [dakhil] *entered* (dāxil); নাজির [naʒʒir] *supervisor* (nāzir); নালিশ [naliʃ] *complaint* (nāliš); ফাজিল [phaʒʒil] *excess, superficial, impertinent* (fāẓil<fāḍil); হাজির [haʒʒir] *present* (adj.) (ḥāẓir < ḥāḍir); কাদের [kader] *a name* (qādir); মোজাহেম [moʒʒahem] *strict* (muzāḥim); আলেম [alem] *scholar* (ʿālim): etc., etc.

The « kasrah-i-iẓāfat » = [i, e], is rendered by [e]: শাহে রুম [ʃaherum] *Emperor of Turkey* (šāh-i-Rūm), তক্তে তাউস [təkte taʊʃ] *peacock-throne* (taxt-i-ṭāūs); সোবে সাদেক [ʃobe ʃadek] *true dawn, early dawn* (subḥ-i-sādiq), etc., etc.

In a few cases, we find [ɔ] for the expected [e] or [i]: *e.g.*, সাজশ [ʃaʒʒɔʃ] *collusion* (sāziš); নাবালক [nabalək] *minor* (nābālig); সনাক্ত [ʃɔnakto] *identification* (šināxt); মৌসিম, মৌসুম, মরশুম [mouʃɔm, mouʃum, morʃum] *season* (mausim), etc. Cf. also সুপারিস [ʃupariʃ] *recommendation* (sifāriš), with [u] for « i », and আতর [atɔr] *otto* (ʿiṭr), with [a] for « *ă<i ». In জবাই [ʒʒobai] beside জবে, জবেহ [ʒʒobe(ho)] *killing an animal by cutting its throat* (jabiḥ), we find change of the « kasrah » to [ai].

For Aphæresis, Syncope and Apocope of [i, e], see *infra*: also for Anaptyxis of [i, e] in Bengali.

(3) Short « ŭ, ŏ » of Persian (=ẓammah, pēš).

315. The remarks made with reference to « ĭ, ĕ » of Persian are also applicable with regard to « ŭ, ŏ ». Bengali prefers the [o] sound, but [u] is also known: but unlike the [i, e] forms, [o] and [u] are kept apart, the same word not ordinarily appearing with both the vowels.

MB. উরুদু [urudu] *camp* (urdū, Turkī ordu); কুদরৎ [kudrət] *power* (qudrat); কুলুপ [kulup] *pad-lock* (Indian Persian qulf < qufl); খুস্কি [khuʃki] *dry path, dry chaff* (xušk-); গুজরান [guʒran] *passing (as time)* (guðrān); জুদা [ʒuda] *separate* (judā); জুলুম [ʒulum] *tyranny* (zulm); জুলপী [ʒulpi] *hanging side-locks* (zulf); তুরুক [turuk] *Turk, Mohammedan* (turk); দুনিয়া [duniɑ] *world* (dunyā); দুষমন [duʃmən] *foe* (dušman): দুম্বা [dumbɑ] *sheep* (dumbah); ফুরসৎ [phurʃət] *leisure* (fursat); বুরুজ [buruʒ] *bastion* (burj); বুলবুল [bulbul] *nightingale*; মুচ্ছুদ্দী [mucʃuddi] *accountant, partner of firm* (mutasaddī); মুর্দাফরাস [murdɑphərɑʃ] *remover of corpes* (murdah+farōš); মুন্সেফ [munʃep(h)] *a judicial officer* (munsif); মুলুক, মুল্লুক [mu(l)luk] *country* (mulk); রুজু [ruʒu] *filing of a plaint* (rujūᶜ); সুরকি [ʃurki] *red* > *brick-dust* (surx-); হুকুম [ɦukum] *command* (ḥukm); হুলিয়া [ɦuliɑ] *description of man wanted* (ḥulyah);

ওমরা, ওমরাহ [omrɑ(ɦ)ɔ] *noblemen* (umrāᵓ); ওস্তাদ [ostɑd] *master, especially in the arts* (ustād, ŏstād); ওরফে [or(ɔ)phe] *alias* (ᶜurf); ওমার [omɑr] *a name* (ᶜumār); ওসমান [oʃmɑn] also ‡ ওছমান [osmɑn] *a name* (ᶜušmān < ᶜuθmān); ক্রোক [kro:k] *attach (property)* (Turkī qurq); খোদ [kho:d] *self* (xʷud); খোদা [khodɑ] *God* (xudā); খোলসা [kholɔʃɑ] *clear* (xulāsah); গোনা [gonɑ] *sin* (gunāh); গোসা, গোস্বা [goʃɑ, goʃʃɑ] *anger, fit of sulks, dudgeon* (ġussah); গোলাপ [golɑp] *rose* < *rose-water* (gul-āb); চোস্ত [ʧostɔ] *quick, well-set, elegant* (cust); জোলাপ [ʒolɑp] *a purgative* (julāb); জোব্বা [ʒobbɑ] *a loose garment* (jubbah); তোফা [topha] *splendid, beautiful* (tuḥfah); নোক্তা [noktɑ] *a dot* (nuqtah); নোকসান, লোকসান [nokʃɑn, lokʃɑn] *loss* (nuqsān); পোস্তা [postɑ] *plinth* (puštah); বোঁচকা [bõcka] *bundle* (Turkī buǧcah); মোহম্মদ [mohɔmmɔd] (Muḥammad); মোকদ্দমা [mokɔddɔmɑ] also মকদ্দমা [mɔkoddɔmɑ] *lawsuit* (muqaddamah); মোল্লা [mollɑ] *Mohammedan priest* (Perso-Turkī mullā

< Ar. mawlā); মোক্ষম [mokkhɔm] *strengthened, secure, unambiguous* (muḥkam); মোগল [mogɔl] *Mogul* (mugal); মোরগ [morog] *fowl, cock* (murg).

বুজরুক [buʤruk] *impostor, miracle-worker* (buzurg *great*); নাখোদা [nɑkhodɑ] *captain of a ship* > *a Mohammedan trading class* (nāxudā); কসুর [koʃur] *fault* (qasur < qusur); চাবুক [ʧɑbuk] *whip* (cābuk).

In a few words, we find অ, আ [ɔ, ɑ] for « ŭ, ŏ » of Persian: গাওয়া [gɑoɑ] *witness* (< găwāh=guwāh); মফঃস্বল [mɔphɔʃʃɔl] *country district* (mufassal); নবাব [nɔbɑb] *Nabob, prince, ruler* (nawāb, nawwāb < nuwwāb): সাবুদ [ʃɑbud] as in সাক্ষী সাবুদ [ʃɑkkhi ʃɑbud] *witnesses* (śubut < θubut); মনিব [monib < *mɔnib] beside মুনিব [munib] *master* (munīb); মজুর [moʤur < *mɔʤur] *labourer* (mazdūr < muzdūr); মকদ্দমা above; অর্শান [ɔrʃɑno] *to cleave to* (*as a fault*) (ʿurs); তদারক [tɔdɑrɔk] *enquiry* (tadāruk); তগল্লব [tɔgɔlləb] *cheating, forgery* (taġallub); সহরৎ beside সোহরৎ [ʃɔhiɔrɔt, ʃohiɔrɔt] *publishing* (*as by beat of drum*) (šuhrat); সহবৎ [ʃɔhiɔbɔt] *companionship* (suḥbat); etc.

Syncope of « ŭ, ŏ »: see *infra*. Anaptyxis of [u, o] in Bengali: see also *infra*.

[II] Long Vowels.

The quantity of Persian has entirely been modified according to Bengali phonetic habits. (See 'Brief Sketch of Bengali Phonetics,' §§ 53ff.)

(1) Long « ā ».

316. Persian « ā » normally occurs as [ɑ] in Bengali, initially, medially and finally: *e.g.*, আইন [ɑin] *law* (āʾīn); আদব [ɑdəb] *politeness* (ādab); আদমী [ɑdmi] *man* (ādamī); আবকারী [ɑbkāri] *excise, relating to intoxicants* (ābkārī); আম [ɑ:m] *public* (ʿām); আবরু [ɑbru] *honour* (āb-rū); আল্লা [ɑllɑ], এলাহি [elɑhi] *God* (allāh, ilāhī); কানুন [kɑnun] *law, custom* (qānūn); কাগজ [kɑgɔʤ] *paper* (kāġaẕ); কাফের [kɑpher] *infidel* (kāfir); কেতাব [ketɑb] *book* (kitāb); কিনারা [kinɑrɑ] *edge* (kināraḥ); খারাপ [khɑrɑp] *bad* (xarāb); খোদা [khodɑ] *God* (xudā); খোন্দকার

[khondɔkar, khon(d)kar] *reader* > *Mohammedan surname* (xwand-kār); গেরেপ্তার, গ্রেপ্তার [g(e)reptar] *arrest* (giriftār); জবান [ʃʒɔban] *word* (*of honour*) (zabān); জায়গা [ʃʒagga] *place* (jāgāh); জবাব [ʃʒɔbab] *reply* (jawāb); জমায়েৎ [ʃʒɔmaɛ̆et] *gathering* (jamāʿat); জাফরান [ʃʒaphran] *saffron* (zaʿfrān); তাল্লাস [tallaʃ] *search* (talāš); তাকাদা, তাগাদা [takada, tagada] *call or demand for payment* (taqāđā); তাঁবে [tābe] *dependent, inferior to* (*in grade*) (tābiʿ); তালা [tala] as in আল্লাতালা [alla-tala] *God is exalted the Exalted One* (taʿālā), also তায়ালা [taala, taɛ̆ala]; দারোগা [daroga] *superintendent of police* (dārōgah); দুনিয়া [dunia] *the world* (dunyā); নাকচ [nakɔeʃ] (*to make*) *defective, to cancel* (nāqiš); কোরান [koran] *the Koran* (qurʾān); বাজু [baʃʒu] *arm* (bāzū); মাত [ma:t] *dead, finished* (māt<maʾata *he died*); মাল্লা [malla] *sailors* (mallāh); শয়তান [ʃɔetan] *devil, Satan* (šaiṫān); হাজার [hazʃʒar] *thousand* (hazār); হালাল [halal] *lawful, properly killed* (*animal, for meat*) (ħalāl); হালুয়া [halua] *sweetmeat, pudding* (ħalwā); হিজরা *the* [hijʃʒra] *Hegira era* (hijrā); etc., etc.

Change of «ā» > [a] through Umlaut and Vowel-Harmony to [e, o, ɔ, i, u] is found in a few instances: ইজের [iʃʒer] *trousers* (izār); ইশেরা [iʃera] *gesture* (išārah); বিলাত > বিলেত [bilat > bilet] *Europe* (wilāyat); হিসাব-কিতাব > হিসেব-কিতেব [hisʃʒab-kitab > hisʃeb-kiteb] *books and accounts* (ħisāb, kitāb); নিশেন [niʃen] *banner* (nišān); নিকে [nike] *wedding* (nikāħ); খ'দ্দের [khodder] *buyer* (*khaírdār < xarīdār); তৈয়ার > ত'য়ের [toiar > toer] *prepared, ready* (taiyār); দিস্তে [diste] *quire* (distah); খোলসা [kholoʃa] *clear* (xulāsah); গুনোগার [gunogar] *compensation* (gunāh-gār); গোমস্তা [gomosta] *agent, rent-collector* (gumāštah); জুদো [ʃʒudo] *separate* (judā); ‡মুরোদ [murod] *power* (murād); তুরপোন, তুরপুন [turpon, turpun] *awl* (turfān); হিসাবী >হিসেবী > হিসিবি [hiʃabi > hiʃebi > hiʃibi] *clever at accounts, methodical* (ħisābī); বিলাতী > বিলিতি [bilati > biliti] *foreign, European* (wilāyatī); ফিরঙ্গী > ফিরাঙ্গী > ফিরেঙ্গী >ফিরিঙ্গি [phirangi > phirangi > phirengi > phiringi] *European, Eurasian* (firangī, firāngī); etc.

In তয়ফা [tɔepha] *nautch girl* (ṫāʾifah), we have change of the group «-āʾi-» to [ɔe]; so পয়মাল [pɔemal] *destroyed, crushed* (= pāʾi-māl). Cf. হরকরা [harkara] *peon, post-boy* (harkārah); বরগী [borgi<*bargi] *a Maratha*

raider (bārgīr *light cavalry*); and ফলসা [phɔlʃɑ] *a fruit* (fālsah), through influence of ফল « phăl̆ɬ ».

Persian « yā, īā, ēā » in the initial syllable after a consonant become [æ, æe] in Bengali, in a number of words (see pp. 412, 421): *e.g.*, পেয়ালা, প্যালা [peɑlɑ, pælɑ, pæelɑ; *cup* (pyālā); পেয়াদা, প্যাদা [peɑdɑ, pæ(e)dɑ] *footman* (piyādah); জেয়াদা (ʄʒeɑdɑ, ʄʒæ(e)dɑ] *much* (ziyādah); দেয়াল [deɑl, dæ:l] *wall*, beside দেওয়াল [deŏɑl] (dīwāl > *dīāl); পেঁয়াজ, প্যাজ [pẽɑʄʒ, pæ̃:ʄʒ] *onions* (pyāz); মেয়াদ, ম্যাদ [meɑd, mæ:d] *term, imprisonment* (miyād); খেয়াল, খ্যাল [kheɑl, khæ:l] *wish* (xyāl); বেয়ারাম, ব্যারাম, ব্যায়রাম [beɑrɑm, bæ(e)rɑm] *disease, illness* (bē-ārām); স্যাকত [ʃækɔt] *impelling, urging* (siyāqat); etc.

For Syncope of Persian « ā », and Anaptyxis of [ɑ] in Bengali in Persian loan-words, see below.

(2) Persian « ī, ē ».

317. The « maᵓrūf » and « majhūl » pronunciations of ی, which obtained in Early Persian, are both found in Bengali, as [i, e]. Initial or medial [ᵓ] is ignored.

« ī » > ই, ঈ [i]: ইমান [imɑn] *faith, honesty* (īmān); ইরান [irɑn] *Īrān, Persia* (īrān < ērān); ইদ, ঈদ [i:d] *the ʿĪd festival* (ᵓīd); ইসা [iʃɑ] *Jesus* (ᵓīsā); মীর্জা, মিরজা, মৃজা [mirʄʒɑ, mriʄʒɑ] *Prince, Mīrzā* (mīrzāh); আমীর [ɑmīr] *prince* (amīr); চীজ [cʃi:ʄʒ] *article* (cīz); জিন [ʄʒi:n] *saddle* (zīn); তীর [ti:r] *arrow* (tīr); পীল, পিলখানা [pi:l, pilkhɑnɑ] *elephant, elephant-stable* (pīl, pīl-xānah); বীমা [bimɑ] *insurance* (bīmah); ফিরোজা [phiroʄʒɑ] *light blue colour* (fīrōzah); শিক [ʃi:k] *iron spit* (sīx); শিরণী, শিন্নি [ʃirni, ʃinni] *sweets, milk etc. (offered to a saint)* (šīrnī, šīrīnī); অছি [oʧhi] *testator* (wasī); আইন [ɑin] *law* (āᵓīn); আখুঞ্জী [ɑkhunʄʒi] *a reader, a teacher* (āxʷandjī); বাজী [bɑʄʒi] *sport* > *trick, magic* (bāzī); আমিন [ɑmin] *survey-officer* < *a trusted one* (amīn); কশিদা [koʃidɑ] *a kind of embroidery* (kašīdah); কাজী [kɑʄʒi] *a Mohammedan judge* (kāẓī < qādī); ‡খবীস [khobiʃ] *evil spirit* (xabīs < xabīθ); জায়গীর [ʄʒɑegir] *land granted for service* (jāēgīr); তজবীজ [toʄʒbiʄʒ] *investigation* (tajwīz); তবিয়ত [tobiɔt]

constitution (*of the body*) (ṭabi°at); তসবীর [tɔʃbir] *picture* (taṣwīr); তবীল [tobil] *funds, treasury, cash* (taḥwīl); তামিল [tamil] *execution of an order* (ta°mīl); নজদিক, নজিক, নগিচ [nɔʒdik, nɔʒik, nogiʧ] *near* (nazdik); হকীম [ɦɔkim] *doctor practising the Arabic system of medicine* (ḥakīm); বকশীশ [bɔkʃiʃ] *present* (baxšīš); মুনিব, মনিব [munib, monib] *master* (munīb); জমী [ʒɔmi] *land* (zamīn); শরীক [ʃɔrik] *sharer* (šarīk); শিরিশ, শিরেশ [ʃiriʃ, ʃireʃ] *glue* (sirīš, sirēš); etc., etc.

« ē » > এ [e]: আমেজ [ameʒ] *shade, faint trace, nuance* (amēz); আন্দেশা [andeʃa] *reflexion, concern* (andēšah); ইংরেজ [iŋreʒ] *English* (ingrēz, angrēz, Arabic inklīs-); জেব [ʒe:b] *pocket* (jēb < Ar. jayb); তেজ [te:ʒ] *sharp, quick* (tēz); শের [ʃe:r] *lion* (šēr); দরবেশ [dɔrbeʃ] *Dervish, Mohammedan religious mendicant* (darwēš); পেশ [pe:ʃ] *presenting* (*as a suit in law*) (pēš); দস্তাবেজ [dɔstabeʒ] *papers* (*in a law-suit*) (dastāwēz); দায়ের [daer] *pending* (*law-suit*) (dāyēr); দেওয়ান [deoan] *minister, manager, office master* (dēwān), also দেয়ান [dean]; নেক [ne:k] *good* (nēk); পেশা [peʃa] *trade, occupation* (pēšah); ফেরেব [phereb] *deceiving* (farēb); বে [be:] *prefix of negation* (bē-); বেশ [be:ʃ] *well, good* (bēš); রেশম [reʃɔm] *silk* (rēšam); সফেদ [ʃɔphed] *white* (safēd); হাবেলী [ɦabeli] *mansion, palace* (ḥawēlī); হামেশা [ɦameʃa] *always* (hamēšah); সরখেল [ʃɔrkhel] *commander of a troop* (sar-xēl); etc., etc.

In ইংরাজ [iŋraʒ], as a variant of ইংরেজ [iŋreʒ], we have an irregular change of « ē » to [a]: cf. a phrase like ইংরাজ-রাজ [iŋraʒ-raʒ] *the English rulers*, in which the jingle is responsible for the change in the vowel.

For loss of Persian « ɪ, ē », and insertion of Bengali [i, e] in Persian loan-words, see below.

(3) Persian « ū, ō ».

318. Like ی, Early Persian و had two sounds, which are both preserved in Bengali, as [u, o]. Examples:

Persian « ū » > Bengali উ, ঊ [u]: আবলুশ [abluʃ] *ebony* (abnūs); ইউনানী [iunani] *Greek* > *Arabic* (*system of medicine*) (yūnānī); ওজু [oʒu]

ablutions (waẓū > wuḍu); উর্দু [urdu] the *Urdū language* (urdū); ইহুদী [iɦudi] *Jew* (yahūdī); কানুন [kanun] *law, customs* (qānūn); কুরনিশ [kurniʃ] *bow* (*before a prince*) (kūrniš); খুশী [khuʃi] *joy* (xūš+ī); খুব [khu:b] *much* (xūb); খুন [khu:n] *blood, murder* (xūn *blood*); তরাজু [tɔraʒu] *scales* (tarāzū); দুরবীন [durbin] *telescope* (dūr-bīn); নূর [nu:r] *light* (nūr); রুমাল [rumal] *handkerchief* (rū-māl); সুরৎ [ʃurɔt] *beauty* (sūrat); সুরু, শুরু [ʃuru] *beginning* (šurū°); বারুদ [barud] *gunpowder* (bārūd); সুদ [ʃu:d] *interest on money* (sūd); সুরুয়া, শুরুয়া [ʃurua] *broth, soup* (šūrwā < šōrbā, šūrbā); হুজুর [ɦuʒur] *presence* > *lordship* (ɦaẓūr > ɦuḍur); হুরী [ɦuri] *fairy, heavenly nymph* (ɦūrī); etc.

Persian « ō » > Bengali ও [o]: কোপ্তা [koptɑ] *pounded meat-balls in soup* (kōftah); আফশোশ [ap(ɦ)ʃoʃ] *grief* (afsōs); কানুনগো [kanun-go] *registrar of a district* (qānūn-gō); খোসামদ, -মোদ [khoʃɑmɔd, -mod] *flattery, fawning* (xōš-āmad); গোস্ত [gostɔ] *meat* (gōšt); গোর [go:r] *grave* (gōr); গোল [go:l] *crowd, noise* (gōl); জোর [ʒo:r] *strength* (zōr); তোক [to:k] *iron collar* (*for punishment*) (tōq < tawq); তোতা [totɑ] *parrot* (tōtā); তোপ [to:p] *cannon* (tōp); তোবা [tobɑ] *repentance* (tōbah); তোষক [toʃok] *mattress* (tōšak); দারোগা [darogɑ] *superintendent* (*of Police*) (dārōgah); দোকান [dokɑn] *shop* (dōkān < dukān); পোদ্দার [poddar] *cashier, money-changer* (fōtah-dār); বন্দোবস্ত [bɔndobɔstɔ] *arrangement* (bandōbast, band-u-bast); মোম [mo:m] *wax* (mōm); বোয়, বো, বয় [boe, bo:, bɔe] *smell, perfume* (bōy); রোশনী [roʃni] *illumination* (rōšanī); রোজ [ro:ʒ] *day* (rōz); শোর [ʃo:r] *din, tumult* (šōr); etc., etc.

[ɔ] and [o] being interchangeable, in a few cases we have [ɔ] for [o] in Bengali: *e.g.*, বয় = বো [bɔe, bo:] above; লবান [lɔbɑn] *gum, incense* (lōbān < Ar. lubān); মৌরশ [mouroʃ, mouroʃ] *hereditary* (maurūš < mawrūθ); বন্দবস্ত [bɔndɔbɔstɔ] *arrangement* (bandōbast, band-u-bast); etc.

For changes of a general nature of « ū, ō », see below.

[III] The Diphthongs.

(1) Persian « ai ».

319. Persian « ai » becomes [oi] in Bengali when the next syllable has [i, j] in the original form: *e.g.*, কৈফিয়ৎ [koiphiɔt] *explanation*

(kaifiyat); গৈবী [goibi] *secret* (ġaibī), but cf. গায়েব [gaeb] *secret* (ġaib); তৈয়ার, তয়ের [toiar, toer] *ready, prepared* (taiyār); সৈয়দ [ʃoiəd] *a descendant of the Prophet of Arabia, an Arab Mohammedan, a class among Mohammedans* (saiyad); etc.

In other cases it becomes [əe], [ai, ae], or [e]: *e.g.*, খয়রাত [khəerat] *charity* (xairāt); খয়ের খাঁ [khəerkhā] *well-wishing, loyal* (xair-xʷāh); ময়দা [məeda] *flour* (maidah); ময়দান [məedan] *field* (maidān); কয়েদ [kəed] *imprisonment* (qaid); বয়েত [bəet] *verse, couplet* (bait); শয়তান [ʃətan] *Satan* (šaiṫān); ফয়সলা [phəeʃola] *agreement* (faisalah); বগয়রা [bəgəera] *and the rest* (waġairah); ছয়লাপ [ʧhəelap] *inundation* (sail-āb); হয়রান [həeran] *worried* (ĥairān); etc.

গায়েব [gaeb] *hidden* (ġaib); পায়খানা, পাইখানা [paekhana, paikhana] *water-closet* (pai-xānah); পাইকার, পাইকের [paikar, paiker] *wholesale dealer* (paikār); বায়না [baena] *advance money* (baiʿānah); etc.

আলেকোম [alekom] as in সেলাম আলেকোম *the Mohammedan salutation* = *peace be with you* (salām ʿalaikum); পয়গম্বর [pəegəmbər], beside পেগম্বর [pegəmbər, pægəmbər] *prophet* (paiġambar); শেখ [ʃe:kh] *a title* (šaix); etc., etc.

Instances also occur which show the transformation of « ai » to [ə] and [a], by syncope of the second element: *e.g.*, গায়েব [gaeb] *hidden*, also গাপ [ga:p] (ġaib); কাঁচী [kãʧi] *scissors* (Turkī qainci); বেগর [begər] *without* (bi-ġair). The case of তোকমারী [tokmari] *the seed of ocymum pilosum* (tuxm-i-raiĥān) is due partly to folk-etymology (cf. মার « mār » *kill*), through intermediate forms like [*tokmerean, *tokmareā].

(2) Persian « au ».

320. Persian « au » commonly occurs as [ou] in Bengali: it is also found as [əo], and occasionally also as [au, ao] and [o]: *e.g.*, তৌজি [touʤi] *a description roll* (taujīh); দৌলৎ [doulət] *prosperity* (daulat); ফৌজ [phouʤ] *troops* (fauj); চৌবাচ্চা [ʧoubaccʃa] *tank, cistern* (caubaccah); ফৌৎ [phout] *death* (faut); মৌসম [mouʃəm] *season* (mausim); মৌজা [mouʤa] *area, district* (mauẓaʿ < mawđaʿ-); মৌজুদ, মোজুদ, মজুদ [mouʤud,

moʒʒud] *existing, present* (maujūd); মৌরুশী [mouruʃi] *inherited* (maurūšī < maurūθī); মৌলবী, মৌলভী [moulobi, moulovi] *Mohammedan scholar* (maulavī); রৌগন, রওগন, রোগন [rougɔn, rɔogɔn, rogɔn] *fat, polish* (raugan); রৌশন in রৌশন চৌকী [rouʃɔn ʧouki] *Indian musical band* (raušan-); সওগাৎ [ʃɔogɑt] *present* (saugāt); সৌদা, সওদা [ʃouda, ʃɔoda] *purchase, articles* (saudāh); হাওদা [ɦɑɔda] *howdah* (haudah); নৌবৎ, নওবৎ [noubɔt, nɔobɔt], also নহবৎ [nɔɦɔbɔt < nɔɔbɔt, nɔobɔt] *Indian musical band* (naubat); হৌজ [ɦiouʒʒ] *cistern* (ɦauz̤ < ɦawḍ-); সৌখীন [ʃoukhin] *desirous (of fancy things), amateur, fancy (articles)* (šauqīn); ঔরঙ্গজেব, আওরঙ্গজেব, অওরংজেব, etc. [ourɔŋʒʒeb, ɑorɔŋ-, ɔorɔŋ-], also আরংজেব [ɑrɔŋʒʒeb] *a name = the emperor Aurangzēb*; etc., etc.

In a few words, « au » occurs as [ɔ] in Bengali: *e.g.*, সখ [ʃɔ:k(h)] *pleasure (in fine things), good taste, luxury* (šauq); মজুদ [moʒʒud < moʒʒud], see above; জহর [ʒʒɔɦɔr] *precious stones, gems* (jauhar); নকর, নৌকর, নোকর [nɔkɔr, noukɔr, nokɔr] *servant* (naukar); etc. This modification is based on the Hindōstānī value of « au » as [ɔo, ɔ:].

