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REALISM

An Attempt to Trace its Origin and Development in its Chief Representatives

BY

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FOREWORD

The study of the doctrines of modern Realism by Dr S. Z. Hasan is an extensive, patient and sympathetic account of the published doctrines of an interesting group of thinkers of the present day. I have read it more than once with enlightenment to myself and I think it desirable that its aid should be available to students of philosophy in various countries.

His survey will save them a good deal of trouble which otherwise they would have to undertake for themselves and I commend it to their attention. Though my own philosophical views are (like those of Dr Hasan himself) not those professed by these thinkers, I think it is well that their views should be studied and accurately known. Dr Hasan has spared no pains in the study, exposition and criticism of them. If I am not always able to agree with the positive doctrines which form the basis of his criticism, I recognize the sincerity and conviction with which he holds them, and the long meditation which he has exercised upon their formation and expression. He calls attention to serious flaws in the reasoning of his opponents and furnishes grounds worthy of their and our consideration in extending their claim to acceptance. Dr Hasan is well equipped for the task which he has undertaken and shows a remarkable capacity for appreciating doctrines which present peculiar difficulties to students whose training has lain in other regions of speculation.

In his Introduction he outlines a view to which he has been led in the course of his study and criticism of the Realistic position. Here he opens out lines of speculation on which he proposes to develop his own independent thinking. These are already interesting and suggestive, and it may be hoped that the results of his further meditations will be later put at the service of his fellow-students in philosophy.

J. A. S.

PREFACE

In this book Realism is conceived as the doctrine which maintains that the external world exists and is directly apprehended in perception.

The Introduction develops this view abstractly. Chapter I briefly indicates the origin of realism. Chapter II deals with the beginnings of realism, and is divided into three sections, the first of which is a short survey of "old realism," that is, of the realistic attempts of Descartes, Locke and Reid; it is short because this period has been fully worked over by competent workers and there is little more to be said. The old attempts, with the doubtful exception of Reid's, do not maintain the directness of perception; but all modern attempts at realism claim it and insist upon it. These attempts fall into three series. The second section of Chapter II deals with the first series—Schuppe, Mach, Avenarius: it brings out the directness of perception, but fails to bring out the independence of objects. Section III deals with the second series—Meinong, Stout, "Critical-realists": it brings out the independence of objects, but fails to bring out the directness of perception. Chapter III deals with the third series: it is a synthesis of the previous two, and brings out both the directness of perception and the independence of objects; the position is not simply realistic but realism. This chapter has three sections. Section I deals with the rationalistic realism of Cook Wilson, Prichard and Joseph; this realism sides with the reality of objects and sacrifices the reality of sensa. Section II deals with the empirical realism or neo-realism of Alexander, Holt and Russell; this sides with the reality of sensa and sacrifices the reality of objects. Section III deals with what may be called critical realism. Moore's is a synthesis of the two realisms just mentioned and maintains the reality both of objects and of sensa[1].

[1] The realistic doctrines of the first era are sometimes called old realism in contradistinction to those of the new era. The expression is not exact, but has its use. But the realistic attempts of the new era are not called modern realism in these pages. This expression has been reserved only for what I regard as true

The arrangement of the book is primarily logical, and in the main also chronological.

The Appendix originally was intended to contain notes on all realists not dealt with in the text. It now contains only short sketches on those of them who seem to say something new, with the exception of Case, and also a note on a controversial point.

A Bibliography of literature on the subject will be found at the end.

Realism is a living movement and still in progress. What is more, its chief representatives are still alive and have not yet finished their life-work. Nothing final can therefore be written on it. However, I have spared no pains in making use of the relevant and available material, though I know I could perhaps do still better.

It has been my earnest endeavour to be objective, that is, to occupy myself exclusively with the arguments and the determination of their cogency, and to avoid the spirit of controversy. Biting remarks and humour make a book perhaps more readable, but do not help to promote truth and scientific research.

My indebtedness to my teachers with whom I learnt to think philosophically, especially Professor J. A. Smith and Mr H. W. B. Joseph of Oxford, is indeed very great. From Geheimrat Professor Dr Paul Hensel of Erlangen and Geheimrat Professor Dr Heinrich Rickert of Heidelberg I have learnt to appreciate better the value of Kant, and from Professor Dr Friedrich Brunstädt to understand Hegel. To Frl. E. Reinsch are due my heartiest thanks for the pains she took in preparing the manuscript. I am also indebted

realism, which is sometimes named modern realism, because it is a modern phenomenon.

I have discussed Moore's position more fully than that of any other writer. The reason is twofold. Firstly, modern realism arises in Moore and his thought traverses all its stages—as realism begins in him, it seems also to be finding its completion in him. And secondly, for this very reason Moore gives impetus to other realists and nearly all the characteristically neo-realistic positions can be traced to him. A history of modern realism can very well take Moore as its text and expound the positions of other writers as the working out of the theses which at various stages of his thought he maintains.

to my friend and pupil, Mr Said Raza, B.A. (Alig.), for the thankless task of preparing the Index of Names.

Moore's papers on "Mr McTaggart's Studies in Hegelian Cosmology," "Experience and Empiricism" and "Kant's Idealism" reached me too late to be noticed in the text. I have, however, referred in the footnotes to them and to other developments of the subject subsequent to the writing of the book, which was finished in October, 1925.

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25th May 1927

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LIST OF ABBREVIATIONS

A. = *Proceedings of the Aristotelian Society.*

A.M. = *The Analysis of Mind*, 1921 (Russell).

A.P. = Prof. Alexander's Theory of Sense-Perception, *M.* 1922 (Stout).

A.S. = *Analysis of Sensation*, 1886; English translation, 1904 (Mach).

An. = *Über Annahmen*, 2nd ed. 1910 (Meinong).

Ap. = Appearance and Reality, *M.* 1906 (Prichard).

B. = *Die Bestätigung des naiven Realismus.* Offener Brief an Herrn Prof. Dr Richard Avenarius, 1893 (based on his *Erkenntnistheoretische Logik*, 1878), published in *Der menschliche Weltbegriff* of Avenarius, 3rd ed. 1912 (Schuppe).

B.R. = Basis of Realism, *Br. Ac.* 1914 (Alexander).

C.C. = *The Concept of Consciousness*, 1914 (Holt).

**C.R.* = The Conception of Reality (Moore).

C.-R. = *Essays in Critical Realism*, 1920 (Santayana, Strong, etc.).

E. u. W. = *Über die Erfahrungsgrundlagen unseres Wissens* (Meinong).

E.W. = *Our Knowledge of the External World*, 1914 (Russell).

F. = Freedom, *M.* 1898 (Moore).

G. = *Grundriss der Erkenntnistheorie u. Logik*, 2nd ed. (Schuppe).

H.Ph. = Hume's Philosophy (Moore).

I. = Identity, *A.* 1901 (Moore).

I.V. = The Conception of Intrinsic Value (Moore).

J. = John Cook Wilson, *Br. Ac.* VII (Joseph).

J.P. = Some Judgments of Perception (Moore).

J.'s P. = William James's Pragmatism (Moore).

K.E. = *Kritik der reinen Erfahrung*, 1888, two vols. 3rd ed. 1921 (Avenarius).

K.K. = *Kant's Theory of Knowledge*, 1909 (Prichard).

M. = *Mind.*

M.Ph. = The Nature of Moral Philosophy (Moore).

M.T. = The Common-Sense Conception of a Material Thing, *A.*1900–1 (Stout).

M.W. = *Der menschliche Weltbegriff*, 1891, 3rd. ed. 1912 (Avenarius).

Mk. = *Die Mechanik in ihrer Entwicklung*, 1883, mit Anhang von Joseph Petzold, 1921 (Mach).

N. = Necessity, *M.* 1900 (Moore).

N.J. = The Nature of Judgment, *M.* 1899 (Moore).

N.R. = *New Realism*, 1912 (Holt, etc.).

O.P. = The Nature and Reality of Objects of Perception (Moore).

O.S. = On Occupying Space, *M.* 1919 (Joseph).

P. = Prof. John Cook Wilson, *M.* 1919 (Prichard).

* The references are to Moore's *Philosophical Studies* where papers included in it are concerned.

P.M. = Are Presentations Mental or Physical? *A.* 1908–9 (Stout).
P.P. = *Printed Papers, Lecture Notes* (Wilson).
P.Ph. = *Problems of Philosophy*, 1912 (Russell).
P.T. = *Present Philosophical Tendencies*, 1912 (Perry).
Ph.P. = Physics and Perception, *M.* 1922 (Russell).
Ph.S. = *Philosophical Studies*, 1922 (Moore).
Pr. = On Propositions, *A.* 1919 (Russell).
Ps.E. = The Psychological Explanation of the Development of the Perception of External Objects, *M.* 1910–11 (Joseph).
R. = External and Internal Relations (Moore).
R.I. = The Refutation of Idealism, *M.* 1903 (Moore).
R.J. = Reply to Mr Joseph, *M.* 1911 (Stout).
S.S. = The Status of Sense-Data, *A.* 1913–14 (Moore and Stout).
S.-T. = *Space, Time and Deity*, Gifford Lectures, 2 vols. (Alexander).
Sc.M. = *Scientific Method in Philosophy*, 1914 (Russell).
T.S. = Things and Sensations, *Br. Ac.* 1905 (Stout).

REALISM

INTRODUCTION

That the external world is real and is directly revealed to us by means of our senses, is one of the most fundamental and deep-rooted convictions of man, a conviction on which all the developed forms of distinctively human consciousness are based. The scientific consciousness expressly builds itself upon this foundation, the artistic consciousness assumes its validity, the moral consciousness would be impossible without it, and the religious consciousness would not be unless it had this conviction. The sense of the real and its insufficiency is the presupposition of all that is a yearning for the ideal. These consciousnesses are forms of this yearning. Moreover they are outgrowths of social consciousness, and social consciousness is not possible without this conviction—without the belief in an external world of things and men which is common to all. It is so deep-rooted that man has seldom doubted it; those who, like Descartes and Hume, have attempted so to do, have failed in the attempt and had to confess their failure.

This conviction may be called the realistic instinct, as the view of the existence and knowledge of the external world it affirms is called realism. What is this conviction more definitely, what does it involve, and what is the function of philosophy with respect to it?

Now this instinct is a feature of common consciousness. What is the function of philosophy with reference to common consciousness? Philosophy has often regarded it as its privilege and its duty to question the validity of the beliefs of this consciousness. They are beliefs of the ordinary man. Philosophy is reason. It is above common consciousness, and has a right to sit in judgment on it and approve or disapprove of the evidence of this vulgar witness. But common consciousness is not "common sense," if by common sense we mean the

good sense of a practical man. It is reason itself in the form of instinct, reason unadulterated by reflection and speaking in man—reason not yet fully conscious of itself but coming to consciousness. And the realistic instinct which makes common consciousness assert the reality of the world, is the same reason in it which makes it seek a cause for an event or a substance for a quality—though it is yet innocent of all philosophy. It is of the nature of those aboriginal and ultimate phenomena which philosophy calls intuition and behind which it cannot go. Because it is so deep-rooted, therefore it is that the conviction of the independent existence of the world is so universal and so unavoidable. Man believes in the existence of the world and its direct perception by a necessity of his nature. Philosophy has to recognize this as an ultimate fact and not to question its validity. The method of all sane philosophy is fundamentally the same as the method of science—to take its facts from reality, and to analyse them and to construct out of them a consistent picture of reality. Science takes its facts from various departments of nature; philosophy takes its facts from human consciousness and its fundamental forms; the instinctive or common consciousness of the unsophisticated man, with its half-reflective developed forms, philosophy regards as a piece of nature to observe and to gather its facts from. It has as little right to quarrel with its facts as science. Its business is to take them as they are offered to it, to describe them exactly, to analyse them and to grasp them, *i.e.* to comprehend them in a harmonious whole of concepts which mirrors the unconscious harmony in which they are found in the nature it is studying. The main developed forms of human or common consciousness from which philosophy takes its facts, are the scientific consciousness, the artistic consciousness, the moral consciousness and the religious consciousness. Philosophy has no right to question the validity of their facts or to prescribe to these forms. They are its *facts*. Its function is to grasp their elements conceptually, to combine them into a system—in a word, to make conscious what was unconscious or half-conscious, to appropriate to reason the riches of instinct. No sane philosophy will set out to prescribe to the