Bengali বেলোয়ারী [beloɑri] *made of crystal or glass* (billaurī) is based on an Indianised form « *bilawarī ».

[IV] Changes of a General Character.

(1) Combination of Two Separate Vowels.

321. Two distinct vowels or syllables separated from each other by a semivowel or the « hamzah » in Persian (= « hamzah » or « ʿayn » in Arabic) combine into a diphthong in Bengali: *e.g.*, আয়েন্দা [ɑenda] *coming, future, next* (āʾindah, āyindah); আয়না [ɑena] *mirror* (āʾinah); আয়মা [ɑema] *land given in (charitable) endowment* (āʾimmah); আশনাই [ɑʃnɑi] *friendship > love intrigue* (āšnāʾī); কলাই [kɔlɑi] *plating, gilding* (qalaʿī); কসাই [kɔʃɑi] *butcher* (qasāʾī); কায়েম [kɑem] *standing, fixed* (qāʾim); কায়দা [kɑeda] *rule, mode, manners* (qaʿidah); তাউস [tɑuʃ] *peacock* (ṯāwus, ṯāʾūs); লায়েক [lɑek] *worthy, fit* (lāʾik); নায়েব [nɑeb] *agent, sub-agent* (nāʾib); ফায়দা [phɑeda] *profit* (fāʾidah); বালাই [bɑlɑi] *calamity* (bălā); মেরজাই [merʒʒɑi] *a short coat* (mɪrzāʾī); মুদ্দই [muddoi]

claimant, suitor (muddaʔī); রোশনাই [roʃnai] *illumination* (rōšanāī); শানাই [ʃanai] *a pipe (in music)* (šah-nāʔī); সরাই [ʃɔrai] *inn* (sarāʔī); হালুই, হালওয়াই [fialui, fialoai] *pastry or sweetmeat maker* (ħalwāʔī); হাউই [fiaui] *rocket* (hawāʔī); etc., etc.

Within Bengali itself, when there is hiatus after the dropping of an intervocal [fi] < Persian [h] = Persian « h », Arabic [ħ, fi], the two « udvṛtta » vowels combine into a diphthong: *e.g.*, সেপাই [ʃepai] *soldier, sepoy* (sipāhī); সোরাই [ʃorai] *earthen jar to cool water* (surāħī); সেয়াই, স্যাহী, স্যাই [ʃeai, ʃæi] *ink* (siyāhi); সই [ʃoi] *signature, valid* (saħīħ); সাহেব, সায়েব [ʃa(fi)eb] *master, European* (sāħib); খেয়াস [kheaʃ] *desire* (xʷāhiš); etc., etc.

(2) Dropping of Vowels.

(i) Initial Vowels (Aphæresis, Aphesis).

322. Dropping of initial syllables is extremely rare in Persian loan-words. The word সওয়ার, সোয়ার [ʃɔoar, ʃoar], noted at p. 313, is an Early MIA. borrowing from Old Persian (cf. « asavāri » in the Bharhut inscriptions < Old Pers. « asabāri »). In তেয়াৎ [teat] *caution, wariness* (iħtiyāt) there is loss of initial « i- ». Other examples are not found.

(ii) Vowels in the interior of a word (Syncope).

323. There is dropping or assimilation of interior vowels to a considerable extent.

[a] « -ă- »: মুচ্ছুদ্দী [mucʃhuddi] *accountant, office-master* (mutăsaddī); মশলা [mɔʃla] *maxim, judgment* (masalah); চাক্‌রান্ [ʧakran] *free land for servants* (cākărān); মাতবর [matbɔr, madbɔr] *respected person, elder* (*muătăbăr < muʕtăbar); তায়নাৎ, তয়নাৎ [taenat, tɔenat] *appointment, duty* (taʕăyyunāt); নাতোয়ান [natoan] *weak, feeble* (nātăwān, nātūwān); নিমকী [nimkī] *salted* (namăkīn); রাইয়ৎ, রায়ৎ, রেওৎ [raiɔt, raĕɔt, reot] *tenant farmer* (raʕăyyat); তছরুপ [toʧhrup] *embezzlement* (tasărruf); মোকরর [mokrɔr] *confirmed* (muqărrar); ফোয়ারা [phoara] *fountain* (făwwārah); মোতফরকা [motphɔrka] *scattered, miscellaneous* (mutăfarriq); রমজান

[rɔmʃʒan] *Mohammedan Lent* (ramăḍān); etc., etc. There are cases of loss of internal « ă (ā) » by assimilation: *e.g.*, রেয়াৎ [reat] *protection, abatement* (riʿāyăt); জমীজেরাৎ [ʃʒomiʃʒerat] *land and property* (zamīn zirāʿăt); তয়নাতি [tɔenati] *relating to service* (taʿăyyunātī); বিলাত [bilat] *foreign land, Europe* (wilāyăt); মোতাজ্জে [motaɟʃʒe] *favorable* (mutăwăjjah); মোতায়েন [motaen] *appointed* (mutăʿayyin); মোদ্দা [modda] *the thing asserted, matter under discussion* (muddăʿā); মানে [mane *meaning* (măʿānī); হালদার [ɦaldar] *a surname* < *military or civil officer* (ɦăwālăh-dār).

[b] « -ĭ-, -ĕ- »: generally after « ā »: *e.g.*, আলাদা, আলাহিদা [alada < ala(ɦi)ida] *separate* (ʿalāĥidah); এক্তার < এক্তিয়ার [ektar < ektiar] *authority* (ixtiyār); কাওয়াজ [kawaʃʒ] *regulations, parade of troops* (qawāʿid); আস্তে [aste] *slowly* (ahistah); জহরৎ [ʃʒɔɦɔrat] *jewellery* (jawāhirāt); জাস্তি [ʃʒasti] *excess* (*zyāzti, *ziyāðti < ziyādătī); ভিস্তি [bɦisti] *water-carrier* (bihištī); etc.

The « ĭ, ĕ » of the « iẓāfat » is dropped in some cases in Persian itself: *e.g.*, খানসামা [khanʃama] *butler* (xān-i-sāman); রায়রায়াঁ [raerae͂] *a Persianised title=chief* (rāy < rājā) *of chiefs* (rāy-i-rāyān); etc.

Cf. also হাজরে [ɦaʒʒre < *ɦaʒʒirā] *attendance* (ĥāẓir < ĥaḍir), ‡মোর্চে [morʧe] *a song of lament of the Kerbela day* (marŝiyyah < marθiyyah), etc., through Bengali contraction by Umlaut and Vowel-Harmony.

[c] « -ŭ-, -ŏ- »: মামলা [mamla] *law-suit, affair* (muʿāmlah); মাফিক [maphik] *suitable to, agreeing with, in measure with* (muwāfiq); মক্কেল [mɔkkel] *client* (muʿaqqal); মাতবর [matbɔr] *elder* (muʿatbar); তয়নাৎ [tɔenat] *appointment* (taʿayyunāt); তফাৎ [tɔphat] *distance* (tafāwut); তোয়াক্কা [toakka] *reliance* (tawaqquʿ); মায়না [maena] *view, inspection* (muʿāynah); কাবলী [kabli] beside কাবুলী [kabuli] *of Kabul* (Kābulī). Cf. MB. তপাস [tɔpaʃ] *search*, NB. তাবাস in তত্ত্ব-তাবাস « tăttwă-tābāsĥ » *enquiry after well-being* (*with presents of sweets*): see footnote, p. 213.

[d] « -ā- »: খাজনা [khaʒʒna], *rent tax* (xazānah); তৈরী beside তৈয়ারী [toiri < toiari] *prepared* (taiyārī); বায়না [baena] *advance money* (bayʿānah); মশলা [mɔʃla] *ingredients, spices* (masālaĥ < -liĥ); মাইনে, মাহিনে [mā(ɦi)ine] *monthly pay* (māhānah, māhiānah); রওনা [rɔona] *departed* (rawānah); হাউই [ɦaui] *rocket* (*hawī < hawāī); etc.

[e] « -I-, -ē- »: after Epenthesis and Harmonic Change: গালচে < গালিচা [galʧe < galiʧa] *carpet* (gālīcah); ফরমাষ beside ফরমাইষ [phɔrma(i)ʃ] *order, commission* (farmāʾīš); খদ্দের [khoddɛr] *buyer* (xarīdār); পল্‌তে > পলিতা [polte < polita] *wick of a lamp* (fatīlah > *falītah); হাবলী, হাউলী [habli, hauli] *mansion* (ḥawēlī); etc.

[f] « -ū-, -ō- »: loss rare: আফিম, আপিম [ap(h)im] *opium* (afyūm); দাদখানি [dadkhani] *a kind of rice* (dāʿūd-xānī)—here we have change by epenthesis to দৌদখানী [daʊdkhani] first: see p. 379.

(iii) Final Vowels.

324. The final short vowels of Arabic forms were dropped in Persian. Excepting « -ăh > -ă », final short vowels are non-existent in New Persian. Bengali as a rule preserves the final vowels of Persian. The words আলবৎ, আলবাৎ [albɔt, albat] *certainly* (albattah) and বেবাক [bebak] *all* (bē-bāqī) are among the very few instances in Bengali where a final sound, expected to be retained, is dropped.

(4) Addition of Syllables.

(i) In the interior of words. Anaptyxis.

325. Persian versification recognises a short vowel, the « nīm-fatḥah » or *half-fatḥah*, between consonants (a liquid, aspirate, nasal or sibilant, or semi-vowel, followed by another consonant). A short anaptyctic vowel was thus present in the Persian speech in early times. In some cases, this indistinct glide vowel has developed into a full sound in Bengali: *e.g.*, নাজেহাল [naʤehal] *extreme trouble* (< *naza²-ḥāl < naz⁽-ḥāl); আহাম্মুক [ahammuk] *a fool* (*aḥmaq < aḥmaq); সোহরৎ [ʃohorɔt] *publishing, as news* (*šoherat < šuhrat); মহকুমা [mɔhɔkuma *sub-division* (*of a district*) (*maḥekumah < maḥkumah); মেহন্নৎ [mehɔnnɔt] *labour* (*mĕḥɔnat < mihnat); বেলোয়ারী [beloari] *glass, crystal* (*billawərī < billaurī); etc.

Anaptyxis of short vowels characterised the Persian transformation of Arabic words (cf. P. Horn, 'Neupersische Schriftsprache,' pp. 39-41, in

the 'Grundriss der iranischen Philologie'). Anaptyxis is also found in Bengali: also intrusive vowels between two stops ending a word. (See pp. 374 ff.) Forms like « qarz̤, wazn, naql » etc. of Persian were not tolerated: they were modified to « qaraz̤ (or qarz̤a), wazan, naqal » before becoming Bengali.

Insertion of [ɑ, ə > o]: ‡আকলমন্দী [ɑkəlmondi] *cleverness* (« ʿaql-mandī »: but cf. আক্কেল [ɑkkel] *sense* < « ʿaql »): আতর [ɑtər] *otto* (ʿaṫr < ʿiṫr); ওজন [oʤ̌ən] *weight* (wazn); ওজর [oʤ̌ər] *objection, excuse* (ʿuz̤r < ʿuḏr); ওয়াকফ [oɑkəph] *religious trust* (*property*) (waqf); কবজ [kəbəʤ̌] *receipt* (qabz̤ < qabḍ); করজ [kərəʤ̌], also কর্জ্জ [kərʤ̌ə] *borrowing* (qarz̤ > qarḍ); কসম [kəʃ̌əm] *oath* (qasm); কবর [kəbər] *grave* (qabr); কদর [kədər] *value, worth* (qadr); খরচ [khərəʧ̌] *expense* (xarc): খসম [khəʃ̌əm] *husband* (xasm); গরম [gərəm] *warm* (garm); চশম [ʧ̌əʃ̌əm] *eye* (caśm); জখম [ʤ̌əkhəm] *wound* (zaxm); জলদ [ʤ̌ələd] *quick* (*in music*) (jald); তরফ [tərəph] *side* (ṫarf); দরদ [dərəd] *pain* (dard); নরম [nərəm] *soft* (narm); নহর [nəhər] *channel* (naḥr); পশম [pəʃ̌əm] *wool* (pašm); বরফ [bərəph] *ice* (barf); বহর [bəhər] *sea, width* (baḥr); মগজ [məgəʤ̌] *brains* (mag̤z); মতন [mətən] *text, reading* (maṫn); মোহর [mohər] *seal* (muhr); রকম [rəkəm] *sort* (raqm); শহর [ʃ̌əhər] *city* (šahr); সদর [ʃ̌ədər] *headquarters* (sadr); শরম [ʃ̌ərəm] *shame* (šarm); হরফ [hərəp(h)] *letter of the alphabet* (ḥarf); etc., etc.

[i, e]: আক্কেল [ɑkkel] *sense* (*in man*) (ʿaql); এলেম [elem] *learning* (ʿilm); জিনিস [ʤ̌inis̤] *article* (jins); জিগির [ʤ̌igir] *courage* (jigr); ‡জেলেদ [ʤ̌eled] (*leather*) *binding of book, volume* (jild); নিরিখ [nirikh] *scales, balance* (nirx); ফতে < ফতেহ্ [phəte < *phəteḥ] *victory* (fatḥ); ফিকির [phikir] *trick, ruse, plan* (fiqr); মিছিল [miʧ̌hil] *procession* (miśl < miθl); মেহেরবানী [meherbɑni, *kindness* (mihrbānī); etc., etc.

An intrusive [i] occurs before the suffix « -ānah » in Bengali forms of some Persian words: *e.g.*, মাহিয়ানা > মাহিনা, মাইনে [mɑhiɑnɑ, mɑhinɑ, mɑine] *monthly pay* (māh-ānah); সালিয়ানা beside সালানা [ʃ̌ɑliɑnɑ, ʃ̌ɑlɑnɑ] *annual* (sāl-ānah); শামিয়ানা [ʃ̌ɑmiɑnɑ] *awning* (šām-ānah); সাহেবিয়ানা [ʃ̌ɑhebiɑnɑ] *affecting European ways* (sāḥib-ānah); etc. Cf. also জরিমানা [ʤ̌ɔrimɑnɑ] *fine* (jar-mānah), Hindōstānī « jarīmānah » (so Hindōstānī « ganjīfah » *playing cards* = Persian « ganjăfah »).

[u, o] : কুলুপ [kulup] *padlock* (qulf < qufl) ; কোরোক, ক্রোক [korok, kro:k] *attachment of property* (Turki qurq) ; জুলুম [ʃʒulum] *oppression* (zulm) ; বুরুজ [buruʃʒ] *bastion* (burj) ; মোরগ, মোরোগ [morog] *cock* (murg) ; হুকুম [hukum] *order* (ħukm) ; etc., etc.

(ii) At the end of words.

Final groups of two stops, or of a fricative or sibilant *plus* stop, ordinarily take the [ə, o > o] vowel finally in Bengali (see p. 304). *E.g.*, ওক্ত [oktə] *time* (waqt) ; গোস্ত [gostə] *flesh meat* (gōšt) ; চোস্ত [cʃostə] *quick, clear* (cust) ; খোন্দকার [khondəkar], beside খোনকার, খনকার [khonkar, khənkar] *a title* (=*reader*) (xwand-kār) ; ‡ জঙ্গ [ʃʒongə], beside জং [ʃʒong] *battle* (jang) ; তক্ত [təktə] *throne* (taxt) ; দরখাস্ত [dərkhastə] *petition* (dar-xwāst) ; দরিয়াপ্ত [doriaptə] *enquiry* (dar-yāft) ; দস্তখত [dəstəkhət] *signature* (dast-xatt) ; দোরস্ত [dorostə] *right, fit* (durust) ; পছন্দ [pɔcʃhəndə] *choice* (pasand) ; পোক্ত [poktə] *ripe, seasoned, cooked* (puxt) ; ফর্দ্দ [phərdə] *list* (fard) ; ফস্ত [phəstə] *bleeding, opening a vein* (fasd) ; বরদাস্ত [bərdastə] *tolerate* (bardāst) ; মক্স [məkʃə] *writing exercise* (mašq) ; রপ্ত [rəptə] *practice, habit* (rabt) ; জব্দ [ʃʒəbdə] *punished, punishment* (zabt<ðabt) ; লাজবর্দ্দ [laʃʒbərdə] *lapis lazuli* (lājaward) ; সনাক্ত [ʃənaktə] *identification* (šināxt) ; সর্ত্ত, শর্ত্ত [ʃərtə] *condition* (šart) ; সোপরদ্দ [ʃopərəddə] *charge over, hand over* (supurd) ; হদ্দ [ɦədda] *limit* (ħadd) ; হেস্তনেস্ত [ɦestənestə] *final settlement* (hast-nīst) ; etc. In ফিরিস্তি [phiristi] (fihrist) *list*, জুল্পী [ʃʒulpi] *side lock* (zulf), and বালাই [balai] *calamity* (balā), we have a final [i] added.

Some of the above words, with liquid or nasal, ought to have taken a vowel in the interior rather than at the end.

Words with a final « -h », which was pronounced in Persian, either drops the « -h », or retains it and takes a final vowel [ə, a] after it (see p. 557) ; *e.g.*, রাহ্ [rafa] *way, journey* (rāh).

Nasalisation of vowels : this is treated under the Nasals, below.

THE CONSONANTS.

[I] The Glottal [h], and [ʿ] of Arabic.

326. The Persian [h] sound represents also the Arabic [ħ, ɦ].

Bengali, Persian « h » becomes হ [ɦ] : but except where initial, Bengali [ɦ] is a very unstable sound, and is frequently dropped.

Initial « h- » : হজম [ɦɔʒɔm] *digestion* (haẓm < haḍm) ; হপ্তা [ɦɔpta] *week* (haftah) ; হাওয়া [ɦaŏa] *air* (hawā) ; হাজার [ɦaʒar] *thousand* (hazār) ; হামেশা [ɦameʃa] *always* (hamēšah) ; হেঁদু, হিঁদু, হিন্দু [ɦẽdu, ɦĩdu, ɦindu] *Hindu* (Hindū) ; হুনুর [ɦunur] *skill* (hunar) ; হক [ɦɔ:k] *truth* (ḥaqq) ; হজরৎ [ɦɔʒrɔt] *presence* = *exalted person* (ḥaẓrat < ḥaḍrat) ; হাকিম [ɦakim] *judge* [ḥākim) ; হদ্দ [ɦɔddɔ] *limit* (ḥadd) ; হলফ [ɦɔlɔp(h)] *oath* (ḥalf) ; হাফেজ [ɦapheʒ] *protector, one who has the entire Koran by heart* (ḥāfiz) ; হাজৎ [ɦaʒɔt] *lock-up* (ḥājat) ; হালাল [ɦalal] *lawful* (*meat*) (ḥalāl) ; হামলা [ɦamla] *attack, raid* (ḥamlah) ; হুঁকা [ɦũka] *hookah* (ḥuqqah) ; হিসাব [ɦiʃab] *accounts* (ḥisāb) ; হুরী [ɦuri] *heavenly nymph* (ḥūrī) ; হৌজ [ɦouʒ] *cistern* (hauẓ < ḥawḍ) ; etc., etc.

In parts of East Bengal, initial [ɦ] becomes [ʔ] : see p. 269.

Interior « h » :

(i) Intervocally it generally remains, although its articulation is very much weakened : *e.g.*, আলাহিদা, আলাদা [alaɦida, alada] *separate* (ʿalāḥidah) ; এস্তিহার, ইস্তাহার [estɛɦar, ista-] *notice* (ištihār) ; ওজুহাৎ [oʒuɦat] *causes, grounds* (wajūhāt) ; এলাহি [elaɦi] *God ; magnificent* (ʔilāhī) ; জেহাদ [ʒeɦad] *religious war* (jihād) ; শাজাহান [ʃaʒaɦan] *the Emperor Shāh Jahān* (Šāh-jahān) ; জাহির [ʒaɦir] *manifest* (zāhir) ; বহাল, বাহাল [bɔɦal, baɦal] *confirmed* (baḥāl) ; বেহোঁশ, বেহুঁশ [beɦõʃ, -hũʃ] *senseless* (bē-hōš) ; মোহম্মদ [moɦɔmmɔd] *Muhammad* (muḥammad) ; মোহরম [moɦɔrɔm] *the Muharram festival* (muḥarram) ; এজাহার [eʒaɦar] *deposition* (izahār) ; রেহাই [reɦai] *excuse* (*as a fault or debt*) (rihāʾī) ; নেহা(য়)ৎ [neɦa(e)t] *excessive* (nihāyat) ; সাহেব [ʃaɦeb, ʃaeb] *gentleman, European* (sāḥib) ; বহস [bɔɦɔʃ] *argument, dispute* (baḥṡ < baḥθ) ; etc.

Intervocal [h] in Bengali frequently disappears : see p. 552. Examples from the Persian loan-words—খেয়াস [kheaʃ] *desire* (xwāhiš) : আলাদা [alada] *separate* (ʿalāḥidah) ; সই [ʃoi] *signature* (šaḥīḥ) ; আস্তে [aste] *slowly* (āhistah) ; হামরাই [ɦamrai] *succouring, eager to help* (ham-rāhī) ; etc. In ভিস্তি [bɦisti] *water-carrier* (bihištī), we have aspiration through contact by loss of intervening vowel.

(ii) « h » forming the first element in a consonant nexus (a) either requires the prop of an intrusive vowel to remain; or (b) is dropped, modifying in some cases the preceding vowel; or (c) it is changed to [i, e] : *e.g.*, (a) তহশীল [təɦioʃil] beside তশীল [toʃil] *treasury* (taɦsīl); ফিহিরিস্তি, ফিরিস্তি [fi(ɦi)risti] *list* (fihrist); মেহন্নৎ [meɦonnət] *labour* (mihnat); চেহেরা, চেহারা [cʰehera, -ara] *figure, portrait* (cihrah); মোহর [moɦor] *seal, a gold coin* (muhr); তহবীল, তবীল [təɦobil] *purse, treasury* (taɦwīl); বহর [bəɦər] *sea, width* (baɦr); সহবৎ [ʃəɦobət] *association* (saɦbat); শহর [ʃəɦor] *city* (šahr); মহকুমা [məɦokuma] *a part of a district* (maɦkumah); etc., etc.; (b) তোফা [topha] *fine* (tuɦfah); দলীজ [dolizʒ] *portico* (dahlīz); প(ত)লোয়ান [paloan, pəloan] beside পহলওয়ান [pəɦloan] *wrestler, athlete* (pahlwān); বল্লম [bəlləm] *lance* (bahlam); শানাই [ʃanai] *pipe* (*music*) (šah-nāʾī); সানক, সানকী [ʃanək, ʃanki] *plate* (saɦnak); মাশুল [maʃul] *tax, postage, fare* (maɦsūl); মামুদ [mamud] *a name* (maɦmūd); সেৎখানা [ʃetkhana] *water-closet* (saɦt-xānah); মেরাপ [merap] *temporary roofing* (*of mats*) (mihrāb); etc.; (c) দইসৎ, দয়সৎ [doiʃət, dəeʃət] *alarm, fear* (dahsat); বায়না < বাহানা [baena < baɦana] *excuse, plea, demand* (*bahnā < bahānah); etc.

In মেথর [mæthər] *prince* > *sweeper* (mihtar), there is metathesis followed by aspiration.

« h » forming the second element of a consonant group is dropped: *e.g.*, ইসাদী [iʃadi] *witness* (išhādī); মলম [məlom] *ointment* (marɦam); সারেং [ʃareŋ] *master of small steamer* (sar-hang), etc.

Final « h ». The « hā-i-muxtafī » of Persian is changed, with the preceding « ă », to [a] in Bengali: see p. 579, *ante*. *E.g.*, তা [ta:] *sheet of paper* (tah); তাজা [taʒʒa] *fresh* (tāzah); দানা [dana] *grain* (dānah); etc. Final « h » after « ā » where it was pronounced in Persian, is generally retained in Bengali, with the prop of a final vowel: *e.g.*, সাহ(ী) [ʃaɦo, -ɦa] beside শা [ʃa:] *king* (šāh); রাহা [raɦa] *way* (rāh); সরবরা(হ) [ʃorbora(ɦo)] *supply* (sar-barāh); রাহাজানী [raɦaʒʒani] *high-way robbery* (rāh-zanī); নিকা(হ) [nika(ɦo)] *marriage* (nikāh), etc. In other cases « -h » is merely dropped: *e.g.*, সহী, সই [ʃo(ɦi)i] *signature* (šaɦīh); তম্বি [tombi] *chiding, threatening* (tanbih); তৌজি [touʒʒi] *district* (taujih).

Final « h » (=Arabic « ħ » after a consonant) normally becomes [ɔ] in Bengali: *e.g.*, ফতে [phɑtɔ] *victory* (fatħ); সোলে, ছোলে [ʃole, cʃhole, sole] *agreement* (sulħ); সোবে [ʃobe] *dawn* (subħ), but cf. সুবা [ʃubɑ] *province* (sūbah: sūbah-i-Bangālah = সুবে বাঙ্গলা [ʃubɔ bɑŋlɑ]).

327. Arabic [ʿ], in Persian resulting in the glottal stop [ʾ]. This is lost to Bengali, normally: *e.g.*, আজব [ɑʃʒɔb] *strange* (ʿajab); আতর [ɑtɔr] *otto* (*ʿatr < ʿitr); ওয়াজ [oɑʃʒ] *sermon, preaching* (waʿz); আরজ [ɑrɔʃʒ] *petition* (ʿarz̤ < ʿarḍ); আরবী [ɑrbi] *Arabian, Arabic* (ʿarab-); ইজ্জৎ [iʃʃɔt] *honour* (ʿizzat); ঈদ [i:d] *the ʿĪd festival* (ʿīd); ওজর [oʃʒor] *excuse* (ʿoz̤r> ʿuḏr); আয়েশ [ɑeʃ] *pleasure, comfort* (ʿaiš); অকু, ওকু [oku] *place where an event took place* (waqūʿ); ইনাম [inɑm] *largesse* (inʿām); এতালা [etɑlɑ] *summons* (iṭṭālāʿ); খেলাৎ [khelɑt] *robe of honour* (xilʿat); জমা [ʃʒomɑ] *collection, deposit* (jamʿ); দোয়া [doɑ] *prayer* (duʿā); মোনফা, মুনফা [monɔphɑ, munɔphɑ] *profit* (munafaʿ); মৌজা [mouʃʒɑ] *district* (mauz̤aʿ > mawḍaʿ); তাঁবে [tãbe] *in a subordinate position* (tābiʿ); etc.