half-reflective dicta of the scientific or the artistic consciousness or to question their validity. Its business on the contrary is to seek the grounds of their validity, to find a place for them in the system of reality. Its function is the same with reference to common consciousness or to the dictates of its realistic instinct as with reference to the scientific consciousness or to the dictates of its causal instinct. Both are its facts. Indeed, the instinctive or common consciousness which affirms the reality of the world, is the root from which other consciousnesses that affirm science and art, morality and religion, spring. They are its pronounced aspects; they are half-reflective developments of it. They cannot break away from it. When reflection threatens to deform them, they have to fall back upon the common consciousness of the unsophisticated man—upon the ultimate. They must not contradict it. Nor do these higher forms exhaust the fundamental form. They do not directly concern themselves with the question of the external world. The instinctive consciousness of the unsophisticated man therefore remains the only and the ultimate witness on the point when reflection enters on the scene and starts its search for its facts. It ought to accept the dictates of common consciousness and its realistic instinct as ultimate data which are to be recognized and not to be questioned but to be conceptually grasped. That they can be doubted is no good reason to deny them. Firstly, they can hardly be doubted seriously, and secondly, doubt can be pressed to any extent with reference to all forms of human consciousness. Philosophy has in their case as well as in the case of common consciousness and its realistic instinct to overcome the doubt and put limits to it. The real reason, however, for questioning this as well as other human instincts is that in philosophy instinct becomes reflection; it passes into a higher stage. The philosopher believes that he is in possession of a higher consciousness, and that therefore he is entitled to modify and reform the lower consciousnesses. He forgets that the superiority of his consciousness consists only in attaining to the conceptual consciousness of that which was already there unconsciously or half-consciously in the lower consciousness,

that the former is only the consciousness *of* the latter and is inconceivable without it. However, being himself a part of the movement of reality, he has a good right to work changes in it. He might thereby be discovering or creating new facts for philosophy. But the attitude of negation he has necessarily to adopt in order to put his notions into practice is not philosophic—he is thereby deforming his facts *as a philosopher*. As a philosopher, he has not to make facts but to take them as they are and to grasp them.

In other words, the function of philosophy with respect to the realistic instinct is (1) to make explicit what is implicit in it, *i.e.* to *analyse* and formulate its dicta and to describe and explain them exactly, and to determine the *limits* of their validity; in a word, to pass from unconscious realism to conscious realism; and (2) to *prove* realism, *i.e.* to seek the grounds on which the validity of the dicta of the realistic instinct can be justified. Then (3) to point out more particularly *the theory of perception and knowledge* that thus comes out; and perhaps also (4) to indicate the *conception of reality* that can make realism and its theory of knowledge ultimately intelligible. (5) Further it must meet the *objections* that can be raised against realism and trace them to their ultimate source.

Now the realistic instinct involves two main theses: the reality of the external world and the direct revelation of it to our sense-apprehension. That the external world is real means that it exists independently of us. It does not make a difference to the table before me, whether I am looking at it or not—it exists in both cases; it does not depend upon my mind or percipience for its existence. The independence in question is want of dependence on a finite mind. It is not necessarily want of dependence on mind as such. There may be an infinite mind, say God, who holds the whole universe of men and things on the palm of his hand, and on whom it depends for its being and for its nature. Realism has nothing to say against this. It is no metaphysics and does not prejudge the nature of ultimate reality. Its contention only is that the external world is real, is independent of me and you; and not that it is ultimate reality, and is necessarily independent of all

mind. Only that species of metaphysics which makes the world dependent on finite minds, namely subjective idealism, is incompatible with realism.

That the world is directly revealed to our senses means that the table I am looking at is *existentially* present to my senses, that its existence is *given*, that in apprehending this existence no transition mediate or immediate is involved from sensum to an ulterior entity, that, in other words, the perception of it is *direct*. Further, it means that the table has the nature which I directly apprehend, with clearness and distinctness—it has the size and the form I see, and it has also the colour and the hardness I sense. In other words, things have both primary and secondary qualities. They are large and small, round and oval, solid and impenetrable, red and green, hot and cold, sweet and bitter, etc. as I directly apprehend them to be. Colours and sounds, tastes and smells, heat and cold, etc. are as objective and as directly perceived as size and form, volume and solidity, motion and rest. In brief, the realistic instinct asserts that the sensum is a part or aspect of the object.

To put the case more exactly, when I look at the table, what I see is a voluminous coloured form at a distance in space. This I call table. It is a particular *existent*. Volume, colour and form are its elements. They are all particular existents. It may have more such elements which I can apprehend by my other senses; but that makes no essential difference. My object is given to me as existent, as substance, which is composed of these elements. Its existence, rather it or its existent nature is before me. There is no question of belief or conviction about it yet. The existent nature is simply there. It is sight—*sui generis* and distinct from the other forms of my apprehension, viz. ideation or thought; and not belief. All this is apprehended—is directly realized. The question of belief arises only when I look away from my object. Does it still exist and exist with the nature I had sensed? The answer of man, of common consciousness, of his realistic instinct, is unambiguous. It does. This affirmation of the existence of the absent object is the most deep-rooted conviction of man.

We may now ask what are the limits of the validity of sense-apprehension—is sense always veridical? The answer of the realistic instinct is in the negative. Not all sensa, but only the normal ones are real, viz. those which are clearly and distinctly apprehended by normal sense under normal conditions. In others sense errs. But that is no ground to doubt the objectivity of its normal sensa. Thought too errs; yet we do not for that reason doubt the validity of thought. Normal thought holds; that which is clearly and distinctly apprehended by normal intellect is objective. It may be that normal sense and normal thought remain undefined. It may be that the normal sensum and the normal object of thought are seldom realized. All the same, neither in the sphere of sense nor in that of thought does the realistic instinct lose its faith in the objectivity of their normal dicta. They are the standards by which it measures the truth of all their other announcements[1].