In a few cases, however, interior [ʿ > ʾ], when pre-consonantal or intervocal, or final [ʿ], has developed into a palatal semi-vowel, « y » (=[ĕ] in Bengali): *e.g.*, তায়দাদ [tɑedɑd] *enumeration, sum, approximation* (taʿdād); জমায়েৎ [ʃʒomɑet] *gathering* (jamāʿat); বিদায় [bidɑe] *farewell* (« widāʿ »: commonly regarded as a Sanskrit formation = « vidāya »); তায়ালা [tɑeɑlɑ] *the Exalted One* (Allāh taʿālā *God is exalted*); ‡নিয়ামৎ [niɑmɔt, neĕɑmɔt] *grace, gift* (niʿmat); সায়েত, সাইত [ʃɑĕet, ʃɑit] *time, watch* (sāʿat).

[II] The Uvular stop [q], and the Velars [k, g; x, xʷ, ɣ].

328. [q] of Arabic,=both [k] and [ɣ(g?)] in Early Persian, and [q] of Turkī, occur normally as ক [k] in Bengali, but there are a few words which show গ [g].

[q] > [k]: Initial: কয়েদ [kɔed] *imprisonment* (qaid); কদম [kɔdɔm] *pace, step* (qadam); কালন্দর [kɑlɔndɔr] *mendicant, 'calender'* (qalandar); কোরান [korɑn] *the Koran* (qurʾān); কোরবানী [korbɑni] *sacrifice* (qurbānī); কুলুপ [kulup] *padlock* (qufl); কবজ [kɔbɔʃʒ] *receipt, bond* (qabz̤ < qabḍ); কোরোক, ক্রোক [k(o)rok] *attachment of property* (Turkī qurq); কসাই

[kɔʃai] *butcher* (qasāʔī) ; কেল্লা [kella] *fort* (qilʕah) ; কালিয়া [kalia] *meat curry* (qalyah) ; কুদরৎ [kudrɔt] *might* (qudrat) ; etc.

Medial : আক্কেল [akkel], also ‡আকল [akɔl] *sense, wisdom* (ʕaql) ; একরার [ekrar] *acknowledgment* (iqrār) ; এলাকা [elaka] *jurisdiction* (ilāqah) ; ওক্ত [oktɔ] *time* (waqt) ; হুঁকা [hũka] *hookah* (ḥuqqah) ; হকুক [hokuk] *facts* (ḥaqūq) ; বাকী [baki] *remaining* (bāqī) ; বেবাক [bebak] *without remainder, all* (bē-bāqī) ; মনক্কা [mɔnɔkka] *dried grapes* (munaqqā) ; চকমকী [cʃɔkmoki] *flint stone* (*to strike a fire*) (Turkī caqmāq) ; চাকু [cʃaku] *knife* (cāqū < Turkī) ; etc.

Final : হক [hɔ:k] *truth, true, rightful* (ḥaqq) ; তবক [tɔbɔk] *dish, layer, stratum* (ṭabaq) ; MB. তোক [to:k] *ring for the neck* (*for punishment*) (tōq >ṭauq, ṭawq) ; তসদীক [tɔʃdik] *proof, verification* (tasdīq) ; লায়েক [laek] *fit, worthy* (lāʔiq) ; মক্স [mɔkʃɔ] *copying* (maškq) ; সক, সখ [ʃɔ:k(h)] *desire or taste for fancy articles* (šauq) ; সিন্দুক, সিন্ধুক [ʃind(h)uk] *chest, box* (sindūq) ; etc.

[q] > Persian [ɣ] > [g] in Bengali : তাগাদা beside তাকাদা [tagada, takada] *demand for payment* (taqāḍah) ; তাগুৎ beside তাকত [tagut, takɔt] *strength* (ṭāqat) ; নগদ [nɔgɔd] *cash money* (naqd) ; নাগারা, নাগরা, নাকারা [nag(a)ra, nakara] *kettledrum* (naqqārah) ; তাগাবী beside তাকাবী [tagabi, takabi] *money advanced to farmers* (taqāwī) ; MB. সগোল্লাদ beside সকলাত [ʃɔgollad, ʃɔkɔlat] *scarlet cloth, costly stuff* (saqalāt).

[q] is found as [kh] in a few words : সখ = সক [ʃɔ:kh, ʃɔ:k] < « šauq », see above ; আহাম্মুখ beside আহাম্মুক [aʃammukh, -muk] *fool* (aḥmaq) ; সুখমুনিয়া [ʃukhmunia] *scammony* (*a drug*) (suqmūnyā).

In the word তাউৎ [taut], as a variant (rather rare) of তাগুৎ, তাকৎ [tagut, takɔt] *strength* (ṭāqat), we have loss of intervocal [q].

329. Persian unvoiced velar stop [k]. There is no trace in Bengali of the Modern Persian aspiration of this unvoiced stop to [kh].

Initial : কম [kɔ:m] *less, small amount* (kam) : কেতাব [ketab] *book* (kitāb) ; কলমা [kɔlma] *the Mohammadan creed* (kalmah) ; কাফের [kafer] *infidel* (kāfir) ; কাগজ [kagɔʃʃ] *paper* (kāgaḏ) ; কারিগর [karigɔr] *artisan, artist* (kārīgar) ; কামান [kaman] *bow* > *gun* (kamān) ; কিনারা [kinara] *edge* (kinārah) ; কোপ্তা [koptɑ] *meat balls in stew* (kōftah) ; etc., etc.

Medial: আকবর [akbər] *Akbar*; উকীল [ukil] *pleader* (wakīl); তকরার [təkrar] *argument* (takrār); রেকাব [rekab] *stirrup* (rikāb); চাপকান [capkan] *tunic* (capkan); চাকর [cakər] *servant* (cākar); সরকার [ʃ̆ərkar] *government, administration* (sarkār); হরকৎ [ɦərkət] *commotion, damage* (ɦarkat); etc.

Final: খাক [kha:k] *earth* (xāk); তদারক [tədarək] *supervision* (tadāruk); তোষক [toʃ̆ək] *mattress* (tōšak); চাবুক [cabuk] *whip* (cābuk); নেমক [nemək] *salt* (namak); সানক [ʃ̆anək] *plate* (saɦnak); etc.

[k] is softened to [g] in ‡ খোদহাগিমী [khod-ɦagimi] *arrogance* (xwud-ɦākimī), তাগিদ [tagid] *pressure, reminder* (tākīd), and নগীজ, নগীচ [nogiʒ̆, nogiʧ̆] *neighbourhood, nearness* (nazdīk).

In খোসা [khoʃ̆a] *beardless man* we have [kh] for [k], from Arabic « kusah » *scant-bearded*.

330. Persian [g] remains in Bengali.

Initial: গরম [gərəm] *warm* (garm); গর্দা [gərda] *dust* (gardah); ‡গাওয়া [gawa] *witness* (guwāh); গোলাপ [golap] *rose* (gulāb = gul); গোনা [gona] *sin* (gunāh); গুমান [gumən] *pride* (gumān); গোর [go:r] *grave* (gōr); গোস্ত [gosta] *flesh-meat* (gōšt); etc.

Medial: কানুনগো [kanungo] *district officer, keeper of records* (qānūn-gō); খরগোস [khərgoʃ̆] *hare* (xar-gōš); জিগির [ʒ̆igir] *encouragement* (jigr); দরগা [dərga] *shrine of a saint* (dargāh); লাগাম [lagam] *rein* (lagām); পরগণা [pərgəna] *part of district* (« parganah »: Persianised Skt. word = « pragaṇa »); etc.

Final: Persian words with final « -g » are very few in Bengali. বুজরুক beside বুজরুগ [buʒ̆ruk, -rug] *impostor, miracle-worker* (< buzurg *great*) shows hardening of « g » to [k]. There are a few words ending in « ng » [ŋg], which either preserve the final [g] by adding a vowel at the end, *e.g.*, জঙ্গ as in জঙ্গ-নামা [ʒ̆əŋgə-nama] *the history of the fight* (*at Kerbela*) (jang-nāmah), or reduce the [ŋg] to [ŋ]: *e.g.*, সারেং, সারং [ʃ̆areŋ, -rəŋ] *master of small steamer* (sar-hang).

A few cases of hardening of [g] to [k] are found: *e.g.*, বুজরুক [buʒ̆ruk] for « buzurg », as above; খানকী [khanki] *woman of ill-fame* (xānah-gī *belonging to the house* > *a mistress*); জিকির [ʒ̆ikir] beside জিগির [ʒ̆igir] < « jigr » above.

331. Persian [x], representing both native [x] and Arabic [χ], normally becomes খ [kh] in Bengali, which intervocally, finally and preconsonantally is deaspirated to [k] as a normal thing, the aspiration remaining only initially.

Examples: initial: খবর, খপর [khɔbɔr, khɔpɔr] *news* (xabr); খারাপ [kharap] *bad* (xarāb); খয়রাত [khɔerat] *charity* (xairāt): খাঁ [khã:] *a title* (xān); খুন [khu:n] *murder* (xūn *blood*); খোদা [khoda] *God* (xudā); খাতির [khatir] *respect* (xātir); খত [kho:t] *letter, writing* (xatt); খাজ(ɽ)না [khaʃʒ(a)na] *tax* (xazānah); খোস, খুসী [kho:ʃ, khuʃi] *glad, happy, beautiful* (also nouns) (xūš, xūšī); খালাস [khalaʃ] *empty, freed, finished,* (xalās); etc.

Medially: নাখোদা [nakhoda] *captain of ship* (nā[w]-xudā); বখেয়া, বকেয়া [bɔk(h)ea] *back stitch, stitched and darned* > *bad* (baxyah); বখশীশ > বক্‌সিস [bok(h)ʃiʃ] *largesse* (baxšīš); আখনী [ak(h)ni] *broth of meat* (yaxnī); আখের [akher] *final* (āxir); মস্করা [mɔʃkɔra] *jest, joke* (masxarah); etc.

Final: সেখ, শেখ, সেক [ʃe:k(h)] *Shaikh* (šaix); সিক, সিখ [ʃi:k(h)] *iron spit (to roast meat)* (sīx); লক [lɔ:k] *thread to fly kites* (nax); নিরিখ, নিরিক [nirik(h)] *scales, weighing* (nirx); etc.

Persian « -xt » becomes [kt]; আক্তা [aktɑ] *castrated* (axtah); এক্তিয়ার, এক্তার [ekt(i)ar] *authority* (ixtiyār); বক্তিয়ার [boktiar] *a name, Bakhtyār*; কমবক্ত [kɔmbɔktɔ] *luckless person* (kam-baxt): তক্তা [tɔktɑ] *plank* (taxtah); পোক্ত [pokto] *seasoned, cooked* (puxt); মোক্তার [moktar] *pleader* (muxtār); সক্ত, শক্ত [ʃɔkto] *hard, stiff* (saxt); শনাক্ত, সনাক্ত [ʃɔnɑkto] *identification* (šināxt); etc.

332. Persian [xw]: the character of this sound has been described at p. 562. The labial element is preserved in a few words: *e.g.*, আখুঞ্জি [akhunʃʒi] *teacher* > *a surname* (āxwand-jī); খোদ [kho:d] *self* (xud < xwad, xwŭd); খোদা [khoda] *God* (xudā); খোন্দকার, খোনকার, খনকার, খন্দকার [khond(ɔ)kar, khonkar, khɔnkar, khɔŋkar] *reader, teacher* > *a surname* (xwand-kār); খুঞ্চিপোষ [khunʧipoʃ] *tray-cover of cloth* (xwāncah-pōš); খোয়ার [khoar] *contemptible, base* (also noun) (xwār); ‡খোয়াব্‌গা [khoabga] *sleeping chamber* (xwāb-gāh); খোয়াব [khoab] *sleep* > *dream* (xwāb); etc.

[w] is dropped: also *e.g.*, খাজা [khaʃʒa] *a title of respect* (xwājah), also খোজা [khoʃʒa]; খয়ের খাঁ [khɔer khã] *loyal, well-wisher* (xair-xwāh); তনখা,

তংখা [tənkha, təŋkha] *salary* (tanxwāh); দরখাস্ত [dərkhastə] *application* (dar-xwāst); খাস্তা [khastɑ] *desired, wished for, rare, difficult to get* (xwāstah); খামখা, খামকা [khɑmok(h)ɑ] *perforce, without reason or deliberation* (xwāh-ma-xwāh); বরখাস্ত [bərkhastə] *dismissal* (bar-xwāst); খেয়াস [kheɑʃ] *desire* (xwāhiš).

333. Persian [ɣ], representing the native sound, as well as Arabic [γ]. This spirant seems to have been pronounced without much friction, so that the Indian equivalent became গ [g], and not ঘ [gɦ] which would have paralleled খ [kh] for [x].

Initial: গজল [gəʃʃəl] *a kind of verse, a melody* (ɣazal); গাজী [gaʃʃi] *a warrior for Islām* > *a name* (ɣāzī); গোসা [goʃɑ] *anger, sulks* (ɣussah); গৈবী [goibi] *secret* (ɣaibī); গরীব [gorib] *poor* (ɣarīb); গোলাম [golam] *servant, slave* (ɣulām); গালিচা [galiʧɑ] *carpet* (ɣālīcah); etc.

Medial: চোগা [ʧogɑ] *a loose robe* (cōgah); তগল্লব [təgəlləb] *cheating, embezzlement* (taɣallub); দারোগা [darogɑ] *a police officer* (dārōgah); বগল [bəgəl] *armpit, side* (baɣal); বাগান [bəgɑn] *garden* (bāɣwān); বাগিচা [bəgiʧɑ] (*pleasure*) *garden* (bāɣ-cah); পয়গম্বর [pəĕgəmbər] *prophet* (paiɣambar).

Final: চেরাগ [ʧerɑg] *lamp* (cirāɣ); বাগ [bɑ:g] *garden* (bāɣ); দেমাগ, also দেমাক [demɑg > demɑk] *pride* (dimāɣ); মোরগ [morog] *cock* (murɣ); etc.

There are a few cases of hardening of [ɣ] > [g] to [k]: নাবালক [nɑbɑlək] *minor in age* (nābāliɣ: cf. বালক « bālāka » *boy*); বোঁচকা [bŏʧkɑ] *bundle* (Turkī buɣcah); তকমা [təkmɑ] *badge, crest* (Turkī tamɣah); সুরাক [ʃurɑk] *plan, trick* (surāɣ); দেমাক [demɑk] above; দেগ, ডেগ [de:g, ḍe:g] *caldron, big pot* but ডেকচী [ḍekʧi] *small pot to cook* (dēɣ, dēɣ-cī), also (dēg); etc.

[III] The Palato-alveolar Affricates, [tʃ, dʒ].

334. Persian چ [tʃ], transliterated « c », remains practically unaltered to Bengali চ [ʧ]. In East Bengali, this is regularly altered to [ʦ].

Examples: Initial: চাকর [ʧɑkər] *servant* (cākar); চোস্ত [ʧosto] *quick, fine, smooth* (cust); চৌবাচ্চা [ʧoubɑcʧɑ] *cistern* (caubaccah); চরবী [ʧorbi] *fat,*

grease (carbī); চাবুক [cʃabuk] *whip* (cābuk); চেহারা [cʃehara] *figure, portrait* (cihrah); etc., etc.

Medial: আচকান [acʃkan] *tunic* (ackan); খাজাঞ্চি [khaʒʒancʃi] *treasurer, accountant* (xazān-ci); কাঁচী [kācʃi] *scissors* (qainci); etc.

Final: কুচ [ku:cʃ] *march (of troops)* (kūc); খরচ [khɔrɔcʃ] *expense* (xarc); পেঁচ [pẽcʃ] *twist* (pēc); শিরপেঁচ [ʃirpẽc] *gem on turban* (sarpēc); etc.

In ছিলিম [cʃhilim] *earthen cup for tobacco and fire in the hookah* (cilam) we have aspiration of [tʃ] in Bengali.

335. Persian [dʒ], representing the native Iranian affricate and the Arabic palatal stop, is retained as জ [ʒʒ] in Bengali. This [ʒʒ] regularly becomes [dz, z] in East Bengal.

Initial: জমা [ʒʒɔma] *collection* (jamᵉ): জান [ʒʒa:n] *life* (jān); জামা [ʒʒama] *coat, shirt* (jāmah); জায়গীর [ʒʒɑegir] *fief* (jāēgīr); জবাব [ʒʒɔbab] *reply* (jawāb); জেল্লা [ʒʒella] *brightness* (jillā); জলুশ [ʒʒoluʃ] *splendour, brightness* (jalūš); জোয়ান [ʒʒoan] *young, strong* (jawān); জাল [ʒʒa:l] *forgery* (jaᵉl); জোব্বা [ʒʒobba] *a loose robe* (jubbah); যিহুদী [ʒʒihudi] *Jew* (Persian jahūdī < Ar. yahūd: cf. also Bengali ইহুদী [ihudi]); জেব [ʒʒe:b] *pocket* (jēb, jaib); etc.

Medial: হাজাম [hɑʒʒam] *barber* (ħajjām); তাজ্জব [taɟʒʒɔb] *wonder* (taᵉajjub); দজ্জাল [dɔɟʒʒal] *vicious* (dajjāl *Satan*); আঞ্জাম [anʒʒam] *arrangement* (anjām); খঞ্জর [khɔnʒʒɔr] *dagger* (xanjar); জিঞ্জির [ʒʒinʒʒir] *chain* (zinjir); ওজুহাৎ [oʒʒuhat] *excuses* (wajūħāt); এজমাল [eʒʒmal] *joint possession* (ijmāl); etc.

Final: খারিজ [khariʒʒ] *separated* (xārij); তাজ [ta:ʒʒ] *crown* (tāj); মেজাজ [meʒʒɑʒʒ] *temperament, pride* (mizāj); বুরুজ [buruʒʒ] *bastion, turret* (burj); etc.

In সতরঞ্চি [ʃɔt(ɔ)ronʒʒi], beside সতরঞ্জি [ʃɔt(ɔ)ronʒʒi] *cotton rug* (šatranjī), we have optional hardening of « j » to « c ».

ঝোব্বাঝুব্বি [ʒʒhobbaʒʒhubbi] *loose robes, robes and trappings* possibly shows aspiration of জোব্বা [ʒʒobba] = « jubbah » *loose robe*.

[IV] The Persian Dental Stops [t, d], and Dental Fricative [ð].

336. Persian « t » represents, in addition to the native sound, Arabic

[t, ṭ] (as well as Arabic [th] in a final position: see p. 566). In Bengali it remains as the interdental ত [t].

Initial: তক্তা [tɔktɑ] *plank* (taxtah); তবক [tɔbɔk] *stratum* (ṭabaq); তবলা [tɔblɑ] *drum* (ṭablah); তরজমা [tɔrʤɔmɑ] *translation* (tarjamah); তোতা [totɑ] *parrot* (ṭōṭā); তালাক, তাল্লাক [tal(l)ɑq] *divorce* (ṭalāq); তুর্ক, তুরুক [tur(u)k] *Turk, Mohammedan* (turk); তীর [ti:r] *arrow* (tīr); তারিখ [tɑrikh] *date* (*time*) (tārix); etc.

Medial: আতর [ɑtɔr] *otto* (ʔiṭr); আতশবাজী [ɑtɔʃbɑʤi] *fire-works* (ātaš-bāzī); আলবাৎ [ɑlbɑt] *certainly* (albattah); এত্তালা [ettɑlɑ] *summons* (iṭalāʿ); শয়তান [ʃɔetɑn] *devil* (šaiṭān); কোপ্তা [kopṭɑ] *meat-balls in gravy* (koftah); গ্রেপ্তার, গেরেপ্তার [g(e)reptɑr] *arrest* (giriftār); কেতাব [ketɑb] *book* (kitāb), etc.

Final: মৌৎ [mout] *death* (maut); দৌলৎ [doulɔt] *riches* (daulat); ওকালৎ [okɑlɔt] *pleading* (wakālat); তাকৎ [tɑkɔt] *strength* (tāqat); দস্তখত [dɔstɔkhɔt] *signature* (dast-xaṭṭ); সনাক্ত [ʃɔnɑktɔ] *identification* (šināxt); বরাৎ [bɔrɑt] *commission, business* (barāʾat); বিলাত [bilɑt] *Europe* (wilāyat); মারফৎ [mɑrphɔt] *intermediacy* (maʿrfat); মুফৎ [muphɔt] *free of cost* (mufat); হাজৎ [hɑʤɔt] *jail, custody* (ḥājat); শর্ত্ত [ʃɔrtɔ] *condition* (šart); etc.

Final «t» is optionally softened to [d] in a few words, *e.g.*, বাবদ [bɑbɔd] *heads, grounds* (bābat); বয়েদ [bɔed] *verse* (bait); মজবুদ [moʤbud] *strong, enduring* (mazbūt); গলদ [gɔlɔd] *fault, mistake* (ġalṭ); জব্দ [ʤɔbdɔ] *punished* (ẓabṭ < ḍabṭ); সাবুদ [ʃɑbud] *witnesses* (*šabūt < θubūt); etc.

337. Persian «d» occurs as দ [d] in Bengali.

Initial: দফা [dɔphɑ] *one time* (dafʿah); দরকার [dɔrkɑr] *necessity* (darkār); দরিয়া [dɔriɑ] *river* (daryā); দাগ [dɑ:g] *mark, stain* (dāġ); দোকান [dokɑn] *shop* (dōkān, dukān); দেমাগ, দেমাক [demɑg, -ɑk] *brain* > *pride* (dimāġ); দীন [di:n] *religion* (dīn); দরাজ [dɔrɑʤ] *long* (darāz); দারু [dɑru] *wine* (dārū); দূরবীন [durbin] *telescope* (dūr-bīn); etc.

Medial: খোদা [khodɑ] *God* (xudā); আদব [ɑdɔb] *polished manners* (ādab); উর্দূ [urdu] *the Urdū speech* (urdū); তামাদী [tɑmɑdi] *barred by limitation* (tamādī); কালন্দর [kɑlɔndɔr] *mendicant* (qalandar); ইশাদী [iʃɑdi] *witness* (išhādī); বদল [bɔdɔl] *exchange* (badal); বরদাস্ত [bɔrdɑstɔ] *tolerate* (bar-dāšt); বন্দুক [bonduk] *rifle* (bandūq); ময়দা [mɔedɑ] *flour* (maidah); etc.

Final: ঈদ, ইদ [i:d] *the 'Īd festivals* (ʿīd); হদ্দ [fiəddə] *limit* (ħadd); জেদ, জিদ [ʤe:d, ʤi:d] *importunacy* (ẓidd < ḍidd); বারুদ [bɑrud] *gun-powder* (bārūd); বুনিয়াদ, বোনেদ [buniɑd > boned] *foundation, plinth* (bunyād); ফরিয়াদ [phoriɑd] *petition, appeal* (faryād); বাদ [bɑ:d] *subtraction* (baʿd); ফর্দ্দ [phɔrdə] *list* (fard); কয়েদ [kɔed] *imprisonment* (qaid); রসীদ [roʃid] *receipt* (rasīd); রসদ [roʃɔd] *rations, food-stuff* (rasd); নগদ [nɔgɔd] *cash, ready money* (naqd); লাজবর্দ্দ [lɑʤbɔrdə] *lapis lazuli* (lājaward); সুদ [ʃu:d] *interest on money* (sūd); রদ্দী [roddi] *worthless* (*as of goods*) (raddī); etc.

In সিন্ধুক [ʃindhuk], beside সিন্দুক [ʃinduk] *chest, box* (sindūq), we have aspiration of « d ».

Final « d » is unvoiced in a few cases: তাইৎ [tɑit] *aid, coucher* (tāʿīd); ফস্ত [phɔstɔ] *bleeding by cutting a vein* (fasd); ‡ মদৎ [mɔdɔt] *help* (madad); ‡ মসীৎ [moʃit] beside মসীদ [moʃid] *mosque* (masjid); etc.

« d » is cerebralised in ডিহি [ḍihi] *a tract* (dih), ডেগ, ডেকচী [ḍe:g, ḍekʧi] *metal cooking pots* (dēg, dēg-cī, dēg).

« d » is dropped in some words: ওস্তাগর [ostɑgɔr] *master craftsman* > *a tailor* (ustād-gar); নগীচ [nogiʧ] *nearness* (nazdīk); খোনকার beside খোন্দকার [khonkɑr < khond(ɔ)kɑr] *teacher* > *a title* (xwand-kār); রেবনচিনি [rebɔnʧini] *China rhubarb* (ravand-cīnī). It is assimilated in বজ্জাৎ [bɔʤʤɑt] *vicious* (bad-żāt < -ðāt).

An intrusive [d] is found in তুন্দুর [tundur] *oven to bake loaves* (tanūr, tannūr).

338. Early Persian « ð » either became « z », or was restored to « d » in later Classical Persian and Modern Persian (see p. 562). It has had a two-fold treatment in the Indian languages, either as a [ʤ] (for the « z » value), or as a dental stop (for the « d, ð » value).

Examples: « kāgað » *paper* gave an Old Nepal form « kāyagada », Hindī, Marāṭhi « kāgad », Assamese « kākât », Bengali কাগতী [kɑgɔti] *a paper-making caste*, beside Bengali কাগজ [kɑgɔʤ]; « xiðmat » *service* is found as খেজমত [kheʤmɔt] in Late Middle Bengali, besides খেদমৎ, খিদমৎ [khidmɔt, khedmɔt]: cf. Anglo-Indian « kitmutgar » *servant, table servant* = « xiðmat-gār »; « guðār, guðastan » *to pass time* gives Bengali গুজরানো [guʤrɑno], beside Marāṭhī « gudarṇẽ »; « ziyāðatī » *excess* through a

stage « *ziyāzʒtī » is the source of জাস্তি [ʃʒɑsti], also found in other Indian languages, Aryan and Dravidian; « qawāʿid > qawāʿiđ » *rules, processes* is the source of কাওয়াজ [kɑoɑʃʒ] *military drill*. In Late Middle Bengali, we have names of places like সয়দাবাজ [ʃɔedɑbɑʃʒ], সিলিমাবাজ [ʃilimɑbɑʃʒ], ফতেয়াবাজ [phɔteɑbɑʃʒ] etc., beside forms in -দ [-d], for « sayyad-ābāđ, salīm-ābāđ, fatḥ-ābāđ ». The Arabic word « taqāđah » seems to have become « taqāđah » in Persian, whence we have তাগাদা [tɑgɑdɑ] *demand for payment* in Bengali: « đ > ʒ » would have given *তাগাজা [*tɑgɑʃʒɑ]; similarly the name « Fađl » occurs as ফদ্দল [phɔddɔl]. in MB., now = ফজল [phɔʃʒɔl], and « Khiđr » as খিদির [khidir].

[V] The Persian Labial Stops [p, b], and Denti-labial Spirant [f].

339. Persian « p » remains in Bengali.

Initial: পীর [pi:r] *a saint* (pīr); পিলখানা [pilkhɑnɑ] *elephant stables* (pīl-xānah); পোলাও [polɑo] *rice and meat with butter* (palāw); পশম [pɔʃɔm] *wool* (pašm); MB. পাতিশা(হ) [patiʃɑ(ɦɔ)] *emperor* (pāti-šāh) (the NB. বাদশা [bɑdʃɑ] is from the Hindōstānī modification of the Persian word); পরওয়ানা [pɔroɑnɑ], beside পরনা [pɔrɔnɑ] *mandate, order* (parwānah); পনীর [ponir] *cheese* (panīr); পয়গম্বর [pɔegɔmbɔr] *prophet* (paiġambar); পিঁয়াজ [pĩɑʃʒ] *onion* (piyāz); etc.

Medial: ‡ওয়াপস [oɑpɔʃ] *returning* (wāpas); সোপরদ্দ [ʃopɔrɔddɔ] *committal, handing over* (supurd); নাসপাতি [nɑʃpɑti] *pear* (nāšpātī); শিরপেঁচ [ʃirpẽʧ] *gem on turban* (sar-pēc); etc.

Final: তোপ [to:p] *cannon* (tōp).

340. Persian « b » remains.

Initial: বান্দা [bɑndɑ] *slave* (bandah); বস্তা [bɔstɑ] *packet* (bastah); বহর [bɔɦɔr] *sea > width* (baḥr); বাকী [bɑki] *remainder* (bāqī); বাগিচা [bɑgiʧɑ] *garden* (bāġcah); বাহাদুর [bɑɦɑdur] *brave* (bahādur); বেরাদর [berɑdɔr] *brother, caste-fellow* (barādar); বরাবর [bɔrɑbɔr] *in front, straight up to* (bar-ā-bar); বেলোয়ারী [belɔɑri] *glass, crystal* (billaurī); etc.

Medial: বুলবুল [bulbul] *nightingale*; খোবানী [khobɑni] *apricot* (xōbānī); বরবাদ [bɔrbɑd] *wasted, ruined* (barbād); জোব্বা [ʃʒobbɑ] *a loose robe*

(jubbah); জবান [ʤɔbɑn] *speech, word* (zabān); কাবাব [kɑbɑb] *roast meat* (kabāb); আবরু [ɑbru] *honour* (āb-rū); আকবর [ɑkbɔr] *Akbar*; কবর [kɔbɔr] *grave* (qabr); জব্দ [ʤɔbdɔ] *punishment* (zabt < ḍabt); etc.

Final: আজব [ɑʤɔb] *strange*; বাব [bɑ:b] *door* > *head of expenditure* (bāb); আসবাব [ɑʃbɑb] *furniture* (asbāb); নবাব [nɔbɑb] *Nabob* (nawāb); জবাব [ʤɔbɑb] *reply* (jawāb); জনাব [ʤɔnɑb] *your honour!* (janāb); হিসাব [hiʃɑb] *accounts* (ḥisāb); কেতাব [ketɑb] *book* (kitāb); etc.

Final and medial « b » in some cases becomes [p]: খারাপ [khɑrɑp] *bad* (xarāb); খপর beside খবর [khɔpɔr, khɔbɔr] *news* (xabr); গাপ [gɑ:p] beside গায়েব [gɑeb] *secret* (gaib); গোলাপ [golɑp] *rose* (gulāb); শরাপ [ʃɔrɑp] *wine* (šarāb); মেরাপ [mærɑp] *temporary roofing of mats* (miḥrāb); তলপ beside তলব [tɔlɔp, tɔlɔb] *wages, summons* (ṭalab); cf. also রপ্ত [rɔptɔ] *habit, familiarity* (rabṭ).

Final « b » is found as [m] in a few words: *e.g.*, MB. গালিম [gɑlim] *conqueror, enemy* (ġālib); বিমোজ্জিম [bimoʤʤim] *by reason of* (bi-maujib).

« b » is assimilated in নসীপুর [noʃipur] *name of a place* (Nasībpur); and it is probably dropped in the personal name নসীরাম [noʃirɑm] (= nasib-rām ?).

In সুরুয়া [ʃurua] *soup* (šōrbā), we have vocalisation of « b ».

341. Persian « f ». Initially, medially and finally, it became ফ [ph] in Bengali: but initially, [ph] often changes to a spirant [f] or [ɸ]; medially, it generally remains [ph], but occasionally it is deaspirated, and [f, ɸ] modification of intervocal [ph] is also quite common.

Examples Initial: ফরাক, ফারাক [phɔrɑk, phɑ-] *distance, space intervening* (farq); ফকির [phokir] *mendicant* (faqīr); ফানুস [phɑnuʃ] *paper lantern, glass dome of lamp* (fānūs); ফলানা [phɔlɑnɑ] *so-and-so* (fulān); ফিরোজা [phiroʤɑ] *light blue colour* (fīrōzah); ফোয়ারা [phoɑrɑ] *artificial fountain* (fawwārah); ফৌজ [phouʤ] *army* (fauj); ফসল [phɔʃɔl] *crops* (fasl); ফরিয়াদ [phoriɑd] *petition* (faryād); ফর্ম্মান [phɔrmɑn] *mandate, order* (farmān); ফিরিঙ্গি [phiriŋgi] *Portuguese, Eurasian* (firangī); etc.

Medial: আপিন, আপিং, আপিম, আফিম্ [ɑp(h)in, -im, -in] *opium* (afyūm); কৈফিয়ৎ [koiphiɔt] *excuses* (kaifiyat); কাফের [kɑpher] *infidel* (kāfir); আপসোস, আফ- [ɑp(h)ʃoʃ] *regrets* (afsōs); খলীফা [kholip(h)ɑ] *the*

Caliph (xalifah); তুফান [tuphɑn] *storm at sea* (tufān); তুরপুন [turpun] *awl* (turfān); তোফা [tophɑ] *fine, excellent* (tuḥfah); খাপা, খাপ্পা [khɑ(p)pɑ] *angry* (xafā); লেফাফা [lephɑphɑ] *envelope* (lifāfah); মোনফা [monɔphɑ] *gain* (munafaᵊ); বরফী, বরপী [borp(h)i] *cream ice, sweetmeat of sugar and cream* (barfī); রিফু, রিপু [rip(h)u] *sewing* (rafū); কুলুপ [kulup] *padlock* (qufl); সুপারিশ [ʃuparish] *recommendation* (sifāriš); MB. তপাস [tɔpaʃ] *search, enquire* (tafaḥḥuṣ); etc.

« ft » becomes [pt]: গেরেপ্তার, গ্রেপ্তার [g(e)reptɑr] *arrest* (giriftār); দপ্তর [dɔptɔr] *book* (daftar); রপ্তানী [rɔptɑni] *export* (raftanī); বাপ্তা [bɑptɑ] *woven stuff, a kind of silk stuff* (bāftah); তাপ্তা [tɑptɑ] *a fine silk or woollen stuff* (tāftah); বাজেয়াপ্ত [bɑʤeɑptɔ] *confiscated* (bāz-yāft); দরিয়াপ্ত [doriɑptɔ] *enquiry* (daryāft); হপ্তা [hɔptɑ] *week* (haftah); etc.

Final « f » > [ph] is commonly found in NB. as [p], and at times as [b]: *e.g.*, তরফ, তরপ [tɔrɔp(h)] *side* (tarf); ওয়াকফ, -প [ɔɑkɔp(h)] *religious trust* (waqf); খেলাপ [khelɑp] *contrary* (xilāf); গেলাপ, গেলাব, গেলেব [gelɑp, gelɑb, geleb] *covering, sheath* (ǧilāf); তকলিফ, তকলিব [toklip(h), toklib] *trouble, suffering* (taklīf); বরফ [bɔrɔp(h)] *ice, snow* (barf); বেকুব [bekub < *beukuph] *foolish, idiot* (bē-wuqf); মোকুব [mokub] *settled, fixed* (mauqūf); সাফ, সাপ [ʃa:p(h)] *clean, pure* (sāf); সেরেপ, সেরেফ, স্রেফ [ʃerep(h), sre:p(h)] *only, merely* (sirf); হলফ, হলপ [hɔlɔp(h)] *oath* (ḥalf); হরফ, হরপ [hɔrɔp(h)] *letter of the alphabet* (ḥarf); সঞ্জাব [ʃɔnʤɑb] *border, fringe* (sanjāf, sajāf); etc.

In the NB. word তাবাস as in তত্ত্ব-তাবাস [tɔttɔtɑbɑʃ] *enquiries with presents of sweets, fruits, etc.* = MB. তপাস [tɔpaʃ] *search*, we have change of « f » to [b] (tafaḥḥuṣ): see p. 213, foot-note.

In the word সভরী as in সভরী আম [ʃɔb(h)ɔri ɑ:m] *pear, guava*, lit., *mango that has travelled*, we have change of « f » intervocal to [b(h)] in Eastern Bengali (safarī).

Persian « v »: see *infra*, under the Semi-vowel [w].

[VI] The Nasals: Velar [ŋ], Alveolar [n], Labial [m].

342. The sound of [ŋ] occurs in Persian only before « k, g » and « q », and it is written ں « n ». [ŋ] as a rule is preserved in Bengali. نگ

« ng »=[ŋg] of Persian is ordinarily reduced to [ŋ], and before another consonant, in a few words, this [ŋ] is altered to [n]. Examples: আঙুর, আঙ্গুর [aŋur] *grapes* (angūr); ফিরিঙ্গি [phiriŋgi] *Portuguese, Eurasian* (firangī); ইংরেজ [iŋreʃʒ] English (ingrēz, angrēz); আওরঙ্‌জেব, ঔরংজেব etc. [aorəŋʃʒeb, ourəŋʃʒeb] beside আওরজেব [aorənʃʒeb] *Aurangzēb*; জঙ্গনামা [ʃʒəŋ-nama, ʃʒəŋgənama] *the Jang-nūmah, a poem on the Kerbela battle*; etc.

343. Persian « n » ordinarily remains in Bengali, but there are cases where it nasalises the contiguous vowel and is itself no longer existent as a separate sound.

Initial: নোকর [nokər] *servant* (naukar); নমাজ [nəmaʃʒ] *prayers* (namāz); নরম [nərəm] *soft* (narm); নসীব [noʃib] *luck* (nasīb); নোক্তা [nokta] *a dot* (nuqtah); নাতোয়ান [natoan] *weak, feeble* (nātawān); নাজির [naʃʒir] *overseer* (nāzir); নিশান [niʃan] *banner* (nišān); etc.

Medial: খঞ্জর [khənʃʒər] *dagger* (xanjar); তুন্দুর [tundur] *oven* (tannūr); পাঞ্জা [pənʃʒa] *hand with five fingers, grip, mark with the hand* (panjāh); সনাক্ত [ʃənakta] *identification* (šināxt); মোনফা [monəpha] *gain* (munafaʿ); দুনিয়া [dunia] *world* (dunyā); etc.

Final: ইমান [iman] *faith* (Imān); কানুন [kanun] *laws, customs* (qānūn); কামান [kaman] *bow* > *gun* (kamān); খুন [khu:n] *blood* > *murder* (xūn); দেওয়ান [deoan] *manager* (dIwān); etc.

Persian « n » also becomes [l] in a few words (see pp. 545, 546 *supra*): লক [lə:k] *thread, twine* (nax); লোকসান [lokʃan] *loss* (nuqsān); আবলুস [abluʃ] *ebony* (abnūs).

344. Nasalisation of Vowels from « n ». In Arabic, the « tanwin », or « n » affix of indefiniteness which was added to nouns, probably early became a nasalisation (although the full « -n » is still preserved in Central Arabian dialects): i.e. « -un, -an -in » became « *-ũ, -ã, -ĩ »; but this is not preserved in Persia or India, as the short final vowels of Arabic were dropped. Nasalised vowels are unknown to Persian and Turkī. In India, in the Hindōstānī area, long vowels of Persian (Perso-Arabic and Turkī) when followed by « n » are optionally pronounced as nasalised, i.e., either as « -ān, -īn, -ūn », or as -ã̄, -ĩ̄, -ũ̄ ». This « nūn-i-ġunnah », or *nasalising*

n, as a rule is not found in Bengali, but there are a number of words in Bengali which are based on a Hindōstānī « ġunnah » pronunciation: *e.g.*, মিয়াঁ, মিঞা, মেয়াঁ [miã, meã] *a title of respect* > *a common term in addressing a Mohammedan* (miyān); খাঁ [khã:] *a title* (xān); জাঁহাপনা < জাহাঁপনা [ʤãhãpɔna < ʤahã-] *refuge of the world* (jahān-panāh); জমী [ʤomi < *ʤɔmī] *land* (zamīn); মিহি [mihi = *mĩhi < *mihĩ] *fine* (mahīn); খানসামা [khanʃama < -ʃamā] *butler* (xān-sāmān); আবরোঁয়া [abrõa] *running water* > *a fine muslin* (āb-i-rawān); শিরী [ʃiri < ʃirī] *Shīrīn, the beloved of Farhād* (šīrīn); কাঁচী [kãʧi] *scissors* (qainci); etc. The group « -wān » of Persian became [wã, oã], written ঙা in Late MB.: *e.g.*, the Musalmānī Bengali spellings নোশেরঙা [noʃerw̃a, -wã] = *the Persian King Nōšīrwān*; রঙানা [rɔw̃ana -wã] *departed* (rawānah).

A pre-consonatal « n » after a short vowel also nasalises the vowel: *e.g.*, চাঁদা [ʧãda] *subscription* (candah); হিঁদু, হেঁদু [hĩdu, hẽdu] *Hindu* (hĭndū, hĕndū); গোলকঁদ, গুলকঁদ [golkõd, gul-] *candied roses* (gul-qand).

Spontaneous nasalisation is also found in a few words: হাঁসিয়া [hãʃia] *hem, border, edging* (hāšyah); হুঁস [hũ:ʃ] *senses* (hōš); হুঁসিয়ার [hũsiar] *clever* (hōšyār); হুঁকা, হুঁকো [hũka, hũko] *hookah* (huqqah); গোঁৎ, গোঁতা, গোঁত্তা [gõ:t, gõ(t)ta] *plunging* (*as of a paper kite in the sky*) (gaut, gautah); পেঁচ [pæ̃:ʧ] *twist, wrench* (pēc); বোঁচকা [bõʧka] *baggage* (bugcah); কোঁৎকা [kõtka] *big stick, cudgel* (qutqah); পেঁয়াজ, পাঁজ [pẽaʤ, pæ̃:ʤ] *onion* (piyāz); ফেঁসাদ [phæ̃ʃad] *danger, difficulty* (fasād); পাঁজা [pãʤa] *brick-kiln* (pazāwah); গোঁয়ারা [gõara] *the* taziyahs *in the Muḥarram festival* (gahwārah *cradle*), also গোমরা [gomra]; cf. also সনন্দ [ʃɔnɔndɔ] beside সনদ [ʃɔnɔd] *letters-patent* (sanad); মছলন্দ [mɔʧhlɔndɔ] *embroidered rug* (*machnand < masnad); and সঞ্জাব [ʃɔnʤab] *border* (sajāf, sanjāf).

345. Persian « m » remains. [m] before [b] is written ও « n » in many words in Perso-Arabic.

Initial: মজা [mɔʤa] *fun* (mazā); মগজ [mɔgɔʤ] *brains* (maġz); ময়দা [mɔeda] *fine flour* (maidah); মিনার [minar] *minaret* (minār); মিয়াঁ *a title* (miyān); মহল [mɔfiɔl] *quarter, wing of house* (maḥal); মালেক [malek] *proprietor, king* (mālik); etc.

Medial: ইমাম [imam] *religious guide* (imām); গুম্বজ [gumbəʤ] *tower* (gumbaz, gunbað); কামান [kaman] *bow* > *gun* (kamān); তামাসা [tamaʃa] *fun, joke* (tamāšah); তামাদী [tamadi] *barred by limitation* (tamādī); পয়মাল [pəemal] *destroyed, crushed* (pai-māl); রুমাল [rumal] *handkerchief* (rū-māl); মকদ্দমা [mokəddəma] *lawsuit* (muqaddamah); etc.

Final: সেলাম আলেকম [ʃelam alekom] *the Mohammedan salutation, 'Peace be with you'* (salām ʿalaikum); হকীম [hɔkim] *physician* (ḥakīm); হারাম [hɑrɑm] *forbidden* (ḥarām); কায়েম [kɑem] *established, fixed* (qāʾim); জুলুম [ʤulum] *oppression* (ẓulm); মোকাম [mokam] *abode* (muqām); etc.

When it occurs with [h], [m] is doubled: আহম্মদ [ɑhɔmmɔd] *the name Ahmed* (aḥmad); আহাম্মুক [ɑhɑmmuk] *fool* (aḥmaq).

In খাপ [kha:p] *sheath* (= xām?), we have a possible case of change of [m] to [p].

Nasalisation through [m]: খোঁয়ারী [khõɑri], also খোঁয়াড়ী [khõɑṛi] *lassitude after hard drinking* (xumārī).

[VII] The Liquids, [r, l].

346. Persian [r] remains.

Initial: রবাব [rɔbab] *a stringed instrument* (rabāb); রফা [rɔpha] *settlement* (rafʿ); রমজান [rɔmʤɑn] *the Ramadan festival* (ramaẓān < ramaḍān); রাস [ra:ʃ] *reins* (rās: ? MIA. *raśśi < OIA. raśmi); রিপু, রিফু [rip(h)u] *sewing, darning* (rafū); রুজু [ruʤu] *placing a complaint* (rujūʿ); রোজ [ro:ʤ] *day, daily wages* (rōz); রেশম [reʃɔm] *silk* (rēšam); etc.

Medial: ইরান, -ণ [iran] *Persia* (īrān); একরার [ekrɑr] *acknowledgment* (iqrār); ফেরার [pherɑr] *absconding* (firār); পারসী, ফারসী [p(h)ɑrʃi] *Persian* (pārsī, fārsī); চরকা, চরখা [cʃɔrk(h)ɑ] *spinning wheel* (carxah); নরম [nɔrɔm] *soft* (narm); শরম, সরম [ʃɔrɔm] *shame* (šarm); বর্গী [borgi] *Maratha raider* (bārgīr); etc.

Final: আনার [ɑnar] *pomegranate* (anār); খাতির [khɑtir] *respect* (xāṭir); তকরার [tɔkrɑr] *discussion, wrangle* (takrār); তৈয়ার, ত'য়ের [toiar, toer] *ready, prepared* (taiyār); তীর [ti:r] *arrow* (tīr); পীর [pi:r] *saint* (pīr *old person*); etc., etc.

In a few words, Persian « r » occurs as [l] : *e.g.*, নিশাদল [nɪʃadəl] *sal-ammoniac* (naušādur) ; মলম [məlɔm] *ointment* (marham) ; দেয়াল [deal] *wall* (dīwār) ; জালা [ʃʃala] *huge earthen jar to hold water etc.* (jarrah) ; মাস্থল as in ‡মাশুল-চোর [maʃul ʧor] *notorious thief* (mashur) ; ‡কসলৎ [kɔʃlɔt] *beside* কসরৎ [kɔʃrɔt] *physical exercise* (kasrat) ; etc.

Persian « r » also occurs as ড় [ṛ] in some words : *e.g.*, তাগাড় [tagaṛ] *mason's lime-pit* (tagār) ; তোড়া [toṛa] *plume, erest, nosegay* (turrah) ; খসড়া [khɔʃṛa] *rough draft of a document* (xasrah) ; মোড়চে, মোরচে < মরিচা [moṛʧe, moreʧe < *məriʧa] *rust* (mōrcah, mūrcah) ; কড়ার beside করার [kɔṛar, kərar] *agreement* (qarār) ; খোঁয়াড়ী beside খোঁয়ারী [khõaṛi, khõari] *morning effects of hard drinking* (xumārī) ; etc.

There is dropping of the « r » in a number of words, in a preconsonantal and final position (see p. 541) : *e.g.*, সর্দার beside সর্দার [ʃɔddar, ʃərdar] *chief, head* (sar-dār) ; মর্দ [mɔddɔ] *man, strong man* (mard) ; কার্দানী, কারদানী [kaddani, kardani] *practicability, power, skill* (kardanī) ; শির্নী, শিরনী [ʃinni, ʃirni] *sweets, milk etc. offered to a saint* (šīrnī) ; সেরেস্তা [ʃerestɑ] *office* (sar-ristah) ; মোহরম [mohərɔm] *the Muharram festival* (muharram) ; মুহুরী [muhuri] *clerk* (muharrir) ; মোকরর [mokrɔr] *permanent* (muqarrar) ; etc.

An intrusive [r] also is found : মোকর্দ্দমা beside মকদ্দমা [mokərdəma, məkɔddəmɑ] *lawsuit* (muqaddamah) ; মরশুম beside মৌসুম [morʃum, mouʃum] *season* (mausim) : see p. 542.

347. Persian « l » remains in Bengali.

Initial : লস্কর [lɔʃkɔr] *troops* (laškar) ; লাগাম [lagam] *bridle* (lagām) ; লায়েক [laek] *worthy, fit* (lā'iq) ; লাল [la:] *ruby, red* (la'l) ; লাস [la:ʃ] *corpse* (lāš) ; লবেজান [ləbeʃʃan] *hardpressed, at the last gasp* (Hindōstānī lab-pai jān *life at the lip*, Pers. lab+jān) ; লহমা [ləhəma] *a twinkle, a moment* (lamhah) ; etc.

Medial : আল্লা [alla] *Good* (allāh) ; ইল্লৎ [illɔt] *dirt, impurity* ('illat) ; ইস্‌লাম, এস্লাম [islam, eslam] *the Mohammedan religion* (islām) ; দালাল [dalal] *broker, middle-man* (dallāl) ; নালিশ [nalɪʃ] *complaint* (nāliš) ; তালাস, তল্লাস [talaʃ, tɔllaʃ] *search* (talāš) ; ফিল্‌হাল [philhal] *at the present day, now* (fī-l-hāl) ; কল্লা [kɔlla] *boasting, quarrelling* (kalah) ; কল্‌মা [kɔlma] *the*

Mohammedan creed (kalimah); কুল্লে [kulle] *in its sum total, in all, all told* (kull-, kullihi); etc.

Final: আমল [amɔl] *rule, tenure* (ʿamal); কবুল [kobul] *admitted, agreed* (qabūl); দিল, দেল [di:l, de:l] *heart* (dil); হালাল [ɦalal] *lawful* (ɦalāl); হাল [ɦa:l] *condition* (ɦāl); আসল [ɑʃɔl] *original, pure* (asl); খেয়াল [kheal] *whim* (xiyāl); গজল [gɔʒɔl] *a song, a melody* (ġazal); etc., etc.

[l] and [n] are interchangeable in Bengali (see pp. 545-546): *e.g.*, নাগাৎ, নাগাদ beside লাগাৎ, লাগায়েৎ [nagat, nagad, naga(e)t] *to the end of, inclusively, approximately* (li-ġāyat > laġāyat); নস্কর beside লস্কর [nɔʃkɔr, lɔʃkɔr] *troops* > *a surname* (laškar); নঙ্গর beside লঙ্গর [nɔŋ(g)ɔr, lɔŋ(g)ɔr] *anchor* (langar); etc.

[VIII] The Sibilants: Palatal [ʃ, ʒ], Dental [s, z].

348. Persian [s, ʃ] fell together in Bengali, in which they normally become [ʃ], written শ, ষ, স « ś, ṣ, s ». In numerous instances, [c͡ʃh, c͡ʃ] were arrived at by the Bengali [ʃ] (see p. 551). In the nexus « st », however, the dental sibilant remained, and Persian « št » [ʃt] was changed to [st] in Bengali (see p. 546). Persian [s] represents not only the native Iranian sound but also Arabic [s, θ, ṣ].

Some Mohammedan writers seek to bring in the Persian dental [s] sound, and following the East Bengal pronunciation, they write it ছ « ch= s »: e.g., ওছমান for ওসমান = «ʿuśmān », ছোবে ছাদেক = সোবে সাদেক = « subḥ-i-sādiq » (see p. 580), etc. This is against the spirit of Bengali phonetics, especially when naturalised words and names with স [ʃ] are interfered with.

Initial: সনদ [ʃɔnɔd] *deed* (sanad); সন [ʃɔ:n] *year* (san); সরাই [ʃɔrɑi] (sarāī); সাবেক [ʃɑbek] *old* (sābiq); সেপাই [ʃepɑi] *soldier* (sipāhī); সাজা [ʃɑʒɑ] *punishment* (sazā); সুরকী [ʃurki] *brick-dust* (surx *red*); সালিস [ʃɑliʃ] *third party* > *arbitrator* (sāliṣ < θāliθ); সদর [ʃɔdɔr] *head-quarters, metropolis* (sadr); সবুর [ʃobur] *waiting* (sabr *patience*); সানক [ʃɑnɔk] *plate* (saɦnak); সই [ʃoi] *signature* (saɦīɦ); শা(হা) [ʃɑ(ɦɑ)] *king* (šāh); শরম, সরম [ʃɔrɔm] *shame* (šarm); সাবাস [ʃɑbɑʃ] *bravo!* (šābāš); সরবৎ [ʃɔrbɔt] *sherbet* (šarbat); শহর [ʃɔɦɔr] *city* (šahr); etc. etc.

Initially we have [c͡ʃh] for the Persian sibilant in a few words: ছবি [c͡ʃhobi] *portrait, picture* (ṣabīh: cf. Sanskrit chavi *beauty*); ছানি beside সানি [c͡ʃhani, ʃani] *second* (*hearing, revision*) (ṣānī < θānī); ছয়লাব [c͡ʃhəĕlab] *inundation* (sail-āb); শিরকা, ছিরকা [ʃirka, c͡ʃhirka] *vinegar* (sirkah); etc. In স্রেফ [sre:p(h)], beside সেরেফ [ʃerep(h)] *only* (sirf), we have change to a dental sibilant before [r].

Medial: খানসামা [khanʃama] *butler* (xān-i-sāmān); মুসলমান [muʃəlman] *Mohammedan* (musalmān); তমঃসুক [təmoʃʃuk] *bond* (tamassuk); মাদ্রাসা [madraʃa] *Arabic and Persian school* (madrāsah); আসমান [aʃman] *sky* (asmān); মৌরুশী [mouruʃi] *hereditary* (*tenure*) (maurūsī < mawrūθ-); আসল [aʃəl] *true, pure* (asl); কশাই [kɔʃai] *butcher* (qasāʾī); ফুরসৎ [phurʃɔt] *leisure* (fursat); রসদ [rɔʃɔd] *rations* (rasad); খাসী [khaʃi] *castrated goat* (xassī); ইশাদী [iʃadi] *witness* (išhādī); মশাল [moʃal] *torch* (mašaʿl); পশম [pɔʃom] *wool* (pašm); হামেশা [hameʃa] *always* (hamēšah); পেশা [peʃa] *business, trade* (pēšah); আশরফী [aʃrop(h)i] *a gold coin* (ašrafī); etc.