[1] As far as the *faculty* of sense is concerned, the position is perfectly on a par with that of thought—only the normal sense reveals reality, is objective. This can as little be impugned as that only the normal thought is objective.

It is the *object* of sense, namely, the sensum that seems to make difficulty. How to determine which sensum is objective and which not, which is real and which appearance, which "normal" and which "abnormal"?

Let us take the various kinds of sensa one by one.

Primary sensa, *e.g.* magnitude, figure, etc. do not offer any serious difficulties. Touch is recognized on all hands to give us normal or standard primary sensa, *i.e.* primary sensa which are objective—though it cannot be denied that sight too, within certain limits, reveals objective primary qualities of objects, *e.g.* size, form.

Secondary sensa may be divided into three classes, (1) tastes and touches, (2) sounds and smells, (3) colours.

Tastes and touches, like primary sensa, do not raise any serious difficulties. Objectivity is determined in their case, solely by the normality of the faculty.

Sounds and smells are not so simple, though the objection of relativity is not usually raised against them. One may however ask: What sound is objective—that heard in the immediate vicinity of the object or that heard from a distance? The reply is: Both. Sound is in the object as well as outside the object. Normality in its case refers, like that of taste and touch, to the faculty and not to the object of the faculty. Sound seems to be a realization of (of a power of) objects that is not confined to their visible place; in sound, the object goes, as it were, out of itself—it expands itself and becomes larger, it swells its dimensions. Or we may, if we would remain nearer to our habitual way of thinking, conceive this realization to be contagious. Then, the sound that is heard away from the object, is not really its sound, but the sound of other objects; it is called its sound because the contagion proceeded from it and is due to it—the real sound of the object would

The normal or standard sensum is therefore objective. It is real and is a part or aspect of a more complex real which we call a thing or an object. This thing or object is the subject of all the predicates that science discovers as the nature of objective reality. The molecule, the atom, the electron, are all descriptions of *its* finer nature which is not open to sense. Yet they are essentially the possible objects of sense. Science never takes us beyond the boundaries of sense—beyond what is sensible. It only supplements sense by increasing its powers of discrimination. In the end it is sense supplementing sense[1].

The sensum which falls short of the standard is not fully real. It is not a part of the object. What is it then? Again the reply of common consciousness is unambiguous. It is appearance and not reality. But appearance is so like reality. The question may therefore be raised: What is the status of appearance? Is it a physical or a psychical entity? In truth

be that which is heard in its immediate vicinity. The case of smell is in essentials the same as that of sound.

Colour seems to be the most difficult case. It is in objects like the sensa of taste and touch, and can be apprehended from varying distances like the sensa of hearing and smell. The objection from relativity of sensa, has chiefly sight in view. For the colour of an object seems to vary with the change of distance. Which of these various sensa is real—which of them is normal and reveals the colour of the object? However, the case is not so bad as it appears on the face of it. Within certain limits, the colour sensa do not seem really to vary. Other conditions remaining the same, the distance does not make appreciable difference to the colour sensum of an object as long as the object can be seen clearly and distinctly. To fix these limits definitely is the business of psychology. Some, *e.g.* Reid, hold them to be from six or seven inches to about eighteen or twenty feet from the eye.

[1] Even where science seems to correct normal sense, as in the case of seeing with a microscope, it is correcting sense by means of sense. Sense remains the ultimate authority. But it is not really correcting sense. A microscope is plainly an instrument for exaggerating the real. It supplements the unassisted sight by enabling it to discover minuter distinctions but does not supplant it. The size it shows is *not* the real size. How can we say then that the colour it shows is the real colour? What seems to happen in this respect is that the microscope is not only an instrument of exaggeration but also of analysis. For the unassisted sight the small drop of blood is a unit. The corpuscles composing it build a synthetic whole, the combined realization of their several colour powers is the red which the unassisted sight sees. The microscope enables the sight as it were to analyse this unit and to see the components by themselves out of the synthesis —to see the realization of the colour power of each which it would have if left to itself. The analysis is like that of a chemical compound.

it is neither. It is simply appearance. Its mode of being is *sui generis*. It is other than real and therefore other than physical or psychical. However, if the issue be confined between physical and psychical, then appearance is more of a physical entity than of a psychical. It is still the real appearing to us, though modified by our inability to see it as it is. The man looking small from a height, is still the object I am seeing. The appearance is his appearance. Its feet are throughout on the real. In no case is it a mere idea, a creation of mine, mental. But my power of vision is limited; it cannot apprehend far enough. In apprehending distant objects it leaves out some of their features and distorts others. Thus it plays a part in the creation of the appearance[1]; and for this reason, we may say that appearance is a physico-psychical entity. But this it is not in itself, but only with reference to its causes. The causes of the appearance are psycho-physical, but the appearance is only appearance; and nothing further can be said of it. It has however the peculiarity of being objective in the Kantian sense, namely that it is for all observers—it is universal and necessary; though it is not objective in the ordinary sense, namely that of existing independently of us. When it is regarded as objective in the ordinary sense, that is, as physical, it is an illusion.

The realism that thus comes out consists only in making explicit what was implicit in the realistic instinct—in saying expressly what the unsophisticated man intuitively and invariably holds. And it is the theory to which the development of realism is unavoidably tending in the history of modern thought, as will be seen in the following sketch. That the external objects exist independently of the finite mind is common to all realists from Descartes, Locke and Reid down to Russell and Moore. That they are directly apprehended by sense is common to all modern realists, Cook Wilson, Prichard, Joseph, Alexander, Russell, Holt, Moore and even Schuppe, Mach and Avenarius. That only normal sensa are real, is perhaps a step in advance. But this step is really involved in the realism of Cook Wilson and his school (cf. *K.K.* p. 83). It is

[1] Here is the empirical basis for the creation theory.

also involved in the neo-realism of Alexander (cf. *S.-T.* II, pp. 186–188)[1]. And it is latent in the distinction of appearance and reality to which Moore's thought is tending. Even Meinong comes to it in his *Wahrnehmungsforum*, while Laurie is quite explicit on it.