[c͡ʃh] for [ʃ] in the interior of a word is also found: *e.g.*, আকছার [akc͡ʃhar, ‡aksar] *frequently* (akṣar < akθar); মোছলমান, মোচরমান, মুচুরমান [moc͡ʃholman, moc͡ʃorman, muc͡ʃurman] *a Mohammedan* (musalmān), beside forms with the palatal and dental sibilants; মিছিল [michil] *procession* (mi-l < miθl); অছি [oc͡ʃhi] *testator* (wasī); অছিলা [oc͡ʃila] *excuse* (wasīlah); কেচ্ছা [kecc͡ʃha] *story, scandal* (qiṣṣah); তছরুপ [toc͡ʃhrup, tosruf] *embezzlement* (tasarruf); মছলন্দ [mɔc͡ʃhlɔndɔ] *embroidered velvet rug*, '*musnud*' (masnad).

Persian « st » remains [st] in Bengali: ওস্তাদ [ostad] *master* (ustād); কিস্তী [kisti] *instalment* (qisṭī); দস্তখৎ [dɔstɔkhɔt] *signature* (dast-xaṭṭ); ওয়াস্তা [oasta] *intermediacy, connexion* (wāsṭah); ইস্তফা [istɔpha] *resignation* (istaʿfā); দোস্ত [dost(ɔ)] *friend* (dōst); বস্তা [bɔsta] *packet* (bastah); হেস্তনেস্ত [hestonesto] *final solution* (hast-nīst); etc.

Persian « št » become [st] in Bengali: গোস্ত [gosto] *meat* (gōšt); কিস্তী [kisti] *boat* (kištī); বরদাস্ত [bɔrdasto] *endurance* (bar-dāšt); কুস্তী [kusti] *wrestling* (kuštī); etc.

Final sibilant: আবলুশ [abluʃ] *ebony* (abnūs); লাস [la:ʃ] *body* (lāš); হদীস [ɦodiʃ] *tradition, cue* (ɦadīṣ <ɦadīθ); ওয়ারিস [oariʃ] *heir* (wāriṣ < wāriθ);

খাস [khɑ:ʃ] *private* (xās); খালাস [khɑlɑʃ] *free* (xalās); কিশমিশ [kiʃmiʃ] *raisins* (kišmiš); খরগোশ [khɔrgoʃ] *hare* (xar-gōš); বখ্‌শীশ [bok(h)ʃiʃ] *largesse, tip* (baxšīš); বালাপোষ [bɑlɑpoʃ] *quilted shawl* (bālāpōš); etc.

[ʧh, ʧ] for final sibilant: নাকচ [nɑkɔʧ] *cancelling* (nāqiṣ); তছনছ [tɔʧ(h)nɔʧ(h)] *broken and scattered* (taḥs-naḥs); MB. তরকচ, -কোচ [tɔrkɔʧ, -koʧ] *quiver for arrows* (tarkaš), beside the form with the sibilant. In Musalmānī Bengali, Persian [s] is written ছ, and generally pronounced [s], following the East Bengali habit; and Persian [ʃ] is written শ, ষ, স. The difference in the original sounds in Persian loan-words is thus sought to be maintained, through the influence of the Maulavīs, but common West Bengali and Standard Bengali ignore it. The ছ orthography is partly responsible for introducing the [ʧh] rather than [ʃ] pronunciation in a few words in the Standard Colloquial, in which the [s] value of ছ is unknown.

349. Persian [z] representing both the native sound, and Iranian [ð], as well as Arabic [z, ð, ẓ (=ðʷ), ḏ (=ḏl)] becomes জ [ʒ] in Bengali. In East Bengali, this [ʒ], as well as [ʒ] from Persian ج [ʤ], becomes [ʣ, z].

Initial: জখম [ʒɔkhɔm] *wound* (zaxm); জবান [ʒɔbɑn] *speech, word* (zabān); জমী [ʒomi] *land* (zamīn); জরী [ʒori] *gold lace* (zarī); জের [ʒe:r] *prolongation, continuation* (zēr); জুলপী [ʒulpi] *side-lock* (zulf); জেরা [ʒerɑ] *a little* (żarā<ðarā?); জিম্মা [ʒimmɑ] *custody* (żimmah<ðimmah); জিলা [ʒilɑ] *district* (ẓilāʿ<ḏilāʿ); জুলুম [ʒulum] *oppression* (ẓulm); জরুরী [ʒoruri] *urgent* (ẓarūrī < ḍarūr); জোর [ʒo:r] *force* (zōr); etc.

Medial: ইজ্জৎ [iʒʒɔt] *honour* (ʿizzat); ওজন [oʒɔn] *weight* (wazn); শাজাদা [ʃɑʒɑdɑ] *prince* (šāh-zādah); উজীর [uʒir] *minister* (wazīr); খাজানা [khɑʒ(ɑ)nɑ] *taxes* (xazānah); মেজাজ [meʒɑʒ] *spirit, temper* (mizāj); ওজর [oʒɔr] *excuse* (ʿuẓr<ʿuðr); কাজী [kɑʒi] *judge* (qāẓī<qāḍī); মেরজাব [merʒɑb] *plectrum* (miẓrāb<miḍrāb); নজর [nɔʒɔr] *sight* (naẓr); হাজির [hɑʒir] *present* (ḥāẓir<ḥāḍir); etc.

Final: আন্দাজ [ɑndɑʒ] *approximation* (andāz *thrower*); বাজ [bɑ:ʒ] *falcon* (bāz) জাহাজ [ʒɑhɑʒ] *ship* (jahāz); রোজ [ro:ʒ] *day* > *daily wages* (rōz); মগজ [mɔgɔʒ] *brains* (maġz); কর্জ্জ [kɔrʒɔ] *debt* (qarẓ<qarḍ);

কাগজ [kɑgɔʃʒ] *paper* (kāgaż < kāgað); সয়দাবাজ [ʃɔedɑbɑʃʒ] *a town* (saiyad-abāð, -bāz); etc.

There is hardening of final জ [ʃʒ] < [z] to চ [ʧ] in a few words: কবচ beside কবজ [kɔbɔʧ, < kɔbɔʃʒ] *bond, receipt* (qabż < qabð); কাগচ beside কাগজ [kɑgɔʧ, -ɔʃʒ] *paper* (kāgaż, -að); and cf. কচ [kɔ:ʧ] below.

350. Persian ژ = « ž » [ʒ]. It is a comparatively rare sound in Persian itself. The normal Indian equivalent would be [z] > [ʃʒ, -dʒ]. In the word কচ [kɔ:ʧ] for কজ [kɔ:ʃʒ] *a small irregular piece attached to a regular plot* we probably have a Persian word in « ž »: « kaž » (also « kaj ») *crooked, curved, irregular.*

[IX] The Semi-vowels « y » and « w ».

351. Persian « y » was probably both a spirant [ɹ] and a semi-vowel [ɪ, j]. Both the values are absent in Bengali.

Initially, Persian « y- » becomes ই [i] (see p. 533): *e.g.*, ইয়াদ [iɑd] *remembrance* (yād); ইয়ার [iɑr] *friend, boon-companion* (yār); ইউনানী [iunɑni] *Greek > Arabic (system of medicine)* (yūnān); ইহুদী [iɦudi] *Jew* (yahūdī); ইউসুফ, ইসুপ [i(u)ʃup(h)] *a name* (yūsuf); ইয়াকুব [iɑkub] *a name* (ya°qūb); etc. In আখনী [ɑkhni] *soup, broth* (yaxnī) we have dropping of « y- »; and « ya- » is assimilated to [e] in এজিদ [eʃʒid] *a name* (yazīd).

Interior « -yă- » becomes এ, য় [e] in Bengali, which generally forms a diphthong with a preceding vowel or is assimilated or dropped: *e.g.*, আয়েন্দা [ɑendɑ] *coming* (āyandah, ā°indah); কেফায়ৎ [kephɑĕət, kephɑet] *benefit* (kifāyat); সৈয়দ [ʃoiɔd, ʃo(i)ed] *a Saiyad* (saiyad); দোয়ম [doĕom, doem] *second* (dōyam); সেয়ম [ʃeɔm] *third* (siyam): বিলাৎ [bilɑt] *Europe* (wilāyat); পায়া [pɑĕɑ] *leg (of furniture)* (pāyah); নেহায়েৎ [neɦɑet, neɦɑt] *excessively* (nihāyat); বায়া [bɑĕɑ] *seller* (*bāyā, *bāyĕ° < bāyi°); etc.

In the group ইয়া « -iyā- », the « y » > [ĕ] is a mere glide, which is dropped in quick speech [iĕɑ > iɑ, eɑ, ɛa, æ, æĕ] (see pp. 412, 417): মিয়াদ, মেয়াদ, ম্যাদ [miɔd, meɑd, mæ:d] *term, term of imprisonment* (miyād); জেয়াদা জ্যায়দা [ʃʒeɑdɑ, ʃʒæ(e)dɑ] *much* (ziyādah); জালিয়াৎ [ʃʒɑliɑt] *forger* (ja°āliyāt): তইয়ার, তয়ের [toiɑr, toer] *ready* (taiyār); পেয়ালা, প্যায়লা [peɑlɑ,

pæ(e)la] *cup* (piyālah); তেয়াৎ [teat] *caution* (iḥtiyāt), etc.; cf. also এক্তিয়ার, এক্তার [ektiar, ektear, ektær, ektar] *authority* (ixtiyār).

« -yā-, yăh » after a consonant becomes [ia, ea]: বখেয়া [bɔk(h)ea] *back-stitch* (baxyah); তাকিয়া [takia] *bolster* (takyah); দুনিয়া [dunia] *world* (dunyā); দরিয়া [doria] *river* (daryā); বুনিয়াদ [buniad], also বোনেদ [boned] *foundation* (bunyād); ফরিয়াদ [phoriad] *petition* (faryād); হাঁসিয়া [hãʃia] *border of shawl* (ḥāšyah); etc.

Final « -y » at the end of a syllable remains as [e], and occasionally as [i]: *e.g.*, জায় [ʃʒae], also জাই [ʃʒai] *place* (jāy); রায় [rae] *judgment* (rāy); পয়মাল, পায়মাল [pɔemal, paemal] *destroyed, crushed* (pāy-māl); etc.

« y- » became [ʃʒ] in যিহুদী [ʃʒihudi] beside ইহুদী [ihudi] *Jew* (« yahūdī », also « jahūdī » in Persian), and in রোজদাদ [roʃʒdad] *statement* (rō-y-dād = rū-i-dād).

352. Persian ﻭ « w » was probably both a semi-vowel [w, ŭ] and a spirant [v, ʊ]. Both these articulations are represented in Bengali, the former by vowels, and the latter by ব [b] (and in recent times by ভ = [bh, v, ʊ]).

Initial « w- »:

Persian « wă-, wŭ- » > Bengali [ɔ, o]: ওকালৎ [okalɔt] *advocacy* (wakālat); অক্ত, ওক্ত [ɔktɔ, oktɔ] *time* (waqt); অছি [ɔʃhi, oʃhi, ɔsi] *heir* (wasī); অছিলা [ɔʃhila, oʃhila] *excuse* (wasīlah); ওজুহাৎ [oʃʒuhat] *reasons* (wajūhāt); ওজন [oʃʒɔn] *weight* (wazn); অলী, ওলী [ɔli, oli] *a name* (walī); অজেদ [ɔʃʒed] *a name* (wazēd): অকু ওকু [ɔku, oku] *place of occurrence* (waqū^{e} < wŭqū^{e}); অজু, ওজু [ɔʃʒu, oʃʒu] *ablutions* (waẓū < wŭḍū); etc.

Persian « wă-, wŭ- » > Bengali [u]: উকীল [ukil] *pleader* (wakīl); উজীর [uʃʒir] *minister* (wazīr); উলী [uli] beside অলী, ওলী [ɔli, oli] *a name* (walī); উসুল, উশুল [uʃul] *realisation, recovery* (*of money*) (wusūl);

Persian « wă- » > Bengali [oa]: this is recent: ওয়াকফ [oakɔph] *religious property* (waqf); ওয়াহাবী [oahabi] *a sect* (wahhābī); ওয়াদা [oada] *a stated period* (wa^{e}dah). Persian « wă- » is also found as [bɔ] in বগয়রা [bagɔera] *et cetera* (wagairah) etc.

Persian « wi- » = [ʋi-, vi] became [bi]: বিলাৎ [bilat] *Europe* (wilāyat); বিদায় [bidae] *farewell* (widāʿ);

Persian « wā- » > Bengali [oa]: ওয়াকিফ, -ব [oakiph, -b] *knowing* (wāqif); ওয়াপস [oapɔʃ] *returning* (wāpas); ওয়াশীল [oaʃil] *collections and balances* (wāsil); ওয়াজিব [oaʒib] *necessary, proper* (wājib); ওয়াস্তা [oasta] *intermediary, reason, sake* (wāstah), etc.

In Musalmānī Bengali, following the MB. tradition, [oa] is written ওা as well as ওয়া.

Interior « -w- »: it is found as the [ŏ] glide, or as [u]; or following the spirant pronunciation it is changed to [b], mainly before [i, e]: *e.g.*, আওয়াজ [aoaʒ] *sound* (awāz); আবোয়াব [aboab] *heads of expenditure* (abwāb); কাওয়াজ [kaoaʒ] *manœuvre, drill* (qawāʾid); দেওয়ান, দেয়ান [de(o)an] *minister* (dīwān); সেওয়ায়, সওয়ায় [ʃĕoae, ʃo(o)ae] *without, in addition* (sīwāy); দাওয়াই [daŏai] *medicine* (dawāʾ); এওজ [eoʒ < ĕoʒ] *exchange* (ʿiwaz < ʿiwaḍ); মেওয়া [meoa] *fruits, dried fruits* (mēwāh); হাওয়া [haoa] *air* (hawā); হালওয়াই, also হালুই [halloai, halui] *sweet-meat maker* (ħalwāī); হালুয়া [halua] *a sweet-meat* (ħalwā); তওয়াক্কা > তোয়াক্কা [toŏakka, toakka] *care, recking* (tawaqquʿ); সওয়াল [ʃoal] *question* (sawāl, suwāl); etc. জবাব [ʒobab], pronounced also [ʒobab] *reply* (jawāb); তজবীজ [tŏʒbiʒ] *enquiry* (tajwīz); দরবেশ dorbeʃ] *a Dervish* (darwēš); নবাব [nobab] *a Nabob* (nawwāb); নবিশ [nobiʃ] *writer* (navīs); বাবুর্চী < বাবরচী [baburʧi < babarʧi] *cook* (bāvarcī); হাবেলী [haabeli], also হাউলী, হাবলী [haauli, haabli] *mansion* (ħavēlī); মৌলবী [moulobi] *a Mohammedan scholar* (maulavī); মুলতবী [multobi] *adjourned, postponed* (multavī); মুসাবিদা [muʃabida] *draft* (musavvadah); রিশবৎ [riʃbot] *bribe* (rišvat); ইসবী [iʃbi], beside ইসুই [iʃui] *Christian* (ʿīsavī); আলিবর্দী alibordi] *a name* (ʿalīvardī); পেশবাজ beside পেশোয়াজ [peʃbaʒ], peʃoaʒ] *a dancing girl's gown* (pēšvāz, -bāz); তাগাবা [tagabi] *money advanced to farmers* (taqāvī); তহবীল, তবীল [tohobil, tobil] *treasury* (taħvīl); গরীবনেওয়াজ, -নেবাজ [goribne(o)aʒ, -nebaʒ] *kind to the poor* (ġarīb-navāz); etc.

« w » occurs as ভ [bh, ʋ, v] in some words, in the recent pronunciation and spelling, frequently through the English transliteration with « v »: *e.g.*, মৌলভী « maulabhī » [moulovi, -ʋi] *Maulavī*; হাভেলী « hābhēlī »

[fiaveli] *a mansion*; গজনভী « gâjnâbhī » [gəʃʒnəvi, -vi] *a surname = of Ghazna* (gaznavī); তাকাভী « tākābhī » [takavi, -vi] *teccavi grant*; জেন্দাভেস্তা « jēndābhēstā », a recent word = *Zend-Avesta* (zand-avastah); etc.

Interior « -w- » is assimilated or dropped (cf. p. 349): *e.g.*, বাগান [bagan], Late MB. বাগোয়ান [bagoan] *garden* (bāgwān); নাতান, beside নাতোয়ান [natan, natoan] *weak* (nātawān); তফাৎ [təphat] *distance* (*tafāwāt, tafāwut); উমেদার, earlier উমেদওয়ার [umedar < *umedəðar < umedðar] *applicant, client* (ummēdwār); দেয়াল beside দেওয়াল [deal, deŏal] *wall* (dīwāl), also দেল, ছাল [de:l, dɛ:l, dæ:l]; রক beside রওয়াক, রোয়াক [rə:k < rəŏak, roak] *ledge, platform of masonry* (rawāq), see p. 403; পরানা, পরনা beside পরওয়ানা [pərana, pərəna, pərŏana] *writ from king or authority* (parwānah); জহরৎ [ʤəfiərət <*ʤəŏfiərət] *jewellery* (jawāhirāt); মক্কেল [məkkel] *client* (*in a law-suit*) (muwaqqil); বেকুব [bekub <*beukuph] *fool, idiot* (bē-wuqf); etc.

« -w- » becomes nasalised [w̃ > m] through the proximity of « n » in a few words; see *supra*, p. 608; cf. also হামাদিস্তা, হামানদিস্তা [fiama(n) dista] *mortar and pestle* (hāwan-dastah); and গোঁয়ারা, গোমরা [gõara, gomra] *the empty biers carried in the Muharram procession* (gahwārah *cradle*) shows spontaneous nasalisation of « w »: so also in পাঁজা [pãʤa] *brick-kiln* (*pājã < *pajāwã < pajāwah).

Final « -w » remains as [o]: তালাও [talao] *tank* (talāw, talāb); পোলাও [polao] *pillau* (pulāw, pilāv); ‡দেও [deo] *a giant* (in Musalmānī Bengali) (dēw).

[X] Consonant Changes of a General Character.

353. Vocalisation of « -y- » and « -w- », and hardening and softening of stops and affricates, have been touched upon before.

Metathesis.

Examples are: ফয়তা [phəeta] *prayers* (*fāhitā < fātihah); প'লতে < পলিতা [polte < polita] *wick* (fatilah); ফৈজৎ [phoiʃʒət] *quarrelling, wrangling* (*fāhizat < fadīhat); তকমা [təkma] *badge, crest* (Turkī tamga); দহরম মহরম [dəfiərəm məfiərəm] *intermixture, familiarity* (dar-ham bar-ham); লহমা

[ləɦiəma] *short space of time, instant* (lamḥah); বোঁচকা [bõʧka] *bundle* (Turkī buġcah); বুজরুক [buʤruk] *charlatan* (buzurg); নগীচ [nogiʧ] *neighbourhood* (*nagdīz <nazdīk); মুচলকা [muʧləka] *bond* (mukalcah); মক্স [məkʃə] *copying* (masq); বস্কীস্ vulgar for বখ্শীশ [boʃkiʃ < bok(h)ʃiʃ] *present* (baxšīš); etc., etc.

Elision (by Assimilation generally).

Elision of « y, w » has been noted before.

মজুর [moʤūr] *daily labourer* (*mădzūr < mūzdur); †মসীদ, মসীৎ [moʃid, -it] *mosque* (masjid); খোনকার, খন্ধার [khonkar, khoŋkar] *a Mohammedan surname* (xʷand-kār); আখুঞ্জী [akhunʤi] *teacher* (āxʷandjī); রেবনচিনি [rebonʧini] *China rhubarb* (ravand-i-cīnī); পিলসুজ [piljuʤ] *brass lamp on stand* (fatil-sōz); নসীপুর [noʃipur] *a place-name* (nasīb-pur); নসীরাম [noʃiram] *a personal name* (nasīb-rām); etc.

Double consonants are occasionally simplified (always so when final): হক [ɦiːk] *true* (ḥaqq); জেদ, জিদ [ʤeːd, ʤiːd] *importunacy* (ẓidd < ḍidd); মোকরর [mokrər] *confirmed* (muqarrar); মুহুরী [muɦuri] *clerk* (muḥarrīr); আলবাৎ [albat] *certainly* (albattah); তমসুক [təməʃuk] *bond* (tamassuk); সেরেস্তা [ʃeresta] *court office* (sar-rištah); মোতফরকা [motpharka] *miscellaneous* (mutafarriq); দালাল [dalal] *broker* (dallāl); খাতা [khata] *notebook* (xaṭṭ-hā); তছরুপ [toʧhrup] *embezzlement* (tasarruf); etc.

In MB. জাশু [ʤaʃu] *spy* (jāsūs) there is loss of final « s »; and of « r » in বরগী [borgi] *Maratha raider* (bārgīr), মুহুরী [muɦuri] *clerk* (muḥarrīr).

Loss of pre-consonantal « r » has been noted before (p. 610).

Insertion of Consonants.

Euphonic insertion of consonants is found in a few words: *e.g.*, of [d] in তুন্দুর [tundur] *oven* (tannūr, tanūr); of [r] in মরসুম [morʃum] *season* (mausim), মকর্দ্দমা [məkərdəma] *law-suit* (muqaddamah); of [ɦ] in নহবৎ [nəɦəbət] *Indian musical band* (naubat); and probably of [p] in চোরাগোপ্তা for *চোরাগোত্তা [ʧoragopta<gotta] *crouching like a thief* (« gōtah » *plunge*: influence of Skt. « gupta »).

In printing, we often find র্দ্দ, র্জ্জ, র্ম্ম for দ্দ, জ্জ, ম্ম « -rdd-, -rjj-, -rmm- » for « -dd-, -jj-, -mm- » etc. : *e.g.*, হর্দ্দ « hårddå » for হদ্দ [ɦɔddɔ] *limit* (ħadd), তার্জ্জব « tårjjåb » for তাজ্জব [tajjɔb] *strange* (taˢajjub), সার্জ্জাদ « sårjjåd » for সাজ্জাদ [ʃajʃʒad] *a name* (sajjād); হার্ম্মাম « hårmmåm » for হাম্মাম [ɦammam] *bath* (ħammām), কের্চ্ছা « kërcchā » for কেচ্ছা [kecʃʃa, kessa] *story, scandal* (qissah). This is generally met with in Musalmānī Bengali printing. It is due to the fact that Bengali type sets were first prepared on the model of Sanskrit as written in Bengal, so that Prakritic groups of double consonants generally do not occur in ordinary founts, and printers were obliged to be content with what was available,—apart from the tendency to regard the intrusive [r] as a learned characteristic (see p. 542).

Spontaneous doubling of consonants is not rare: আক্কেল [akkel] *wisdom, sense* (ˢaql); আহম্মদ [aɦɔmmɔd] beside the recent আমেদ [amed] *a name* (aħmad); আহাম্মুক [aɦammuk] *fool* (aħmaq); খাপ্পা [khappa] *angry* (xafā); এত্তেলা [ettela] *summons* (iṭlaˢ); সোপরদ্দ [ʃɔpɔrɔddɔ] *handing over, placing before* (supurd); তাল্লাক [tallak] *divorce* (talāq); কেল্লা [kella] *fort* (qilˢah); কিম্মৎ [kimmɔt] *price* (qimat); ত(ট)ল্লাশ [talla∫, tɔlla∫] *search* (talāš); হাল্লাক [ɦallak] *fatigued* (halāk); মেহন্নৎ [meɦɔnnɔt] *labour* (mihnat); বেমক্কা [bemɔkka] *untimely* (bē-mauqˢah); মাতব্বর [matɔbbɔr] *elder, chief* (muˢtabar); বিমোজ্জিম [bimoʃʒim] *in accordance with* (bimaujib); etc.

Spontaneous nasalisation, presupposing the insertion of an « n », has been discussed before, p. 608.

CHAPTER VII

PHONOLOGY OF THE FOREIGN ELEMENT: PORTUGUESE

354. An account of Portuguese activities in Bengal has been summarised by J. J. A. Campos (in his 'History of the Portuguese in Bengal,' Calcutta, 1919). The Portuguese first came to the province in 1517, and they exerted a very great influence down to 1668, when Shāyista Khān destroyed their power at Chittagong. Before that the capture of Hugli by the Moghals in 1632 had put a stop to Portuguese aggrandisement in West Bengal. After the decline of their power and prestige as traders, pirates and conquerors, and controllers of the sea-board of Bengal, the Portuguese were content to remain in a humbler *rôle* and to make room for their rivals the Dutch, the English and the French; but Portuguese missionary activity continued, and Portuguese influence in Bengal was in a flourishing state down to the end of the 18th century. The Portuguese element in Bengali came in during the period extending from the latter of part of 16th down to middle of the 18th century, or even later, when there were settled communities of Portuguese, or Portuguese speakers, at Hugli, at Chittagong, at Dacca, and at other places in the Delta. Already in the 'Caṇḍī-kāvya' of Mukunda-rāma (c.1580) we find the word হরমাদ « hârmāda » or হারামদ « hārāmâda » *Portuguese pirate* = Portuguese « armada ». The phonetic characteristics of the Portuguese loan-words show that they were borrowed during the Late MB. period. The extent of the Portuguese element in Bengali has been noted before (p. 214). It is quite likely that there were a good many Portuguese words in Bengali of the 17th and 18th centuries which are now lost, or are found as class-dialect words, specially pertaining to religion, among Bengali Christians whose ancestors were converted by the Portuguese and among Luso-Indians who have become Bengalised. Portuguese words (unlike a number of Persian and English words) came into Bengali through contact

between Portuguese and Bengali speakers, and not through the literary influence of Portuguese on Bengali. The words were therefore not transliterated, following some system. Dialectal phonetics also undoubtedly presented some slight variations in the Bengali forms. Folk etymology also played its part. The forms in the Standard Colloquial are taken into consideration, as these are the recognised ones. The general closeness of the Bengali loan-words to the original Portuguese forms, however, is striking.

Accounts of Modern Portuguese pronunciation are to be found in the paper by Henry Sweet (1883, in the 'Collected Papers,' Oxford, 1913, pp. 165-198); in Aniceto dos Reis Gonçalves Vianna's 'Portugais, Phonétique et Phonologie, Morphologie, Textes' (Leipzig, 1903, in Teubner's 'Skizzen Lebender Sprachen'), and in Louise Ey's 'Portuguese Conversation-Grammar' (Heidelberg, 1912). The basis of the Bengali loan-words was, however, 17th century Portuguese in the main, which certainly differed a great deal in its pronunciation from Modern Portuguese, as is the case with most languages. I have not seen any account of the early pronunciation of Portuguese. The phonology of the Portuguese loan-words in Bengali (and in other languages), however, will certainly throw some side-light on the phonetics of the former language as it was over 250 years ago. The phonetics and phonology of Modern Portuguese is one of the most complicated among European languages. The vowel system is not very rich, but the possession of some central vowels [ɐ, ə, ɪ] as subsidiary forms of other vowels, and of some breathed vowels and diphthongs makes the phonology rather intricate. There are some peculiar consonants, *e.g.*, breathed nasals and liquids; voiced stops occur as fricatives intervocally; the original [s] sound is pronounced as [ʃ] and as [ʒ]; [m, n] nasalise vowels and are dropped under certain circumstances, etc.; all of these bring in the complexity of the consonant phonology as well.

A number of the Portuguese words in Bengali are not native Portuguese (Latin), being themselves loan-words from different languages, but so far as Bengali is concerned, they are Portuguese, and nothing else.

The Vowels.

355. In Modern Portuguese unaccented « a » is pronounced as [ɐ], something like the English [ə] in *above* [əbʌv]. This was probably also the pronunciation in Early Modern Portuguese of the 17th century.[1] The unaccented « a » as a rule is retained in Bengali as আ [a] : *e.g.*, আনারস [anarɔʃ] *pineapple* (ananás); আলপিন [alpin] *pin* (alfinete); আলকাৎরা (alkatra] *tar* (alcatrão); কেদারা [kedara] *chair* (cadéira); গির্জা, গির্জ্জা [griʄa, girʄa] *church* (igréja); জান(ɫ)লা, জানেলা [ʄan(a)la, ʄanela] *window* (janélla); তোয়ালিয়া > তোয়ালে [toalia > toale] *towel* (toálha); কাফি [kaphi] *coffee* (café); সাগু, সাবু [ʃagu, ʃabu] *sago* (sagú); etc. But in a number of cases, it is dropped in Bengali, both initially and finally: *e.g.*, কাবার [kabar] *to end* (*as a month*) (acabár); নোনা [nona] *custard apple* (anóna); সেঁকো [ʃẽko] *arsenic* ([*əssenko] < arsénico); কাজ as in কাজঘর [kaʄghɔr] *button-hole* (cása [de botão]); মেজ [me:ʄ] *table* (mésa); কামিজ [kamiʄ] *shirt* (camísa); ইস্পাৎ [iʃpat] *steel* (espáda); তিজেল [tiʄel] *a shallow earthen pot to boil rice* (tigéla); পিস্তল [pistɔl] *pistol* (pistóla); ফিগ্রু <*ফিগুর [phigru<*phigur] *a lean figure* (figúra); বোতল [botɔl] *bottle* (botélha). In disyllabic words, initial or final « a » remains: আতা [ata] *custard apple* (ata); আয়া [aĕa] *nurse* (áia); টোকা [ṭoka] *a hat, an umbrella hat of bamboo* (tóuca); তেরেন্তা [terenta] *thirty* (*in a card game*) (trinta); পিপা>পিপে [pipa>pipe] *cask* (pipa); ফর্ম্মা [phɔrma] *form in printing* (forma), বয়া [bɔĕa] *buoy* (bóia); বরগা [bɔr(ɔ)ga] *rafter* (vérga); বেহালা, বেয়ালা [be(ɦ)ala] *violin* (vióla); বোমা [boma] *bomb* (bómba); মার্কা [marka] *mark, stamp* (márca); সায়া [ʃaĕa] *petticoat* (sáia); সালসা [ʃalʃa] *sauce, sarsaparilla* (sálsa); etc.

Stressed « á », pronounced as a central [a], or as [ɑ] before the velarised [ɫ] and before [u], remains in Bengali as আ [ɑ] : *e.g.*, আলমারী [almari] *almirah* (almário); কানাস্তারা, কানেস্তারা, ক্যানেস্তারা, ক্যানেস্ত্রা [kanastara, kanestara, kænestara, kænestra] *canister* (« canástra » *large basket*: there has been influence both in form and meaning of the English

[1] In the Portuguese words given within brackets, stress on the vowel is indicated, although stress is not represented in the ordinary orthography.

canister); কাফরি [kaphri] *negro* (cáfre); কাতান [katan] *sword* (catána); চাবি [ʧabi] *key* (cháve); গরাদিয়া > গরাদে, গরাদি [gɔradia > gɔrade, -di] *bars of a window* (gráde); পরাত [pɔrat] *a large plate* (práto); তামাক, তমাক, তামাকু [tamak, tɔmak, tamaku] *tobacco* (tabáco); বাল্‌তি, বাল্‌দি [balti, -di] *bucket* (bálde); MB. হরমাদ [fiɔrmad] beside a variant spelling হারামদ [fiaramɔd] *Portuguese pirate-ship* (armáda); etc.

Portuguese « a, á » are also represented by অ [ɔ], through folk etymology in most cases: *e.g.*, আনারস [anarɔʃ] *pineapple* (ananás): ওলন্দাজ [olɔndaʃʒ] *Dutch* (Hollandez); তমাক beside তামাক [tɔmak, tamak] *tobacco* (tabáco); MB. হারামদ [fiaramɔd] *pirate fleet* a variant of হরমাদ [fiɔrmad] (armáda); তোলা < তলুয়া, *তৈলা, *তল্যা [tolo<tɔlua, *toila, *tɔila, *tɔlĕa] *a large earthen pot* (« tálha »: through influence of তলা [tɔla] *base, bottom*).

In কোরেন্তা [korenta] *forty, a term in card-game* (quarénta), we have « a » as [o] through the influence of the « u » (Modern Portuguese pronunciation [kwɐ'rẽntɐ]). In জোলাপ [ʤolap] *purgative* (jalápa) we have influence of the Perso-Bengali গোলাপ [golap] *rose* (gulāb).

Change of « a » to [e, æ] is noticed in a few words: *e.g.*, কেদারা [kedara] *chair* (cadéira); বেসালি [beʃali, bæʃali] *vessel, pail* (« vasilha », through Umlaut: « *bāsilyā > *bāisilyā > *besāliā »); পেঁপে [pẽpe] *papaya fruit* (papaia). As in বেসালি < « vasilha », « lha »=palatal « l » + « a » [ʎa], becomes « *lyā > *liā » in Bengali in তোয়ালিয়া > তোয়ালে [toalia > toale] *towel* (toalha).

« a » is found as [i] in ইস্ত্রি, ইস্তিরি [istri, istiri] *ironing clothes* (estirár), through Vowel Harmony; and in ঝাঁকালি [ʃãkali] *bag with two mouths* (saccóla), there is probably the influence of the final vowel of থলী, থৈলী [tholi, thoili] *bag*.

Loss of « a »: through absence of stress: কামরা < *কামারা [kamra < kamara] *chamber* (cámara). In লবাদা, লবেদা [lɔbada, lɔbeda] *a loose gown*, we have probably a case of assimilation of « loba » *loose gown* + « abada » *tucked edging*.

356. The nasal diphthong « ão », in a final position, was probably pronounced [ãu] in Early Modern Portuguese. This regularly became

[ãu, ão], and then [ãõ, ãm, am, aŋ] in Bengali. See pp. 521-522. *E.g.*, বোতাম [botam] *button* (botão); গুদাম > গুদোম by Vowel Harmony [gudam, -dom] *godown, warehouse* (gudão); সাবাং [ʃabaŋ], also সাবান [ʃaban] *soap* (« sabão »: the « n » form is due to the influence of the Perso-Arabic « sābūn »); পাঁউ, পাঁও in combination with রুটী [pãu-, pão-ruṭi] *European bread* (pão); নীলাম < *লীলাম [nilam < *lilam] *sale* (leilão); বয়াম, বইয়াম, বৈয়াম [boĕam, boiam] *earthen-ware or stone-ware vessel* (boião). In ক্রিস্তান earlier ক্রিস্তাঁও [kristan, kristão] *Christian* (c[h]ristão), and in কাপ্তান beside কাপ্তেন [kaptan, kapten] *captain* (capitão), there is influence of the English *Christian, captain*, with the [n]: cf. কৃশ্চান, খ্রীষ্টান, খৃষ্টান [kriʃʧan, khriʃṭan], ক্যাপ্টেন [kæpṭen] etc. The nasalisation is dropped in আলকাতরা [alkatra] *pitch, tar* for [*alkatram] (alcatrão).

357. The Portuguese « e ». When strong, it probably had in the 17th century, as now, the values of [e, ɛ]. When weak or unstressed, it was probably both short [ĭ] and [ə] as now.

Final unstressed « e », or unstressed « e » in a final syllable, is normally represented by [i] in Bengali: the 17th century Portuguese pronunciation was probably a short [ĭ]. Before « s »+consonant, it occurs also as [i] in Bengali, following the Portuguese pronunciation. *E.g.*, কপি for কোপি, কোবি [kopi, kobi] *cabbage* (cóuve); কাফ্রি [kaphri] *negro* (cáfre); চাবি [ʧabi] *key* (cháve); পাদ্রি [padri] *Christian priest* (pádre); বালতি, বালদি [balti, baldi] *bucket* (bálde); বিন্তি [binti] *twenty, a term in card-game* (vínte); সুরতি [ʃurti] *lottery* (sórte); বের্দ্দি [berdi] *green colour* (vérde); কালাপাতি [kalapati] *to correct, tinker, calker* (calafáte); গরাদি [gɔradi] *bar* (grade); পিরিচ [piriʧ] *saucer* (pires); ইস্পাত [iʃpat] *steel* (espáda); ইস্ত্রী [istri] *ironing* (estirár). In an initial syllable, unstressed « e » remains [e]: *e.g.*, পেরু [peru] *turkey fowl* (perú): in যীশু [ʤiʃu] *Jesus* (Jesus), there is probably the influence of the English [dʒi:zəs]: we have also a rare যেশু [ʤeʃu], based on the Aramaic.

Stressed « e », pronounced [e, ɛ], is retained in Bengali as এ [e]: কোরেন্তা [korenta] *term in card game* (quarénta); তিজেল [tiʤel] *a vessel* (tigéla); প্রেক, পেরেক [p(e)rek] *nail* (prégo); মেজ [me:ʤ] *table* (mésa): বের্দ্দি [berdi] *green colour* (vérde); রেস্ত [restɔ, -o] *balance, capital* (résto);

সেঁকো [ʃẽko] *arsenic* (arsénico). Open [ɛ], as in « pera » *pear* becomes [ea, æ, æĕ] in Bengali : পেয়ারা, প্যারা, প্যায়রা [peara, pæra, pæĕra] *guava*.

In গিরজা, গীর্জ্জা, গ্রিজা [girʃʒa, griʃʒa] *church* (igréja), we have [i] for « é », through influence of the assimilated « i » : see also p. 357. In কাফি [kaphi] *caffee* (café), final stressed « é » is changed to [i].

In বোতল [botəl] *bottle* (botélha), it seems there is influence of the English word [bɒt].

Loss of « e » : আলপিন [alpin < *alpint ?] *pin* (alfinite) ; গামলা [gamla] *large earthen or metal basin* (gaméla) ; জানলা [ʃʒanla] beside জানেলা, জানালা [ʃʒanela, ʃʒanala] *window* (janélla).

The group « ei », in Modern Portuguese = [ɛĭ] when stressed, [ĕĭ] when unstressed, is differently represented in Bengali : *e.g.*, *লিলাম > নীলাম, নিলাম [*lilam > nilam] *sale* (leilão) ; কেদারা [kedara] *chair* (cadeira) ; প্রেমারা, প্রমারা [premara, promara] *a card game* (primeiro) ; বোম্বাটিয়া > বোম্বেটে [bambaṭia > bombeṭe] *pirate* (bombardeiro).

358. Portuguese « i », stressed or unstressed, remains as [i] in Bengali : *e.g.*, আলপিন [alpin] *pin* (alfinite) ; কামিজ [kamiʃʒ] *shirt* (camisa) ; ক্রিস্তান [kristan] *Christian* (cristão) ; ফিতা [phita] *tape* (fita) ; পিপা [pipa] *barrel* (pipa) ; পিরিচ [piriʧ] *saucer* (pires) : ফিগ্র [phigru] *lean of figure* (figura) ; কিরিচ, কিরিস [kiriʧ, kiriʃ] *Malayan dagger, bayonet* (creis) ; আলমারি [almari] *almirah* (armario) ; বিন্তি [binti] *a term in card game* (vinte) ; মেরিনো [merino] *a kind of woollen stuff* (merino) ; তিজেল [tiʃʒel] *an earthen pot* (tigella) ; বিস্কুট [biʃkuṭ] *biscuit* (biscoito).

Intervocal « i » becomes the [ĕ] glide, rarely [i], in Bengali : *e.g.*, বয়াম, বইয়াম, বৈয়াম [boĕam, boiam] *large earthen-ware or stone-ware vessel* (boião) ; আয়া [aĕa] *nurse* (aia) ; বয়া [boĕa] *buoy* (bóia) ; সায়া [ʃaĕa] *skirt, gown* (saia) ; পেঁপে < *পাঁপাইয়া, *পাঁপিয়া [pẽpe < *pãpaia, *pãpia] *papaya fruit* (papaia).

In প্রেমারা, প্রমারা [premara, promara] *a card game* (primeiro), and তেরেন্তা [terenta] *a term in card game* (trinta), the group « ri » behaves like ঋ « ɾ » in Bengali words (see *ante*, p. 357). In বেহালা, বেয়ালা, also ‡ব্যায়লা [beala > beĕala, baĕla] *violin* (viola), there is change of « i » to [e].

In ‡সাঁতরা, সান্তারা [ʃãtra, ʃantara] *orange*, cf. সাঁতরাগাছি [ʃãtragaʧhi] *Orange-tree*, village near Calcutta, from Portuguese « Cintra », we have change of the group « in » to [an, ã].

Loss of « i »: আলপিন [alpin] *pin* (alfinite); কাপ্তেন [kapten] *captain* (capitão), through English influence; and সেঁকো [ʃõko] *arsenic* (arsenico), where « ni » probably became « ñ » and then a mere nasalisation of the vowel.

359. Unstressed « o » was pronounced as [u] in Early Modern Portuguese, as now. In Bengali « o » occurs as [u] and as [o]: *e.g.*, তামাকু [tamaku] beside তামাক, তমাক [tamak, tomak] *tobacco* (tabáco); মাস্তুল<*মাস্তু [mastul <*mastu] *mast* (mástro); in a number of 'Christian' words like এন্‌ক্রুদু [entrudu] *carnival, shrove-tide* (entrudo), ইশপিরিতু সান্তু [iʃpiritu ʃantu] *Holy Ghost* (espirito santo), ইন্‌সেন্সু [inʃensu] *incense* (incenso), মানু [manu] *brother* (mano), তেরসু [terʃu] *rosary* (terço), etc.; বোতাম [botam] *button* (botão); বোতল [botol] *bottle* (betélha); তোয়ালে [toale] *towel* (toálha); বোম্বেটে [bombeṭe] *pirate* (bombardéiro); মেরিনো [merino] *a kind of woollen stuff* (« merino »: may be through the English); রেস্ত, রেস্তো [resto, -to] *remainder, capital* (resto), probably through a stage *রেস্তু [restu]; সেঁকো [ʃõko] may be from a form *সেঁকুয়া [ʃõkua] *arsenic* (arsenico). Unstressed « o » occurs as [a] in খানা [khana] *ditch* (cano), and in প্রমারা, প্রেমারা [promara, premara] *a card game* (primeiro).

There is loss of final unstressed « o » in আলমারী [almari] *almirah* (armário); আলকাতরা [alkatra < *alkatrãu] *tar* (alcatrão); কাতান [katan] *sword* (catano, catana); পরাত [porat] *large salver* (prato); পেরেক, প্রেক [perek, pre:k] *nail* (prego); ‡মার্তল, মার্তোল [martol, -tol] *hammer* (martello), বিস্কুট [biʃkuṭ] *biscuit* (biscoito), due partly to a facetious analysis বিষ-কূট « biṣa-kūṭa » *poison-mass*, biscuits as foreign food prepared by Christians being prohibited to orthodox Hindus.

Stressed « ó », pronounced [o, ɔ], occurs in Bengali as [o, ɔ] as well: বয়া [boẽa] *buoy* (bóia); নোনা [nona] *custard apple* (anóna); বোমা [boma] *bomb* (bómba); ফর্মা [phorma] *form* (fórma). In ফুর্তি [ʃurti] *lottery* (sórte), the [o] is changed to [u] by vowel harmony (see p. 397). « ó » occurs

as [a] in সাঁকালী [ʃãkali] *two-mouthed bag* (saccóla), and in বেয়ালা [beala] *violin* (vióla).

« oi », pronounced [oĭ], occurs as [u] in বিস্কুট [biʃkuṭ] *biscuit* (biscoito). « ou », pronounced [o, ou] in Modern Portuguese, was probably [o] in the 17th century: In কপি for *কোপি, *কোবি [kopi < kobi] *cabbage* (cóuve) and টোকা [ṭoka] *a large bamboo hat* (touca), this group is found as [o].

360. Portuguese « u », stressed and unstressed, remains as [u] in Bengali, *e.g.*, সাগু [ʃagu] *sago* (sagú) : পেরু [peru] *turkey bird* (perú); কাজু [kaʃʒu] *Brazil nut* (cajú) ; গুদাম [gudam] *godown, ware-house* (gudão); যীশু [ʃʒiuʃu] *Jesus* (Jesus); ক্রুশ, কুরুশ [kruːʃ, kuruʃ] *cross* (crúz); ফিগ্রু [phigru] *lean figure* (figura); কাকাতুয়া [kakatua] *a white talking parrot, cockatoo* (cacatú); ফুঁদিল [phũdil] *funnel* (funil). The word কোঙা, কোঁয়া [koŋa, kõa] *bent double with age*, probably from Portuguese « cúnha » *wedge*, shows change of [u] to [o] through Vowel Harmony.

361. In groups like « cr, tr, pr » there has been an intrusive vowel: মিস্তিরি [mistiri] beside মিস্ত্রী [mistri] *craftsman, artisan* (mestre); পরাত [pərat] *plate* (prato); ফরাসীস [phoraʃiʃ] *French* (Francez); কিরিচ [kiriʧ] *dagger, bayonet* (cris); গরাদিয়া [gəradia] *bar* (grade); etc. « r » with a consonant has been treated as ঋ « ṛ » in Bengali (see p. 356): *e.g.*, « igreja » *church* > গীর্জ্জা, গৃজা, গিরিজা [girʒʒa, griʒʒa, giriʒʒa]; « verga, virga » *rod, pole, lintel* > বরগা, বর্গা [bərəga, bərga] *rafter*.

A final [a] has been added to some words : কাকাতুয়া [kakatua] *parrot* (cacatú); গরাদিয়া [gəradia] *bars* (grade); and probably also *সেঁকুয়া > সেঁকো [*ʃẽkua > ʃõko] *arsenic* (arsenico).

Consonants.

362. Portuguese « b » remains as [b] in most cases : বয়া [bəẽa] *buoy* (bóia); বোতাম [botam] *button* (botão); বাল্‌তি [balti] *pail* (baldé) ; কাবার [kabar] *finish, last day of month* (acabar). « mb » occurs as [m] in বোমা [boma] *bomb* (bomba). Intervocal « b » becomes [m] in তামাক etc. [tamak] *tobacco* (tabáco): the intervocal stop in Portuguese itself has the open pronunciation of « b » = [v].

363. Portuguese « c » before « a, o, u », and before consonants = [k] in Bengali: *e.g.*, কাজু [kaʃʒu] *Brazil nut* (cajú); কপি [kopi] *cabbage* (couve); ক্রুশ [kru:ʃ] *cross* (cruz); কাবার [kabar] *finish, last day of month* (acabar); কাকাতুয়া [kakatua] *cockatoo* (cacatú); টোকা [ṭoka] *large bamboo hat used as umbrella* (touca). In খানা [kana] *ditch* (cána), we have a case of « ca » = [kha], through influence of native word like খাত « khāta » *fosse* < √খন « khan » *to dig*, etc.

Portuguese « ce, ci » pronounced [se, si]: ‡সাঁতরা [ʃãtra] *orange* (Cintra) : see p. 626, *supra*.

364. Portuguese « ch » is now [ʃ], as in French; but in earlier times it was a palato-alveolar affricate [tʃ], as in Old French and in Spanish (Castilian). In North Portugal (Tras-os-Montes), the affiricate sound is still found (F. Diez, Grammar of the Romanic Languages, French trans., Vol. I, Paris, 1874, p. 358). In the 17th and early 18th centuries the value of « ch » in all likelihood was [tʃ] : for (East) Bengali চ « c » = [c͡ʃ, ts], is represented by Padre Assumpçam by « ch », and by « s », and Portuguese « ch » normally became চ = [c͡ʃ = tʃ] and not শ, ষ, স = [ʃ] in Bengali; besides, [tʃ] of other languages is written « ch » by the early Portuguese authors. Examples in Bengali: চা [c͡ʃa:] *tea* (chá); চাবি [c͡ʃabi] *key* (chave); আচার [ac͡ʃar] *pickles, conserves* (achár).

365. Portuguese « d » is generally rendered by the dental দ [d] in Bengali: গরাদে [gorade] *bars* (grade); কেদারা [kedara] *chair* (cadeira); পাদ্রি [padri] *Christian priest* (padre); বের্দি [berdi] *green colour* (verde); etc. In some words it is cerebralised in Bengali, in the group « nd »: ওলণ্ডা [oloṇḍa] *a kind of pea* (Hollanda), but cf. ওলন্দাজ [olondaʃʒ] *Dutch*, (Hollandês), which may equally be from the French; বাণ্ডেল, ব্যাণ্ডেল [baṇḍel baṇḍel] *place-name near Hugli town* (Bandel < Pers. bandar *port*); and লণ্ড্র [loṇḍrə], an early Bengali name for London (Londra). There is unvoicing of « d » in বালতি beside বালদি [balti, baldi] *bucket* (balde), and in ইস্পাত [iʃpat] *steel* (espada *sword*).

An intrusive [d] occurs in ফুঁদিল < *ফুন্দিল [phũdil < *phundil] *funnel* (funil).

366. Portuguese « f » occurs as ফ « ph », which is pronounced as [ph, ɾ, f]: ফিতা, ফিতে, ‡ফিঁতে [phitɑ, phite, phĩte] *tape* (fita); ফুঁদিল [phũdil] *funnel* (funil); ‡ফেস্তা [phestɑ] *feast, holiday* (festa); কাফরি [kɑphri] *negro* (cafre); কাফি beside কাপি [kɑp(h)i] *coffee* (café). It also occurs as [p] in আলপিন [ɑlpin] *pin* (alfinite), and কালাপাতি [kɑlɑpɑti] *tinker* (calafate *caulker*). In the Dacca dialectal ('Portuguese Christian') word কংসার, কঙ্কসার [kɔŋ(k)ʃɑr] *to confess* (confessar), we have change of « nf » to [ŋ(k)].

367. Portuguese « g » before « a, o, u » and before consonants = গ [g] in Bengali: গামলা [gɑmlɑ] *large basin* (gamella); গুদাম [gudɑm] *warehouse* (gudão); বরগা [bɔr(ɔ)gɑ] *rafter* (verga); গিরজা [girʒɑ] *church* (igréja); etc. In পেরেক [perek] *nail* (prego) there is hardening of [g]. Loss of intervocal « g », pronounced as an open consonant in Portuguese, has given rise to the form সাবু [ʃɑbu < *ʃɑwu] beside সাগু [ʃɑgu] *sago* (sagu); and « figura » *figure* has given in addition to ফিগ্‌রু [phigru], ফিকরু [phikru] as well as ফিব্রু [phibru] *lean and thin*.

In Modern Portuguese, « g » before « e, i » is pronounced [ʒ], as in French. Probably the old pronunciation was [dʒ]: তিজেল [tiʒel] *a large earthen vessel* (tigella).

368. The letter « h » was not pronounced in Early Modern Portuguese, as now: ওলণ্ডা [olɔ̃ɖɑ] *a kind of pea* (Hollanda).

There is prothetic [fi] in MB. হরমাদ, হারামদ [fiɔrmɑd, fiɑrɑmɔd] *pirate fleet* (armáda), and euphonic intervocal [fi] in বেহালা [befiɑlɑ] *violin* (viola).

369. « j » is [ʒ] in Modern Portuguese, but formerly in all likelihood it was [dʒ]. In Bengali it occurs as জ [ʃʒ]: জানেলা [ʃʒɑnelɑ] *window* (janella); যীশু [ʃʒiʃʒu] *Jesus* (Jesus); কাজু [kɑʃʒu] *Brazil nut* (caju).

370. Portuguese « l » ordinarily remains: *e.g.*, আলকাতরা [ɑlkɑtrɑ] *tar* (alcatrão); জানেলা [ʃʒɑnelɑ] *window* (janella); সালসা [ʃɑlʃɑ] *sarsaparilla* (salsa); ফুঁদিল [phũdil] *funnel* (funil); etc. In নিলাম [nilɑm] *sale* (leilão), initial « l » is changed to [n], and in ইংরেজ [iŋreʃʒ] *English* (Inglês), we have [r] for « l ».

The group « lh » has the value of a palatal [ʎ] in Modern Portuguese, but its earlier value seems to have been [lĭ]: in Bengali, the basis of

change was a [lĭ] sound, which was later modified: *e.g.*, তলুয়া, *উলা, *তল্যা > তোলো [tɔluɑ, tɔ̆lɑ, > tolo] *a large pot* (talha); তোয়ালে < তোয়ালিয়া [toale < toalia] *towel* (toalha); বেসালি [beʃali, bæʃali] *pail* (vasilha); and বোতল [botɔl] *bottle* (botélha) seems to have been influenced by the English word = [bɒtł].

371. « m » remains: মার্কা [mɑrkɑ] *mark* (marca); ফরমা [phɔrmɑ] *form* (forma); কামরা [kɑmrɑ] *chamber* (camara); গামলা [gɑmlɑ] *large basin* (gamella); মাস্তুল [mɑstul] *mast* (mastro); etc.

372. « n » remains: নোনা [nonɑ] *custard apple* (anona); বিন্তি [bintɪ] *term in card game* (vinte); জানেলা [ʄanelɑ] *window* (janella). Folk etymology has changed it to [r] in আনারস [ɑnɑrɔʃ] *pine-apple* (ananas), and it nasalises the vowel in ‡সাঁতরা [ʃãtrɑ] *orange* (Cintra *a town*), and in সেঁকো [ʃẽko] *arsenic* (arsenico).

There is spontaneous nasalisation in পেঁপে [põpe] *papaya fruit* (papaia).

« nh » has the value of [ɲ] in Portuguese. In the word কোঙা, কোঁয়া [koŋɑ, kõɑ] *beat (with age)*, probably = Portuguese « cunha » *wedge*, we have a case of « nh » = [ŋ, ˜] in Bengali.