The same is true even of idealism in its objective form. Indeed objective idealism is but realism plus the hypothesis of an infinite subject. The objects are "presentations" of the infinite mind and hence dependent on it; but they are independent of finite minds. Again, being essentially presentations, they are, in principle, directly apprehensible. And if directly apprehensible by the finite mind, then only they can be its standard or normal sensa—all its other sensa are appearance. Idealism has seldom squarely tackled the problem of our knowledge of the external world. It has even gainsaid these propositions, as in Stout. But it is hardly contestable that all the positions of modern realism are transparently latent in it.

So far we have tried to follow the witness of human consciousness. It holds that the world exists independently of us, that it has primary as well as secondary qualities, that our perception of it is direct, that in sensa there is the distinction of appearance and reality, and that only the normal or standard sensum is part of the object. This view, we find, is self-consistent. Philosophy, we concluded, ought to accept it and not to question it. However, in the strict sense of the term, all this is no *proof* of the truth of realism. All its positions and presuppositions can be denied without logical absurdity, and have been denied. But the question is whether a proof can be given of any of our ultimate convictions. When Hume questioned the objective validity of causality and substantiality, what proof could be given of them? Only that without them all science and experience would be impossible, that they lie at the foundation of all science and experience, that if we are to have science and experience we must allow objective validity to causality, etc. In this consists Kant's

[1] Turner, who in his *Direct Realism* accepts Alexander's position, is quite explicit on it: cf. p. 76, also pp. 51, 52, 55, 56.

transcendental deduction of the categories. Evidently the proof is hypothetical and not absolutely conclusive. It cannot be otherwise. It assumes that science and experience are undeniable facts. But the assumption can be denied. This would not trouble Kant, because in making the assumption he has human consciousness on his side.

A similar transcendental deduction is also possible of realism. If we do not make the distinction of appearance and reality in sensa we shall be compelled to make them all appearance[1]. With this direct perception disappears, as in Locke. But with direct perception go not only the secondary but also the primary qualities, and with qualities the existence of things, as Berkeley showed. And with the disappearance of things disappears a common world. But a common world of self-existing things is the presupposition of all communion with our fellow-beings as well as of science, art, morality and religion. We cannot seriously doubt the fact of communion. We must therefore allow objective validity to all that is involved in it. And the independent existence of things, the directness of our perception of them, and the distinction of appearance and reality in our sensa are involved in it.

This may well be regarded as the justification of the distinction of appearance and reality in sensa, though it is equally well a deduction of the independent existence of things and the directness of our perception of them. However, something more may be said with respect to the latter as they are the two fundamental theses of all realism.

Independent existence is a pure concept of the understanding. It is not given by sense—sense cannot give it. What it gives is a presentation, and not the independent existence of the presentation. That in fact is a conviction, a belief that accompanies the presentation and is other than it. It is a concept supplied by thought or understanding. Further, it is a concept *a priori*, because it is universal and necessary.

[1] Neo-realism takes the alternative of making them all real. It becomes consistent only in Russell, as will be seen later; and in Russell sensa become private and temporary. They are not common and permanent or independent, and cannot therefore make community possible.

It is universal, because mankind is unanimous in attributing independent existence to external objects. It is necessary, because even theories which overtly deny it are compelled surreptitiously to introduce it.

There are two ways of conceiving the existence of objects, the realistic and the idealistic. The realistic frankly admits independent existence. The idealistic, too, in its objective form, accepts it; only it goes a step further, postulating an infinite mind on which everything depends. But in its subjective form, idealism seems to reject independent existence. However it does not really do that. It assumes independently existing entities as causes of dependent sensa[1].

But independent existence is not only a pure *a priori* concept, of which the proof must be a transcendental deduction; it is, in fact, but another name for the category of substance or self-subsistence itself. The proof therefore that Kant would advance of the objective validity of that category, is the proof of the independent existence of things.

Again, the validity of direct perception is guaranteed by the knowledge of the particular. Knowledge is direct contact with reality. Hence the feeling of certainty incident to it which distinguishes it from opinion. Now reality in a broader sense may be regarded as comprehending both the universal and the particular. Thought is the faculty of the former; and Anschauung, sensibility, perception that of the latter. Without perception therefore there can be no knowledge of the particular, the existent, the real. Indeed to be an existent primarily means to be an object and consequently an object of perception. Nor can we give up knowledge of the particular, or sense-knowledge, in favour of the knowledge of the universal or rational knowledge. For thought without sense is inconceivable. It is the faculty of the universal and no doubt the universal is essentially different from the particular—its mode of being is not existence but subsistence, and it does not depend for its being on the particular. But we are so con-

[1] It will thus be seen that the question between realism and subjectivism is not the independent existence of *things*, but only the independent existence of *sensa*.

stituted that the universal becomes intelligible to us only through its coming down to existence—through its presence in the particular. Thought cut loose from sense loses its meaning for us. Its highest possessions, viz. the categories, first attain to significance when they are translated in terms of sense, as Kant showed. And its universals have interest for us only because they help to organize our reality, the real, the existent, the particular, as again Kant brought out. Thus not only the knowledge of the particular, but indeed all knowledge is bound up with the validity of perception. And perception to give knowledge must be direct perception.