373. Portuguese « p » is retained: পিপা [pipɑ] *barrel* (pipa); পাঁউ [pãu] as in পাঁউরুটী « pãu-ruṭi » *European bread, loaf* (pão); পেয়ারা [peɑrɑ] *guava* (pera); পিস্তল [pistɔl] *pistol* (pistola); etc.

374. In কোরেন্তা [korentɑ] *a term in card game* Portuguese « qua » occurs as [ko].

375. Portuguese « r » is generally retained: রেস্ত [restɔ] *remainder, capital (in card game)* (resto); পাদ্রি [pɑdrɪ] *priest* (padre); পেরু [perɑ] *turkey fowl* (peru); ক্রুশ [krʊ:ʃ] *cross* (cruz); কাবার [kɑbɑr] *finish, last day of month* (acabar); etc. It is changed to [l] in মাস্তুল [mɑstul] *mast* (mastro) and in আলমারি [ɑlmɑrɪ] *almirah* (armário): and it seems to have been be dropped finally in ইস্ত্রী [istrɪ] *ironing* (estirar).

376. Modern Portuguese « s » has four sounds, namely [s, z, ʃ, ʒ], all of which seem to have obtained in the 17th century. The [s, ʃ] pronunciation appears in Bengali as শ, স [ʃ] (occasionally as চ [ʧ] in a final position), and the voiced ones, [z, ʒ], as জ [ʄ]. Examples: সাবান, সাবাং

[ʃabaṇ, -aṇ] *soap* (sabão); সায়া [ʃaĕa] *skirt, petticoat* (saia); সুর্তি [ʃurti] *lottery* (sorte); সালসা [ʃalʃa] *sarsaparilla* (salsa); আনারস [anarɔʃ] *pine-apple* (ananas); মেজ [me:ʃʒ] *table* (mesa); কামিজ [kamiʃʒ] *shirt* (camisa); ইস্পাৎ [ĭʃpat] *steel* (espada); কাজ in কাজ-ঘর [kaʃʒ-ghɔr] *button-hole* (casa); ইংরেজ [iṇgreʃʒ] *English* (Ingles); পিরিচ [piriʧ] *saucer* (pires); কিরিস, ক্রিস, কিরিচ ['kriʃ, kiriʃ, kiriʧ] *bayonet, dagger* (cris); etc. In « st », the dental [s] is retained: পিস্তল [pistɔl] *pistol* (pistola); মিস্ত্রী [mistri] *craftsman* (mistri).

377. Portuguese « t » is retained as ত [t] in most cases: তামাক [tamak] *tobacco* (tabaco); তোয়ালিয়া [toaliа] *towel* (toalha); তিজেল [tiʃʒel] *earthen pot* (tigella); বিন্তি [binti] *term in card game* (vinte); মাস্তুল [mastul] *mast* (mastro); ফিতা [phitа] *tape* (fita); etc. It is cerebralised in টোকা [ṭoka] *umbrella-hat* (touca), in সপেটা [ʃɔpeṭa] *a plant* (zapóta, sapóta), and in বিস্কুট [biʃkuṭ] *biscuit* (biscoito). Loss of « t » occurs in আলপিন [alpin] *pin* (alfinite).

378. Portuguese « v » is regularly represented by ব [b].

The denti-labial spirant [v] was absent in Middle Bengali, and the bilabial spirant [ʋ] seems equally to have been non-existent. The spirant pronunciations of ভ [bʱ], = [v, ʋ], are very recent, and do not seem to have been developed before the 19th century (cf. pp. 135, 443; also *infra*, under « v » in English loan-words). ভ « bh » became [v, ʋ] first in the towns, among educated classes, and in the country-side in West Bengal the use of [bʱ] for the foreign [v], following the Modern Bengali transliteration, is not absent. If the spirant pronunciation of ভ had been developed in Bengali of the 17th, 18th and early 19th centuries we would have found that letter, rather than ব [b], for the Portuguese [v]. বিন্তি [binti] *twenty, term in card game* (vinte); বেসালি [beʃali] *pail* (vasilha); চাবি [ʧabi] *key* (chave); *কোবি>কপি [*kobi>kopi] *cabbage* (couve); বের্দ্দি [berdi] *green colour* (verde); বরগা [bɔr(ɔ)gа] *rafter* (verga).

379. Portuguese « x » has as its characteristic value the sound of [ʃ], although other sounds are known [ks, kʃ, z, s]. (See p. 547.) It is not found in any Portuguese loan-word in Bengali, unless it were « crux » as a variant of « cruz ».

380. « z » is found in ক্রুশ [kru:ʃ] *cross* (cruz), ফরাসীস [phɔrɑʃʃ] *French* (Francêz): final « z » was pronounced as [ʃ] as now in Early Modern Portuguese. In সপেটা [ʃɔpetɑ] *a plant, sapota*, we have [ʃ] for « z » (« zapota », also spelt « sapota »), and « ananas » > আনারস [ɑnɑrɔʃ] *pineapple* is also spelt « ananaz ».

CHAPTER VIII

PHONOLOGY OF THE FOREIGN ELEMENT: ENGLISH

381. The English first came to Bengal in 1651, more than a hundred years after the Portuguese had obtained a footing in the province. Calcutta was founded in 1689. The English thus came in touch with the people of Bengal in the middle of the 17th century, but it was not until the middle of the 18th that there was much scope for the English speech to influence Bengali. Among other reasons, one was that Portuguese influences ruled supreme, although Portuguese power was on the decline. The names of the English and of other European nations in 18th century Bengali are from French, or from Portuguese (Iŋrēj, Phārāsī[s], Olāndāj, Dinēmār, Alēmān : see p. 215). A Portuguese jargon was for a long time the language of intercourse between European traders of various nationalities and their Indian agents. Barring one or two words like কোম্পানী « kōmpānī » *company*, it does not seem likely that any English words came into Bengali before the year of Plassey (1757). When the English assumed the reins of government in 1765, a number of English terms of administration at once came into Bengali, like গবর্ণর জন্দরাল « gabarṇarʃ jandarālʃ » *governor general*, কৌঁশুলী « kõuśuli » *counsel*, কালেক্টার « kālēkṭārʃ » *collector*, লাট « lāṭʃ » *lord*, তেরেজুরী « tērējurī » *treasury*, পোলিস or পুলিস « pōlisʃ, pulisʃ » *police*, etc. From the third quarter of the 18th century, there has been a steady accession of English words into Bengali, and through an intimate knowledge of the English language and English culture among the educated classes—and 'educated' is now almost synonymous with 'educated in English'—an unending stream of English words is now being admitted into Bengali; and the process was never more active than at the present moment: so that it is well-nigh impossible now to estimate the English element in Bengali, alike in its extent and in its phonology. Contact with English is now arresting further Bengalisation of English loan-words, as English-knowing people,

whose number is now on the increase, will not ordinarily pronounce these words in the ignorant way, and some would even use an approximately proper English form rather than a naturalised one like ডাক্তার « ḍāktār » *doctor*, হাঁসপাতাল « hãspātāl্ » *hospital*, আপিস « āpis্ » *office*, ডবল « dabal্ » *double*, etc.

In the present connexion, notice can only be taken of the naturalised words, which have completely accommodated themselves to Bengali phonetics, and are used and understood by most Bengali speakers. In introducing the English words into Bengali a rather archaic pronunciation of the language, based to a great extent on the spelling, is followed as the basis of the English forms. A hundred years of English schooling in Bengal has established a current Bengali pronunciation of English,[1] and some five generations of Bengali schoolmasters have been teaching an English pronunciation, of a sort, which obtains wherever English is used by Bengalis—in the law-courts, in the schools and colleges and the University, on the political platform, in government offices and in European firms, in literary and scientific societies—and which, though not unintelligible to even an unaccustomed English ear, is not, and cannot be English. The same thing has happened in Madras, and is happening everywhere in India. Extreme types of Indian provincial pronunciation of English, *e.g.*, East Bengali pronunciation and Tamil pronunciation, are at times mutually difficult to follow.

The current Bengali pronunciation of English has at its basis Standard Southern English of about a century ago, modified to a great extent by the Scottish pronunciation, and by the spelling and the pronouncing dictionary, all of which have helped to give it rather an archaic character. The vowels [e:, o:] of 18th century English and present-day Scots English, have been diphthongised to [eɪ, oʊ] in Standard Southern English, as in the words *cane*, *cone* [kʰe:n, kʰo:n = kʰeɪn, kʰoʊn], but they retain their

[1] The only scientific system of transcription of English sounds by Bengali letters, to teach a correct English pronunciation to Bengali children, is that of Śyāmā Charaṇ Gāṅgulī, in his 'Bengali-English Word-book,' New Edition, Calcutta, 1901, the introduction to which little work is valuable for Bengali phonetics as well.

monophthong character in Bengali, although occasionally [ei] also is found. Southern English drops the sound of [r] at the end of a syllable and before a consonant within a word, but it is retained everywhere in Bengali except that it is occasionally assimilated with a following [*t*, *d*]. Finer distinctions in the vowel sounds are avoided, and, naturally enough, Bengali approximations are used for all English sounds not found in Bengali.

Below is given a transcription (in the alphabet of the International Phonetic Association) of the Story of the North Wind and the Sun in the Bengali pronunciation as followed in West Bengal by people who have no opportunity of coming in contact with native English speakers, or who do not care to acquire the correct pronunciation from such native speakers of English even though they meet and talk with them frequently:

[di nərth uinḍ ænḍ di san oær ḍispiuṭiŋ fiuiʧ oaz di sṭrɔŋgar, fioeu e ṭrævlar (ṭræbfilar) ke:m ælɔŋ ræpṭ in e oarm klo:k. de: egri:ḍ dæṭ di oan fiu: farsṭ (pfarsṭ, ғarsṭ, pharsṭ) meḍ di ṭrævlar ṭek ɔf: (ɔph) fiiz klo:k ʃuḍ bi kən'siḍarḍ sṭrɔŋgar dæn di adar. den di nərth uinḍ blu: uith ɔ:l fiiz mait, baṭ di mo:r fii: blu:, di mo:r klozli ḍiḍ di ṭrævlar foḷḍ (pfoḷḍ, ғoḷḍ, pholḍ) fiiz klo:k æraunḍ fiim; ænḍ æṭ lasṭ di nərth uinḍ ge:v (ge:bfi) ap di æ'ṭem(p)ṭ. den di san ʃo:n auṭ oarmli, ænḍ im(m)iʒʒieṭli di ṭrævlar ṭuk ɔf: (ɔph) fiiz klo:k; ænḍ so di nərth uinḍ oaz oblaiʒʒḍ ṭu kənfes (kənphes) dæṭ di san oaz sṭrɔŋgar ɔf (ɔph) di ṭu:][1].

The general line of change of the English sounds in Bengali is indicated below; and this is followed by a select list, with phonological notes, of naturalised English loan-words in the language.

The Vowels.

382. Quantity of vowels is entirely in accordance with Bengali habits. (See 'Brief Sketch of Bengali Phonetics,' §§54 ff.) Thus, in all

[1] For phonetic transcriptions of the above story in the ordinary South English, Northern English, Scots English and American English pronunciations, see 'The Principles of the International Phonetic Association,' London, 1912.

monosyllables the vowel is always long; *e.g.*, জজ [ʤɔ:ʤ] *judge* (dʒʌdʒ); ফুট [phu:ṭ] *foot* (fʊt); উল [u:l] *wool* (wʊl); পীট [pi:ṭ] *pit in a theatre* (phɪt); etc. No difference is made between *full* and *fool*, *bell* and *bail* in Bengali.

The stress is according to the habits of Bengali.

The vowel sounds of English, as in Standard South English, are the following: [ɪ, i:, ɛ, æ, ɑ:, ɒ (=short ɔ), ɔ:, ʊ, u:, ʌ, ə, ɜ: (=long ə:)], with the diphthongs [eɪ, oʊ, aɪ, aʊ, ɔɪ, iə, ɛə, ɔə, uə]. [e, o, a, aə] are also found. (See Daniel Jones, 'An English Pronouncing Dictionary,' London, 1922; 'The Pronunciation of English,' Cambridge, 1914; 'An Outline of English Phonetics,' Leipzig and Berlin, 1922; Lilias E. Armstrong, 'An English Phonetic Reader,' London, 1923; R. J. Lloyd, 'Northern English,' Leipzig and Berlin, 1908; William Grant, 'The Pronunciation of English in Scotland,' Cambridge, 1914).

383. [ɪ, i:] both occur as ই ঈ [i:, i] = a rather low vowel in Bengali; [ɛ] becomes এ [e:, e]; [æ] remains as [æ:, æ], written এ, এ্যা, য়্যা, আ্যা, the Bengali sound being rather lower than the English one; [ɑ:] is found as আ [ɑ:, ɑ], slightly more advanced than the English sound.

384. The treatment of English [ɒ, ɔ:] requires a note.

At the present day, [ɒ], the so-called short [ɔ] sound (as in *lot* [lɒt]), and long [ɔ:] (as in *law* [lɔ:]), are both rendered by অ [ɔ, ɔ:] in Bengali: *e.g.*, কলেজ [kɔleʤ] *college* [kʰɒlɪdʒ], ল [lɔ:] *law* [lɔ:], etc. This is now the nearest Bengali equivalent of the English sounds. But in the late 18th and early and mid 19th century transcriptions of English words and names in Bengali, we find the use of আ [ɑ:, ɑ], for the English vowel now pronounced [ɒ, ɔ:], and not অ [ɔ:, ɔ], as we would expect. অ = [ɔ] is also found, but আ [ɑ] is more common; and this আ [ɑ] tradition in spelling, as an equivalent of the New English [ɒ, ɔ:] sounds, is carried down to the end of the 19th century. Early naturalised loan-words from English all show আ [ɑ] and not অ [ɔ]: *e.g.*, আগর [ɑgɔr], beside অগর [ɔgɔr] which is recent < *auger*; কার্ণিশ, কারনিস [karniʃ] < *cornice*; কার [ka:r] < *cord*; হাল [ɦa:l] *hall*; কাক [ka:k] *cork*; আপিস [apiʃ] *office*; আর্দালী [ardali] *orderly*; ডাক্তার [ḍaktar] *doctor*; লাট <

*লাড [la:ṭ < *la:ḍ] *lord*; পালিশ [paliʃ] *polish*; কাপি [kapi] *copy*; বাক্স [bakʃɔ] *box*; etc., etc.; and also quite a number of English names in early 19th century Bengali, *e.g.*, জান [ʄa:n] *John*; তামস [tamɔʃ] *Thomas*; জার্জ্জ [ʄa:rʄ] *George*; লার্ড মার্ণিঙ্গটান [lard marniŋ(g)ṭan] *Lord Morningtton*; etc. The use of আ [a] in Bengali was due to the fact that the pronunciation of *o, au, aw* etc. in English of a hundred years ago was to a great extent open: it was quite distinct from the present-day [ɒ, ɔ:], and acoustically was rather like [a, a:] both short and long, possibly with but little rounding of lips. This old [a]-like pronunciation of *o, au, aw* is still found in American English. (Cf. Otto Jespersen, 'A Modern English Grammar,' Part I, Heidelberg, 1909, under [ɔ:], pp. 313, 316: Kenrick in 1773 identifies the vowel sound in *soft, oft, cloth, call, hawl, caul, George* with that in French *âme, pas*; and Pegge, 1803, says that "daater, saace, saacer, saacy" =*daughter, sauce, saucer, saucy*, savour rather of an affected refinement than vulgarity. There were fluctuations between [ɒ, ɔ:] and [a, a, a:] in the 18th century. See also under the treatment of [a] in Jespersen). It is also to be noted that in the 18th century and early and mid 19th century transcriptions of Indian names and words into English, the Indian sound of [a, a:] was almost invariably rendered by *o, au, aw*: which is strong corroborative evidence for (at least acoustically) an [a] pronunciation in English itself: *e.g.*, *Awlley Cawn* = ᵒAlī Khān; *Collychurn Doss* = Kālī-cāraṇ Dāsa; *Punjaub* = Panjāb; *Daw(n), Law, Shaw, Paul* = the Bengali surnames দাঁ « Dā̃ », লা or লাহা « Lā(hā) », সা or সাহা « Sā(hā) », পাল « Pāl »; *Loll* = « Lāl »; *Jaun* = « Jān »; *Juggernaut* = জগন্নাথ « Jagannātha »; *Meer Cosseem* « Mīr Qāsim »; *Cossipore* = কাশীপুর « Kāśīpura »; *pawnee* = পানী « pānī » *water*; *shraub* = « šarāb » *wine*; *dolly* = ডালী « ḍālī » *basket* (*of fruits or flowers, as a present*); *dholl* = দাল « dāl » *pulses*; *shawl* = « šāl »; etc., etc. Early Bengali forms with আ [a] of English loan-words are thus based on a more open pronunciation which obtained in English itself. At the present day, when the [ɒ, ɔ:] pronunciation has been definitely established in English, many early 19th century Bengali borrowings from English are being revised according to this later pronunciation. Thus although we retain ডাক্তার [ḍaktar] *doctor*,

আফিস [apiʃ] *office*, পালিশ [paliʃ] *polish*, কার্ণিশ [karniʃ] *cornice*, বাক্স [bakʃɔ] *box*, লাট [la:ṭ] *lord*, we do not ordinarily say as before, কালেক্টর [kalekṭɔr] *collector*, কাপি [kapi] *copy*, কালেজ [kaleʄʒ] *college*, etc., which are regarded as old-fashioned, but [kəlekṭɔr, kɔpi, kəleʄʒ].[1]

The slight difference in quality between the sounds of the short [ɒ] as in *not* [nɒt] and the long [ɔ:] as in *law* [lɔ:] is not taken in to account in Bengali.

385. [ʊ, u:] are rendered by [u:, u], written ঊ, and occasionally উ.

The English sound of [ʌ] as in *dull*, *sun*, *son*, is now changed to আ [a] in Bengali, but its older transformation in Bengali was অ [ɔ] : *e.g.*, গবর্ণমেণ্ট « gȧbȧrṇȧmēṇṭ৪ » *government*, ডবল « ḍȧbȧl » *double*, হরিকেন « hȧrikēn » *hurricane* (*lantern*), নম্বর « nȧmbȧr » *number*, হন্দর « hȧndȧr » *hundredweight*, টন « ṭȧn » *ton*, টব « ṭȧb » *tub*, ডজন « ḍȧʄʒȧn » *dozen*, etc., etc., and in names like বর্টন « Bȧrṭȧn » *Burton*, গলিবর « Gȧlibȧr » *Gulliver*, etc. Most of the naturalised words introduced into the language early in the 19th century retain the [ɔ] sound in Bengali.

The [ɔ] sound for Modern English [ʌ] is based on an earlier value of the short « ŭ, ŏ », of English, which is still found in dialectal English, as for example, in Ireland. Present-day English [ʌ] rather approaches [a] : possibly in the late 18th and early 19th, it approached the back sound of [ɔ] to a great extent. In Modern Bengali transcriptions, the equivalent of [ʌ] is আ [a], and the use of অ [ɔ], in pronunciation as well as in writing in Bengali, is now regarded as old-fashioned.

386. [ə], the so-called neutral vowel, is not found in Bengali, and the other strong vowels (of which it is the weakening in English) are used for it : *e.g.*, এপ্রিল [epril] *April*, beside আবরিল [abril] in late 18th cen., and আপরিল [april] in early 19th cen. transcriptions ; এমেরিকা, আমেরিকা [æmerika, amerika] *America* ; লেপ্টেনাণ্ট [leptenant] *lieutenant* ; হোমিওপাথী

[1] In Hindōstānī and other Indian languages, আ [a:] is normally used for the English sound of [ɒ=ɔ, ɔ:], and now ঔ 'au,' pronounced [ʌo, ɔu, ɔo, ɔ:] is also employed. Excepting the diphthong 'au,' Hindōstānī does not, or till very recent times did not, possess a sound approximating the English [ɔ], and hence the employment of [a:].

[fiomiopathi] *homœopathy*; ইংলণ্ড, -লাণ্ড, -ল্যাণ্ড [iŋlɔnḍ, -lanḍ, -lænḍ] *England*; চায়না [ʧaĕna] *China*. When this [ə] occurs with [r], which is not pronounced in Modern Southern English, it is now found as আর [ar]: in the earlier transcription, however, it became অর [ɔr]: *e.g.*, earlier গবর্ণর [gəbɔrnɔr], beside গভ(র্)ণর [gɔvarnar, -vɔr-] *governor*: লিবার [livar] *liver* beside old-fashioned ‡নিবর [nibɔr] = *infantile liver*; রিভলবার [rivɔlbar] *revolver*; নম্বর [nɔmbɔr, nɔmbor] *number*, an old borrowing; etc. The use of *ar* for *er* is not unknown in the orthography and pronunciation of English itself. The commonest equivalent of [ə] in Bengali would be আ [a]. Initial [ə] is found to be dropped in a few cases: *e.g.*, টুর্নী [ṭurni], also টর্নী [ṭɔrni] *attorney*; গিরিমেণ্ট [girimenṭɔ] *agreement*. [ɜ:], the so-called long form of [ə], as in *birth, shirt, her* [bɜ:θ, ʃɜ:t, hɜ:], occurs only in connexion with [r], and it is generally rendered by আর [ar]: *e.g.*, শার্ট [ʃart] *shirt*, সার্জ্জ [ʃarʤ] *serge*, সার্জ্জন [ʃarʤɔn] *sergeant* (*in police*), also *surgeon*, etc. The word কর্ণেল [kɔrnel] *colonel* [khɜ:nl] is probably influenced by the spelling in *o*.

387. [ei] of Modern Southern English is ordinarily denoted by এ [e], following earlier English and present-day Scotch pronunciation of [e:]. It is only rarely that the Southern English diphthong value is followed: *e.g.*, ফেল [phe:l], rarely ফেইল [pheil] *fail*; মেল ট্রেন [me:l tre:n] *mail train*; জেল [ʤe:l] *jail*; etc.

[ai] is regularly denoted by আই [ai]: টাইম, টাইন [ṭaim, ṭain] *time*; টাইপ [ṭaip] *type*; ফাইন [phain] *fine*; হাইকোট,-কোর্ট [fiaiko(r)ṭ] *High Court*; বাইসম(র্)ান [baiʃmæn, -man] *vice-man, mechanic*; বাইসিকিল [baiʃikil] *bicycle*, etc. The first element of this diphthong was probably of a higher quality than now, but that was not taken into consideration in Bengali.

[au] = English *ou, ow*, etc. The equivalent of this group now is আউ [au], *e.g.*, হাউস [fiauʃ] *house*, টাউন [ṭaun] *town*, আউট [auṭ] *out*, কাউন্সিল [kaunʃil] *council*, ফাউল [phaul] *fowl, foul*, etc. In the earlier borrowings in Bengali, on the other hand, we find ঔ [ou]: *e.g.*, হৌস [fiouʃ] (*commercial*) *house*, ঔট [ouṭ] *out*, কৌশুলি [kōuʃuli] *counsel*, টৌন হাল [ṭoun fia:l] for present-day টাউন হল [ṭaun fio:l] *Town Hall*, etc. Here, too, as in the case of early Bengali আ [a] for English *aw, au, o*, the [ou], or rather [ɔu],

pronunciation obtained in English itself a hundred years ago. (Cf. O. Jespersen, *op. cit.*, pp. 235, 236.) We would expect to find [ɑu] in Bengali in the late 18th and early 19th centuries for *ou, ow*, if the first element in the diphthong were a low-back or low-central sound, and not a mid-back-wide-round one.

The South English diphthong [oʊ] was at one time simply a long [o:], which is the value preserved in Scotland. Bengali renders it by [o:, o], *e.g.*, বোট [bo:ṭ] *boat*, রোড, রোডসেস [ro:ḍ, roḍʃeʃ] *road, road-cess*, কোট [ko:ṭ] *coat*, etc.; and occasionally by [ə], following Bengali phonetic harmony: *e.g.*, ফটো (-গেরাপ) [phoṭo(gerap)] *photo(-graph)* = [foʊtoʊ, foʊtə-grɑ:f], মটর [məṭər] *motor* (moʊtə).

[oɪ] and [əɪ] are represented by অয় [ɔỏ]: বয় [bɔỏ] *boy* [boɪ, bəɪ], রয়টার [rɔỏṭar] *Reuter* (rəɪtə). For [iə], we have [iɑ]: ইণ্ডিয়া [inḍiɑ] *India*, রাশিয়া [rɑʃiɑ] *Russia*; and the [r] is preserved when [iə] occurs in connexion with that consonant: *e.g.*, বিয়ার [biɑr] *beer*, 'চিয়ার' [cʃiɑr] *cheer*; ইয়ারিং beside ইয়ার-রিং [iɑ(r)-riŋ] *earring*. [uə] would similarly be উঙ, উয়ো [uo], উওর, উয়োর [uor] or উয়র [uər]: বুওর, বুয়োর, বুয়র [buor, buər] *Boor, Boer*; 'পুওর' [puor] *poor*. The diphthong [ɔə], also pronounced [ɔ:], is from earlier [ɔr], written *ore, oor*, and it is rendered by ওর [o:r] in Bengali: ষ্টোর [sṭo:r] *store* [stɔə, stɔ:].

[ɛə] of South English is based on the group [ɛ] + [r], and the group [ɛr, ɛ:r] brings in a glide [ə] — [ɛᵊr, ɛᵊ]. In earlier transcriptions, this group became [ær]: *e.g.*, হ্যার [fiæ:r] *Hare, a name*; চ্যার [cʃær] *chair*; ক্যার [kæ:r] *care*; শ্যার [ʃæ:r] *share* etc. In recent renderings, we have এয়া [eɑ]: চেয়ার, শেয়ার, হেয়ার [cʃeɑr, ʃeɑr, feɑr], etc.

388. Regular loss of vowels is rare: see under [ə], *supra*.

There is addition of vowels [ə] in the interior of words, by anaptyxis—*e.g.*, গেলাস [geləʃ] *glass*; টেরেন [ṭeren] *train*; টেলিগেরাফ [ṭeligerap(h)] *telegraph*; তেরেজুরী [tereʃʃuri] *treasury* (an obsolete form); তোরং [toroŋ] *trunk*, পেলেগ [peleg] *plague*; বুরুষ [buruʃ] *brush*; সিলেট, সেলেট [ʃileṭ, ʃeleṭ] *slate*, ইনেস্পেক্টার [ineʃpektar] *inspector*, etc., etc.; [b] at the head of words beginning with «s»+stop: *e.g.*, আস্তাবল [astabol] *stable*; ইস্কুল [iʃkul] *school*; এষ্ট্যাম্প [eʃṭæmpə] *stamp*; ইষ্টিশন [iʃṭiʃən], also ইষ্টেশান [iʃṭeʃən] *station*;

ইস্পিরিং, ইস্প্রিং [iʃp(i)riŋ] *spring*, etc.; and [e] at the end of words ending in two consonants, where both are retained, without one of the consonants being dropped or assimilated, or where there is no intrusive vowel in between : *e.g.*, বেঞ্চি [benʧi] *bench*; কেট্‌লি [keṭli] *kettle*; ডেস্ক, ডেস্ক [ḍekʃo, deʃko] *desk*; বাক্স, বাস্ক [bakʃo, baʃko] *box*; গিল্টি [gilṭi] *gilt*; লিষ্টি [liʃṭi] *list*; লম্প or ল্যাম্প [lompo, læmpo] *lamp*, etc. Cases of dropping or assimilation of one consonant—রিপোট [ripoṭ] *report*; কার্ড [ka:r] *cord*; লার্ড [la:ṭ] *lord*; লণ্ঠন [lonṭhon] *lanthorn, lantern*; ওয়ারিন [oarin] *warrant*; হন্দর [hondor < *hondord] *hundredweight*; পিচ-, পিজবোর্ড, -বোড [piʧ-, piʤboṭ, -boḍ] *paste-board*, etc.; and cases of intrusive vowel in a final consonant nexus, *e.g.*, বাইসিকিল [baiʃikil] *bicycle*; ফারম [pharom] *form*; টারম [ṭarom] *term*, etc.