Indeed the validity of sense, of direct perception is embedded in the very postulate of all knowledge. All theory of knowledge makes a postulate as to the nature of reality as well as to the nature of knowledge. It assumes that reality is such as admits of being known by us, or that our faculties of knowledge are capable of grasping reality. This is the most fundamental assumption of all search after truth, all inquiry and all science. It is ultimate inasmuch as it is not further explicable or provable. The attempt attributed to Kant to explain why reality is capable of being known, is itself an assumption, a hypothesis[1], which moreover involves this postulate; and the effort made by Descartes to prove that our faculties are capable of grasping reality—to prove, that is, the reliability of our faculties, is a huge circle. Nor can this postulate be doubted without putting the whole fabric of knowledge in jeopardy. Human consciousness never doubts this postulate; it bears testimony to its validity. It makes this postulate with reference to thought as well as with reference

[1] We cannot demonstrate why reality *is* governed by necessary laws, by saying that it is our own creation. The hypothesis on which the demonstration is based is more doubtful than the fact to be demonstrated. But perhaps a reasonable explanation can be given of the fact why we *know a priori* that reality is governed by necessary laws, if we conceive reality to be force, energy, activity governed by such laws, and finite minds to be the very same force come to consciousness. We know that reality is governed by necessary laws, because we are the very same reality come to the awareness of its own nature. But this only explains our *a priori knowledge* of the fundamental nature of reality; it does not explain why reality has this nature.

to sense. Philosophers, *e.g.* Descartes, confine it to thought and refuse it to sense. In this lies the fundamental ground of their turning anti-realistic and in the end sceptic. For sense is evidently an avenue of knowledge—it is a form of consciousness, and consciousness as such is awareness of something. If we doubt the truth of this avenue of knowledge, we are led to doubt the truth of the other avenue also, viz. of reason or thought—as happened with Descartes. Because, if the knowledge given by sense is limited, so is the knowledge given by reason; and if there are difficulties in ascribing objectivity to sense, there are difficulties in ascribing objectivity to thought[1].

Before proceeding further, it may here be remarked that the conviction of human consciousness that the world is real and its perception direct involves a theory of knowledge and perception. It involves that knowledge and perception are direct apprehension of reality; that in knowing and perceiving we stand face to face with the object; that the object is there and reveals itself to us both in thinking and sensing; that thought and sense have their gaze on reality itself; that there is no veil between the knower and the known which has to be raised; that reality is there, we only come to see. In other words, the theory involved is that knowledge is revelation, and not that it is reproduction of the object or production of the object. The revelation theory of knowledge when looked at from the side of the object asserts revelation; and when looked at from the side of the subject it asserts self-transcendence. Revelation suggests that the object is active and as it were takes away the veil by which it was covered from its face. Self-transcendence indicates that the subject is active and goes out of itself like a ray of light to the object. Both are metaphors. They are attempts to describe an ultimate fact

[1] In the contention that perception is direct, it is not intended that it involves no activity of thought whatsoever. The distinguishing of real from appearance in sensa, the conception of the independent reality of veridical sensa and the notion that the latter are aspects of things which also have other aspects that are not perceived, are all work of thought. What is contended is only this. There is an element in our apprehension of objects which is revealed to sense without any mediation of thought whatsoever, viz. the sensum.

in physical terms. Knowledge, like existence[1], is an ultimate fact not further analysable. *Es ist einmal da.* Nothing further can strictly be said of it. But because ultimate, when realized, it appears, like existence, most wonderful. We stand aghast before it. We do not understand it. To understand is to reduce to ulterior elements, to go behind the thing. But because we do not understand it, we try to understand it—we try to describe it in terms of facts with which we are more familiar. Existence seems to be more familiar. We therefore describe knowledge in terms of existence. Revelation of the object and self-transcendence of the subject are such descriptions. They are useful, because they suggest characteristics of the ultimate fact of knowledge, which are more adequate to its nature than those suggested by other theories of knowledge, namely the representation or reproduction theory and the creation or production theory.

These latter theories veritably regard knowledge as a form of existence, as a fact which can be explained as a mode of existence—of physical reality. The representation theory conceives the subject as a physical substance on which the object, another physical substance, is somehow acting. The changes, or modes, thus wrought in the subject are the representations of the object in the subject. This is its account of knowledge. The creation theory removes the inconsistency of the representation theory in holding the resulting ideas or modes of the subject to be representations of the object. There is no way to go out to the object and to compare the ideas with it. Nor is there a way to affirm the object. All we have is the subject and its modes. We can say nothing about their cause. But the subject further works up its modes into relations. Then alone they become objects. They are creations of the subject. This is the account of knowledge which the creation theory gives us[2]. Both these theories are attempts

[1] The concrete corresponding to knowledge is subject, and that corresponding to existence is substance. The empirical reality corresponding to the former is mind, and that corresponding to the latter is matter.

[2] Descartes is the protagonist of the representation theory and we shall meet it in Chap. II. Locke, too, is a representationist, though his theory of the subjectivity of relations would bring him nearer to the creation theory. But it is

to explain knowledge in terms of its object, the existent. But neither the representation theory nor the creation theory gives an account of *knowledge*. They give an account only of the immediate *object*—of how this object comes into existence. The *knowledge* even of this object is still a remainder unaccounted for. This testifies to the unique nature of knowledge.

to Kant that the creation theory owes its triumph. It is said that before Kant the theory of knowledge started with presuppositions which no one questioned. Both rationalists and empiricists held that (1) there are independently existing things out there, (2) knowledge is a reproduction or representation or copying of these realities in our mind. This made knowledge impossible. For, there is no way to compare the copy with the original. Kant questioned these presuppositions of the theory of knowledge. He said, let us start not from the object as the theory of knowledge has done till now and consequently resulted in representationism, but from the side of the subject; let us further assume that the objects obey the laws given by the subject, and not that the subject takes a picture of the laws inherent in the objects; and let us see how we succeed. According to the new hypothesis therefore it is the subject which gives its forms, the fundamental laws, to the presentations and thereby turns them into objects—it creates the objects. The objects are no more transcendent—behind the scene, but immanent —immediately present. The forms necessarily hold of the objects, because the subject has given them to presentations and thereby turned them into objects. There is therefore no doubt now about the necessity and objective validity of these laws, such as Hume had entertained. Knowledge is not now representation; it is creation of the object by the subject. In this change in the theory of knowledge consists, it is said, Kant's Copernican revolution.

This is the view generally taken of Kant's position. It has an advantage over representationism in cancelling the transcendent object, and making the object of perception direct by a circuitous path. Common consciousness always held objects to be immanent and perception direct. The question is whether the hypothesis succeeds in explaining our belief in the necessity and objective validity of the forms or fundamental laws, *e.g.* of cause-effect or substance-attribute, for the sake of which it was primarily constructed. It could explain the belief of the Creator in the objectivity of these laws, because He had created objects according to them. But I am not aware of having created the objects according to these laws. I do not *know* that the laws hold of them necessarily. I simply *believe* this, now after the creation theory as I did before it. My belief in the objective validity of the forms remains a belief; it has not become certainty—it can still be doubted, because the hypothesis can be doubted. The theory has only involved me in a gigantic metaphysics—it makes the world a creation of mine, and me identical with the Creator—positions which beat all metaphysics that had ever existed before Kant. And it does not explain or describe *knowledge*. It is a theory of the creation of the *object*, and no theory of knowledge. Like representationism it conceives knowledge as a case of causality and ends in creating the object instead of the knowledge of the object. But knowledge is a fact *sui generis*—it cannot be explained.

The problem of the necessary forms of sense and thought, which led Kant to his theory, is not answerable, as far as *reality* is concerned. We cannot account for the fact why reality is such that we can know it. But an answer can be given to Hume if we take another turn consonant with common consciousness. Space,

It is an ultimate fact, and all attempts to explain it in terms of other facts, *e.g.* existence, are futile. Common consciousness or the consciousness of the unsophisticated man is innocent of all such theories. The theory which it suggests and which comes nearest to a correct description of knowledge in physical terms is the theory of revelation and self-transcendence.

"Self-transcendence," however inappropriate in itself, seems to be a more appropriate term even than "revelation." Revelation implies an activity on the part of the object. We find no such activity in the object. The object does nothing to be known. It only lets itself be known. It is a *condition* of the knowledge of it, but not a cause. There would be no knowledge if it were not there; but it does not produce

time and the categories are forms of our *knowledge*. That which does not admit of these forms—does not appear in these forms, cannot come to us; it cannot become our object. We cannot know it. Therefore all we can know, *i.e.* our world, must be in these forms. Thus these forms must have objective validity with reference to our objects: If the objects are not in them we cannot know them—they will not be our objects. In this way we prescribe to objects what nature they must have to be our objects, to be parts of our world. And this is the proof of the objective validity of these forms. However, this says nothing as to why the world is in space and time and conformable to the categories. That is a fact and cannot be explained—it has to be taken as such. All that is "proved" is that the world must be so if it is to be known by us, if it is to be our object. And this seems also the sense in which Kant meant his exposition to be understood. Let us start, says he, from the side of knowledge, and not from that of the object. Now we find that space, time, causality, etc. are the forms of our knowledge. The object must be according to them if it is to be our object, *i.e.* if it is to be known. Therefore the object must obey the demand of my faculty of knowledge. Why it obeys the demands of my faculties, that I do not know. That is, why objects are of a nature suited to our faculties of knowledge is a mystery. It is not the business of a theory of knowledge to unravel it—if it can be unravelled at all. Thus it would be seen that Kant did not attempt to explain *knowledge*. His endeavour was to find a way to maintain the objectivity of its forms in view of Hume's doubt.

In view of the creation theory attributed to him, one may ask if the problem Kant set to himself was: How is *reality* possible? Kant's problem on the contrary is: How is *knowledge* (= certainty as to the objective validity of its forms expressed in the synthetic judgments *a priori*) possible? He is not concerned with the possibility of knowable *reality*; his only concern is the possibility of scientific *knowledge*. He is not a metaphysician; he refutes the possibility of all metaphysics at length and conclusively, and regards this as his chief achievement. The creation theory is a tremendous metaphysics that seems to have been saddled upon him by later philosophers who were pre-eminently metaphysicians, going to their task with religious motives, and whose theories Kant lived long enough to disown expressly.

knowledge[1]. It is the notion of the activity of the object and of the consequent passivity of the subject in perception which leads to the causal conception of knowledge at the basis of representationism and creationism and the difficulties incident to them. Self-transcendence on the contrary suggests activity on the part of the subject in apprehending the object. This activity is a fact. We are conscious of it. And it avoids the difficulties incident to the opposite theories. Common consciousness seems to suggest the view of knowledge as activity. It seems to think as if knowing is taking hold of the object, is taking it in our grip, rather than waiting for it in an attitude of receptivity.

Now if we allow ourselves to try to follow the movement of reality which ends in the appearance of knowledge, the view that naturally suggests itself would be that it is a process of unfolding. The real is force, energy, activity. It is endowed with many potentialities. It is a system of them all; and the groups of potentialities again build subordinate systems. It yearns to realize them. The first system of potentialities it realizes, consists in the yearning to appear, "to come out of itself," to be a physical object, spatial, extended, voluminous, coloured, etc.; it becomes, say, an atom, which though extended, is an indivisible unity. It is now a constituent part of the physical world. In every case its realizations are subject to the favourable disposition of the whole reality and to the influences of other reals. Further, some of the realizations are of the nature of sustained activity, *e.g.* extension, colour. They become qualities of the real. Others are of the nature of intermittent activity, *e.g.* sound. They are rather acts than qualities of the real. A further realization consists in becoming alive. The real will live and make others live; it will propagate itself. But its powers form a system; they build something like an organic whole. The former realizations must therefore undergo a vital modification as indication of the realization of the new potentiality. The material is turned into an organism by the power of life. The organism is the external

[1] This is what Kant seems to mean in holding that the Ding-an-sich is no cause of our perceptions though it is a condition of them.

expression, the indication, the symbol of the new realization. Next, the real yearns to feel and to see and to move about. It will realize these potentialities. It will be an animal. The former realizations as well as their external expressions must undergo change. In realizing itself, the new potentiality modifies them. The forms of appearance as well as of life are changed. So also the organism. It passes into an animal body with a nervous system and sense organs. The latter are the external expressions, indications, symbols, of the new realization. The last realization which the real achieves is of its power of knowing itself, of self-consciousness, of thought, of becoming an I; it will "come back to itself." Again the new potentiality in realizing itself modifies the former realizations and their external expressions. Animal life and sensibility must pass into human life and sensibility and animal organism into human organism with highly developed nervous system and cerebrum. The physical changes are again the external expressions, indications or symbols of the new realization.