The above are the normal modifications of the English vowels in Bengali. There are case of irregularity due to folk-etymology, to the influence of Sanskrit, and at times to a humorous attempt at punning to which foreign words with even a very slight resemblance to native ones lend themselves (although these latter may be wide apart in significance); but such cases cannot be taken into account generally.

Occasionally, especially on the printed page, there is an attempt to give continental (Italian) values to the vowels in European and other names, personal or geographical : *e.g.*, আসিয়া [aʃia] rather than এশিয়া [eʃia] for *Asia*, বুলগারিয়া [bulgaria] *Bulgaria*, প্লাতো(ন্) [plato(n)] *Plato* [pleitou], etc. This is rather exceptional, and it is the English forms which generally obtain in the spoken language, as most speakers having occasion to use foreign names are familiar with English.

The Consonants.

389. The Stops and Nasals, and Affricates.

The slight aspiration of unvoiced initial stops of English, [kʰ, ṭʰ, pʰ], is dropped in Bengali. In খ্রীষ্ট, খ্রীষ্টান (খৃষ্ট, খৃষ্টান) [khriʃṭo, khriʃṭan] *Christ, Christian*, the aspiration is due to the original Greek : cf. ক্রিশ্চান, কৃশ্চান [kriʃʧan], from the English.

The voiced [g, b] remain. English alveolar [ṭ (ṭʰ), ḍ] are regularly changed to the cerebral ট, ড [ṭ, ḍ] in Bengali. But it is curious to note

that in the earlier adaptations of English words and names the dentals ত, দ [t, d] are frequently employed for the English sounds. This was partly due to the fact that transcription in Early Modern Bengali books and printed documents was done by, or under the inspiration of English scholars and orientalists, who equated the so-called English dentals with the Bengali dentals. Examples are, among obsolete forms, অক্তোবর [ɔktobɔr] *October*, দিসম্বর [diʃɔmbɔr] *December*, তামস [tamɔʃ] *Thomas*, কালেক্তর [kalektɔr] *collector*, লেপ্তেনেন্ত [leptenentɔ] *lieutenant*, etc., and among living words, ডাক্তার [ḍaktar] *doctor*, হাঁসপাতাল [hãʃpatal] *hospital*, গারদ [garɔd] *guard* = *lock-up*, তেরেজুরী [tereʒuri] *treasury*, তারপিন [tarpin] *turpentine*, তারপলিন, তেরপল [tarpɔlin, terpɔl] *tarpaulin*, etc.

English [ŋ, n, m] are retained. Final [ŋ] sometimes, and in a few words final [m], become [n] in folk-Bengali (this is independent of the same change which is observable in spoken English of the uneducated classes): *e.g.*, এষ্টাকিন [eʃṭakin] *stockings*, একটিনি [ækṭini] *working as a substitute* < *acting* + « I », ‡টাইন [ṭain] *time* (cf. আপিং, আপিম, আপিন [apiŋ, apin, apim] *opium*, from Perso-Arabic « afyūm »).

The affricates *ch*, *j* [tʃ, dʒ] regularly become চ, জ [ʧ, ʤ] in Bengali: চিমনি [ʧimni] *chimney*, জজ [ʤɔ:ʤ] *judge*. In East Bengali, these as usual become [ʦ, ʣ].

390. The Liquids. The equivalent of the English 'clear' and 'dark' *l* [l, ɫ] is the ল [l] of Bengali, the velarised 'dark' [ɫ] being ignored. The *r* sound of South English is a fricative, [ɹ], and in Scots English it is a trilled sound. It becomes the ordinary trilled or flapped র [r] in Bengali. [r] is commonly dropped before [ṭ, ḍ] = English alveolar [*t*, *d*]: *e.g.*, লাট [la:ṭ] *lord*, বোড [bo:ḍ] *board*; also after consonants. Its retention in Bengali is due to a great extent to a spelling pronunciation of English.

391. The Fricatives. The English *h* is an unvoiced sound, [h], and it is altered to the voiced হ [ɦ] in Bengali: *e.g.*, হাইকোট [ɦaikoṭ] *High Court*. [s] and [ʃ] of English fall together in Bengali as শ, ষ, স [ʃ]; [s*t*] normally becomes ষ্ট [ʃṭ], but the pronunciation [sṭ] is also heard, and occasionally we meet with the spelling স্ট in an attempt to be more faithful to the English original (cf. the recent Dēvanāgarī ligature স্ট = « sṭ »).

[z] and [ʒ] become জ [ʃ͡ʒ] in naturalised words, *e.g.*, জেব্রা [ʃ͡ʒebra] *zebra*, জুলু [ʃ͡ʒulu] *Zulu*, মেজার-গেলাস [meʃ͡ʒar gelaʃ] *measure glass*, etc., but the [z] sound is often heard. This [ʃ͡ʒ] becomes [d͡z, z], as usual, in East Bengali.

The equivalent of the unvoiced spirant *th* [θ], as in *thin* [θɪn], is the aspirate থ [th], *e.g.*, থিয়েটার [thieṭar] *theatre*. The voiced dental spirant [ð], as in *then* [ðɛn], regularly becomes the dental stop দ [d]. We would expect consistency in this matter by meeting with ধ [dɦ] for [ð], which is the regular Marāṭhī and Gujarātī substitute for the English sound: but as in the case of খ [kh] and গ [g], unvoiced aspirate and voiced stop, for the spirants [x, ɣ] of Persian (see *supra*, pp. 572, 599, 600), the voiced spirant becomes a mere stop. Hindōstānī agrees with Bengali in employing [th] for [θ] and [d] for [ð].

The unvoiced denti-labial spirant [f] is written ফ « ph » in Bengali, with its three-fold pronunciation of [ph, ɸ, f]. Intervocally and finally, the sound tends to become a mere stop [p]: *e.g.*, আপিস [apiʃ] *office*, হাপ [ɦa:p] *half*.

The treatment in Bengali of the voiced denti-labial spirant [v] of English shows how recent the spirant pronunciation of ভ « bh » is in the language. (See *supra*, pp. 442, 443). During the first half of the 19th century, English [v] is ordinarily represented by ব [b]: whereas at the present day it is invariably ভ = [bɦ, ʋ, v]. In the Portuguese loan-words in Bengali, we have only ব [b] (see p. 631); and in the Roman-Bengali of Padre Assumpçam, in the early part of the 18th century, we have « ph » for ফ, and « bh » for ভ, never « f, v ». So long as the modern spirant value of ভ « bh » did not develop, the stop ব « b » was used for the foreign denti-labial or bilabial spirant as its nearest equivalent in Bengali (cf. also p. 616, for treatment of Persian « w, v » in Bengali). We have typical early 19th century English loan-words and names like the following: বিসুবিয়স « bisubiyâs » *Vesuvius*; বার্ণিশ « bārṇiś » *varnish*; গবর্ণর, গবরনর « gâbârṇâr, gâbârnâr » *governor*; বাইকৌণ্ট « bāikauṇṭ » *viscount*; বর্জিল « bârjil » *Virgil*; নবেম্বর « nâbēmbâr » *November*, etc., etc. It seems that the spirant pronunciation of « bh » became established (at least among certain

speakers of the Standard Colloquial) during the middle of the 19th century: in the *Hutōm Pēm̃cār Naksā* (1862), ভ is used in transcribing some English words, *e.g.*, ড্রাইভিং « ḍ্রāibhiṅ » *driving*, ইন্‌সালভেণ্ট « insālbheṇṭ » *insolvent*, সিভিলিজেসন « sibhilijēsân » *civilisation*, স্কেভেঞ্জর « skēbhēñjâr » *scavenger*, ভলমনস « bhâlâmnâs » *voluminous*, etc., but ব also is used. We see that ব « b » for [v] is almost the rule in the first quarter or first third of the 19th century, but from the second half ভ « bh » is seen to be coming into prominence: but the ব « b » tradition holds its ground well on towards the end of the 19th century: thus spellings like ক্লাইব « Klāib » *Clive*, বর্ণাকুলার « bârṇākulār » *vernacular*, বাইসর(ঢ়)য় « bāisrāy, -rây » *viceroy*, বীবর « bībâr » *beaver* (*the animal*), কল্‌বিন « Kâlbin » *Colvin*, বিক্টোরিয়া « Biḳṭōriyā » *Victoria*, ডবটন « Ḍâbṭân » *Dovelon*, ট্রিবিলিয়ান « Ṭribiliyān » *Trevelyan*, বলন্টিন ডুবাল « Bâlâṇṭin-Ḍubāl » *Valentin Duval*, বল্টেয়ার « Bâlṭēyār » *Voltaire*, বিন্‌সেণ্ট « Binseṇṭ » etc., are found, among hundreds of similar names and words, in Bengali literature and periodicals of the second half of the 19th century.

The spirant pronunciation, however, seems to be spreading now. Beames remarked in his Bengali Grammar (Oxford, 1891): 'it takes a Bengali boy many years' training before he can pronounce the English *v*, and many never attain to it ..... Some Bengali writers have conceived the erroneous idea that the European *v* corresponds to their ভ *bh*, thus they transliterate সভা sŏbhā 'an assembly' as shova, which is absurd' (p. 9). But there cannot be any doubt that the transliteration « shova » indicates a spirant pronunciation, [ʃ͡ʋa, ʃ͡ʋɑ]: the spirant in extremely quick articulation loses its friction and so disappears. Thus, the word শোভা « śōbhā », pronounced [ʃ͡ʋa, ʃ͡ʋɒ], results in [ʃ͡ɑ], and even [ʃ͡ɔ:], in Calcutta, as in শোভাবাজার > শ'বাজার [ʃ͡obɦabaʒʒar > ʃ͡o(ʊ)abaʒʒar > ʃ͡ɔ:baʒʒar] *name of a quarter in Calcutta town* (see p. 403—[wɑ:, oɑ] becomes [ɔ:] in Bengali). Present day transcriptions like « Avilash, Amitava, Biva, Prova, Shulov, Durlov, Vishma, Vramar » and even « Vadralogue » *gentry* and « Mohavarot » for « Abhilāsh, Amitābha, Bibhā (Vibhā), Prabhā, Sulabhā, Durlabhā, Bhīṣma, Bhramarā, Bhadra-lōkā, Mahābhāratā », etc., etc. have a real basis on the pronunciation.

392. The Semivowels *y*, *w* = [j, w] of English.

The palatal semivowel is always dropped before [i], *e.g.*, ডাইং ক্লিনিং [ḍaiŋ kliniŋ] *Dyeing and Cleaning*, in Calcutta shop signs; and it becomes a full vowel, [i], before the other vowels. Intervocally and at the end of a syllable, it is changed to য় [ĕ].

[w] is dropped before [u, o]. Before [i], it becomes [u]; and before the other vowels, it is lowered to [ŏ], written ওয় « oẏ ». *E.g.*, উড-, উটপেন্সিল [uḍ-, uṭ-penʃil] *wood pencil*; উল [u:l] *wool*; the word *woman* is ordinarily pronounced ওম্যান [omæn]; উইল [ui:l] *will*; রেলওয়ে [reloe] *railway*; ওয়ার্ড্‌স্‌ওয়ার্থ [oardsoarth] *Wordsworth*. For an attempt to represent the [w] (as well as the [v]) sound of English by the letter ব « b », see pp. 534, 535.

The usual consonant changes—voicing, unvoicing, elision, metathesis etc., are present in the English loan-words.

Typical Naturalised English Words.

393. Below are given some common English words naturalised in Bengali. The phonological alteration in most cases is plain, but in some instances they are complicated, through folk-etymology. Extreme folk-forms are often very widely removed from the original.

অয়েল-ক্লথ, -কেলত [ɔël-k(e)lɔt(h)] *oil-cloth*; আউট [auṭ], earlier ঔট [ouṭ] *out*; আপিস, আফিস [ap(h)iʃ] *office*; আপেল [apel] *apple*; আর্দালী [ardali] *orderly* (*noun*); আস্তাবল [astabɔl] *stable*, cf. Perso-Arab. « istabal », from Greek from Latin; ইন্‌কম-, ইঙ্কাম-টেক্স [inkɔm-, iŋkam-ṭekʃɔ] *income-tax*; ইঞ্চি [inʃi] *inch*; ইনেসপেক্টার, -টর [ineʃpekṭar, -ṭɔr] *inspector*; ইষ্টাম্প [iʃṭæmpɔ] *stamp*; ইষ্টিশ(ট)ন [iʃṭiʃɔn, -ʃan] *station*; ইষ্টিমার [iʃṭimar] *steamer*; ইস্কুল [iʃkul] *school*; ইষ্টীট, ইষ্টিরিট, ইষ্ট্রীট [iʃṭiṭ, iʃṭ(i)riṭ] *street*; ইষ্টীল পেন [iʃṭil-pen] *steel-pen*; ইস্প্রিং, ইস্‌পিরিং [iʃp(i)riŋ] *spring* (*coil*); ঈগল [igɔl] *eagle*; উইল [uil] *will*; উড-, উটপেন্সিল [uḍ-, uṭpenʃil] *wood pencil*; এগ্‌জিবিশন, এক্সিবিশন, একজিবিশন [egʃibiʃɔn, ekʃi-, ekʃi-] *exhibition*; এগ্‌জামিন [egʃamin] *examine* = *examination*; একটিনি [ekṭini, ækṭini] *acting* + the nominal affix -ই,-ঈ « -ī »; এয়ারিং, ইয়ারিং, ইয়াররিং [earin, iarin, iarriŋ] *earring*; এন্‌ট্রান্স, এনটেন্স, এনট্রেন্স [enṭanʃɔ, enṭenʃɔ, enṭrens] *entrance* = *matriculation*

examination; এষ্টাকিন [eʃṭakin] *stockings*; ওয়ারিন, -রেন [oarin, -ren] *warrant (legal)*; ওয়েটিং রুম [oeṭiŋ rum] *waiting room*;

কর্ণেল [kɔrnel] *colonel*; কপি, older কাপি [kɔpi, kapi] *copy*; কাক as in কাক-ইস্কু [kak-iʃk(u)ru] *cork-screw*; কার [ka:r] *cord*; কম্ফাট, কম্ফট [kɔmphaṭ, -phɔṭ] *comforter, scarf for the neck*; কারনিস [karniʃ] *cornice*; কারেন্সি, older করেন্সি [karenʃi, kɔrenʃi] *currency*; কলেক্টর [kɔlekṭɔr] *collector*; কুইনাইন [kuinain] *quinine*; কুইলপেন [kuil pen] *quill pen*; কেলাস [kelaʃ] *class*; কোট [ko:ṭ] *coat*; কোট, কোর্ট [ko:ṭ, kɔrṭ] *court*; কোচমান, কচুয়ান [kocʃman, kocʃuan] *coachman*, showing vocalisation of the [m]; কেঙ্গারু, ক্যাঙ্গারু, কাঙ্গারু [keŋaru, kæ-, ka-] *kangaroo*, fallen in line with native words lik গোরু [goru] *cattle*, সাঁজারু [ʃãʒʒaru] *porcupine*, etc.; কেয়ার, older ক্যার [kear, kæ:r] *care*; কেরাসিন [keraʃin] *kerosine oil*; কোম্পানী [kompani] *Company, the East India Company* > *the English government*; কৌঁশুলি [kõuʃuli] *counsel, advocate*, with native -ই, -ঈ « -i, -ī » affix; খাঁটি [khãṭi] *country* = *country-liquor* (?), showing aspiration of the guttural; গঞ্জি, গেঞ্জি [gonʒʒi, genʒʒi] *guernsey, undervest*; গাউন, earlier গৌন [gaun, goun] *gown*; গারদ [garɔd] *guard, lock-up*; গার্জেন [garʒʒen] *guardian*; গার্টার, গাটার [ga(r)ṭar] *garter*; গিরিমেণ্ট [girimenṭɔ] *agreement*, with aphesis of *a-*; চেয়ার, older চ্যার [cʃear, cʃæ:r] *chair*: চুরুট [cʃuruṭ] *cheroot*, from the Tamil « śuruṭṭu »; জাঁদরেল [ʒʒãdrel] *general* > *big, huge*; চেরেট [cʃereṭ] *chariot, large coach*; জিমনাষ্টিক [ʒʒimnaʃṭik], also জিবনাষ্টিক [ʒʒibnaʃṭik] *gymnastics*;

টুর্ণী, টর্ণী [ṭurni, ṭorni < *əṭɔrni, æṭɔrni] *attorney*, with aphesis of *a-*, and change of [ɔ] to [u] (see p. 398): টমটম [ṭɔmṭɔm] *tandem*, a folk alteration; টহরম [ṭɔɦiɔrɔm] *term* with intrusive [ɦi] through analogy of Perso-Arabic forms like মহরম [mɔɦiɔrɔm], শোহরৎ [ʃɔɦiɔrɔt], etc.; টালি [ṭali] (i) *tile* [< ṭail], by metathesis, (ii) *trawley (of an electric tram)*; টিকিট, টিকিস [ṭikiṭ, ṭikiʃ], also ‡টিকট [ṭikɔṭ] *ticket*; টিপিন [ṭipin] *tiffin*; টিংচার, টিঞ্চার [ṭiŋ(k)cʃar, ṭincʃar] *tincture*; টেক্স, ট্যাক্স [ṭekʃɔ, ṭækʃɔ] *tax*; টুল [ṭu:l] *stool*; টেবিল [ṭebil] *table*; টেলিফোঁ [ṭeliphõ] *telephone*, nasalisation brought in by the influence of ফুঁ [phũ:] *blowing*; ডজন [ḍɔʒʒɔn] *dozen*; ডবল [ḍɔbɔl] *double*; ডাইমন, ডায়মন [ḍaimɔn, ḍaĕmɔn] *diamond pattern on jewellery*, with final consonant group simplified; ডাক্তার [ḍaktar]

also ডাক্তর [ḍaktɔr] *doctor*; ডম্বল, also a recent ডাম্বেল [ḍɔmbɔl, ḍambel] *dumb-bells* (*for exercise*); ডেপুটী, ডিপটী [ḍeputi, ḍipṭi] *deputy* = *deputy magistrate*; ডেস্ক, ডেক্স [ḍeʃkɔ, ḍekʃɔ] *desk*, showing metathesis;

তারপলিন [tarpɔlin] *tarpauline*, also ত্রেপল, ত্রিপল, তেরপল [trepɔl, tripɔl, terpɔl]; তারপিন [tarpin] beside টারপিন [ṭarpin] *turpentine*; তোরঙ্গ, তোরং, তোড়ং [toroŋgo, toroŋ, toroŋ] *trunk, box*; থিয়েটার [thieṭar] *theatre*; দেরাজ [deraʄʄ] from [*dra:z] *drawer, chest of drawers*; নভেম্বর [nɔbʃiembar], older নবেম্বর [nɔbembar] *November*; নম্বর [nɔmbɔr] *number*; নীট [ni:ṭ] *nett*, the [i:] for [ɛ] is exceptional; নুটিশ [nuṭiʃ] *notice*, cf. পুলিস below: a vulgar লুটিশ [luṭiʃ] with [l] for [n] is also found;

পণ [pɔ:n] from [*pɔnḍ] *pound* (*in the paper trade*); পলস্ত(র)া [pɔlɔstɔra, -tara] *plaster*; পান্সী [panʃi] *pinnace*: connection with পানী « pānī » *water* suggested by folk-etymology?; পালিস [paliʃ] *polish*; পিজবোড, পিজবোট, পিচবোড, পিচবোট [piʄʄbɔḍ, piʄʄbɔṭ, piʧ-bɔḍ, piʧbɔṭ] *paste-board*, based on a form like [*peʃbɔrḍ < pʰeɪs(/)bɔ:d: *st* > s > ʃ > ʧ, ʄʄ]; পুট [pu:ṭ] *pit* (*in tailor's measure*); পুটিং, পুডিং [puṭiŋ, puḍiŋ] *putty* (*in repairing glass*) (influenced by *pudding* ?); পুলিস [puliʃ] *police*, exceptional case of Vowel Harmony changing [o] to [u]; so পুল্‌টিশ [pulṭiʃ] *poultice*; পেণ্টুলেন [penṭulen] *pantaloon(s)*; ফটোগেরাপ [phɔṭogerap] *photograph*; ফিট [phi:ṭ] *feet, fit*; ফিটন, beside ফেটিন, ফেটিং [phiṭɔn, pheṭin, pheṭiŋ] *large carriage, phaeton*; ফ্লুট, ফুলুট [phluṭ, phuluṭ] *flute*; ফেল, also occasionally ফেইল [phe:l, pheil] *fail*; ফ্যাশান [phæʃan] *fashion*; পাঁপর [pā̃pɔr] *pauper* (*legal term*): cf the common Bengali পাঁপড়, পাঁপর « pā̃pāṛa, pā̃pāṛa » *thin round wafers of spiced gram or pulse paste* (parpaṭa); বগলস [bɔgloʃ] *buckles*; বগী [bɔgi] *buggy*; বডি [bɔḍi] *bodice*, with exceptional loss of final [s]; বর্জ্জাইস [bɔrʄʄaiʃ] *bourgeois* (*type*); বাক্স, by metathesis বাস্ক [bakʃɔ, baʃkɔ] *box*; বার্ণিশ [barniʃ] *varnish*; বাইসমান [baiʃman] *vice-man, mechanic*; বীবর [bibɔr] *bearer*; বুরুষ [buruʃ] *brush*; বুলু [bulu] *blue* (*dye*); বেঞ্চি [beneʃi] *bench*; বেলেস্তারা [belestara] *blister* (*medical*), cf. পলস্তারা [pɔlɔstara] above; ব্যাটম্বল [bæṭombɔl] *bat and ball* (see p. 532); ভিজিট [bʰiʄʄiṭ] *visit, doctor's fee*; মটন [mɔṭɔn] *mutton*; মারগীজ beside মরগিজ [margiʄʄ, mɔrgiʄʄ] *mortgage*; মেজিষ্টর, মাজিষ্টর [mæʄʄiʃṭɔr, ma-] *magistrate*; ম্যাজেণ্টা(র), ম্যাজেণ্ডার [mæʄʄenṭa(r), mæʄʄenḍar] *magenta* (*red*), with intrusive final [r]; মানোয়ার [manoar]

man o'war, battleship; মারকিন [markin] *American*, with loss of initial [ə] [əmɛrikən]; মাষ্টার, ‡ম্যাষ্টর, মাষ্টর [maʃtar, mæʃtər, maʃṭər] *master, teacher* মিউনিসিপালিটী [miuniʃipal(ı)ṭi] *municipality* (see p. 216); মেম, ‡ম্যাম [me:m, mæ:m] *European lady* < *ma'am, madam*; মটর [məṭər] *motor* [mouṭə] influenced by the native word মটর [məṭər] *pea*; মামলেট [mamleṭ] *omelette*, with prothetic [m];

রাস্কেল [raʃkel] *rascal*; রিপিট, রিবিট [ripiṭ, ribiṭ] *rivet*; রিপোট, রিপোর্ট [ripoṭ, riporṭ] *report*; রিভলবার [ribfiəlbar, -vəl-] *revolver*; রিসিভার, beside রিসিবর, ঋষিবর [riʃibfiar, riʃibər] *receiver* (*of property*); রেজেষ্টারী [reʃʃeʃṭari] *register, registered*; রোঁদ্ [rõ:d] *round, as of a policeman*: change of [n] to nasalisation of vowel; রাবিশ [rabiʃ] *rubbish*;

লজঞ্চুস, রজঞ্চুস [lɔʃʃənʧuʃ, rɔʃʃənʧuʃ] *lozenges* (*sweets*), influence of native root চুষ « cus » *suck*, and peculiar change of [l] to [r] in the alternative form; লণ্ঠন [lɔṇṭhɔn] *lantern, lanthorn*; লম্প, ল্যাম্প [lɔmpɔ, læmpɔ] *lamp*; লাট [la:ṭ] *lot* (*of goods*); লাট [la:ṭ] *lord, governor of province*; লিবার [libar] (*infantile*) *liver*, also ‡নিবর [nibər]; লোট for নোট [lo:ṭ < no:ṭ] *note* (*money*), showing vulgar change of [n] to [l]; so লুটিশ [luṭiʃ] *notice*; ল্যাংবোট [læŋ bo:ṭ] *long boat* (*attached to a steamer*) = *satellite*.

সমন [ʃɔmən] *summons* (*law*), influenced by শমন « śámanā » *God of death*; শাশী [ʃaʃi] *window sash*, also a form with intrusive [r], শার্শী, সার্সী [ʃarʃi]; সীল, শীল [ʃi:l] *seal*; শিলেট, শেলেট [ʃileṭ, ʃeleṭ] *slate*; সপিনা, সফিনা [ʃop(h)inɑ] *sub-poena*, with exceptional aspiration; সব, সাব [ʃɔb, ʃab] *sub*, in words like সবজজ [ʃɔbʃʃɔʃʃ] *sub-judge*, সব ডেপুটী [ʃɔbḍeputi] *sub-deputy* etc.; সিগারেট, through initial stress সিগ্‌রেট [ʃigɑreṭ, ʃigreṭ] *cigarette*; সেমিজ [ʃemiʃʃ] *chemise*; সোডা [ʃoḍa], beside a vulgar সোঁটা [ʃõṭa] *soda*.

হন্দর [fiəndər] *hundred-weight* (see p. 641); হাপ [fia:p] *half*: হাপসাইড [fiapʃaiḍ] *off-side*, in game of foot-fall, with prothetic [fi]; হিব্রু [fiibru] *Hebrew*; হার্মোনিয়া(ম) [fiarmonia(m)] *harmonium*, with vulgar dropping of final [m]; হুইল [fiuil] *fishing wheel*; হেট, হ্যাট [fiæ:ṭ] *hat*; etc., etc.