To make it better comprehensible why the various realizations are so intimately connected, one may perhaps conceive the original yearning of the real as desire to *be*, and all its realizations as *forms of being* arranged in a progressive order—the subsequent being a differentiation of the immediately preceding. This will help us to grasp why the external expressions of preceding realizations must undergo changes and develop new forms and organs with the succeeding realizations. It should be noted that the first realization has no external expression—it is itself externality; and because it is externality and must be modified with new realizations, therefore it is that the subsequent realizations have external expressions.

Sense and thought, both are realizations of the aboriginal potentialities of the real. They are capable of grasping reality because they are the realizations of the powers of the real to know—and to know is to know reality. Further the bodily organs are neither channels of knowledge nor instruments of knowledge, much less causes of knowledge. The eye does not

see; nor do we see with the eye. The eyes are only external expression of the realization of the power of sight, which is totally a spiritual activity. They are only its symbols. The same is true of the brain. It is only an external expression, an indication, a symbol of the realization of thought. Sense and reason directly apprehend reality; the changes in sense-organs and brain are modifications of prior realizations indicative of the realization of sensing and thinking. If these modifications are obstructed, the obstructions are indicative of obstruction in the realization of sensing and thinking. The real has failed to work the changes in former realizations which must be made along with the realizing of new powers.

But that the real is not in its realization bound down to any definite physical conditions, is brought out by the daily experience of adaptation. It is its yearning to realize itself which brings about the necessary changes in the organs of body. Its power of sight will realize itself; the eye is not in the proper condition; that power exerts itself and along with it compels the eye to adapt itself to its demands and puts it in the proper disposition. This, even when the eye is not quite normal. Some portions of brain are removed, others are made to function as indications of the realization of mentality. Indeed, the physical apparatus, *e.g.* the visual, is incapable of giving all we see. We see distance and volume, which this photographic camera does not and cannot convey. The "impressionists" in art base their case on these facts and call the former art mechanical. They give objects as we actually see them; while the "mechanical" art produced them as they would be for a photographic camera—it had to train the eye (the sight) to look at things as they would look to a photographic camera.

This view of the process of the real would seem to be in consonance with the view that human consciousness takes of sense and thought. On the one hand, it affirms the external objects and attributes to reality the qualities which the unsophisticated man attributes to it; and on the other it holds the directness of perception and keeps it free from physiological

complications which make perception representation and are the chief stumbling-block in the way of its directness. Moreover, it pointedly brings out that sense is activity and not passivity. In this it differs from the view of sense generally accepted. But here again it finds human consciousness on its side, which invariably expresses perception in terms of activity. It emphasizes that perception is initiated from within and not from without, and is thus in harmony with the central importance which psychology attaches to attention and interest in the theory of cognition. It is in fact the passivity of sense-organs which is as a rule taken for the passivity of sense. Or it is the involuntariness of sensa which leads us to think that sense is passive. But the involuntariness only shows that there is want of conscious volition on the part of mind and not want of volition, of conation. The realization of the potentiality of cognition consists in a sustained exertion which never ceases. It is involuntary and continues every moment of our life. It is there to take hold of whatever may come within its range, be it something which it consciously sought or not, *i.e.* be it voluntary or involuntary. It may be urged that to have an object in itself involves passivity. This is in a sense true. But it is equally true of thought as of sense—thought which has always been regarded as activity.

Again the view of the function of sense-organs which comes out of these considerations has some peculiarity. It is closely akin to what Broad calls the "instrumental" theory which holds that the sense-organs are not constitutive of sensations —are not their part-causes, but only instruments of perception. It is clear that according to the view suggested above sense-organs are not causes, but are, on the contrary, effects of sense. They are modifications wrought in the organism as by-products by the power of sense-perception in the process of its realization. Strictly speaking, they are not even instruments with which the sense works. Sense does not work by means of them. They are concomitant with the realization of sense, and are therefore only external expressions, indications, symbols of its realization. They do not play any part

in perception. They only indicate to the external observer that it is taking place[1].

Besides the independent reality of things and their nature and the directness of perception, this theory is also in consonance with the distinction of appearance and reality in sensa. Reality is apprehended when the power of sense finds its normal realization; appearance when it finds one abnormal or defective. But how is its normal realization to be determined? The prevailing habit of thought takes the way of determining it by means of the normality of sense-organs. This may be to an extent justifiable even on this theory, as it holds the condition of the organs to be indicative of the realization of sense. But at best the method is indirect. More, on this theory the method is questionable, because according to it the organs are not essential instruments of perception. Bergson mentions cases of normal organs of vision yet deprived of vision. Again, the normality of the organs is rare; yet veridical perception is not rare. Even with physiologically defective organs, *e.g.* in so-called short-sightedness, we ap-

[1] The question of the function of sense-organs is an aspect of the problem of the relation of mind and body. This relation has been conceived either as concomitance or as interaction. Both involve representationism. The former conceives mind and body as two series of events running parallel to each other without ever coming into contact. As metaphysics this conception originated in Descartes' rationalism, who conceived mind and matter as negations of each other, and was advanced by Spinoza as the true outcome of Cartesianism. It was hailed by scientific thought as alone consonant with the principle of the conservation of energy which Descartes had propounded. But clearly it leaves no room for any direct contact between mind and matter nor hence for knowledge. The latter, viz. interaction, conceives body to act on mind in knowledge, and mind to act on body in volition. It naturally gives the physiological explanation of sensation, and makes the sensum an effect of matter on mind which is at best a representation of the object. Thus knowledge, the direct apprehension of reality, is excluded by this view too. The theory of the relation of mind and body advanced above does not deny concomitance in a certain sense; indeed it treats the physiological modifications as organic to the mental. The two series are however in constant contact—the latter being rather the cause of the former. Nor, evidently, does it deny interaction. That is an undeniable fact if perception is direct. What it denies is that matter acts on mind in perception, that sensum is an effect of matter on mind. On the contrary it conceives mind to be active and in actual possession of matter itself in veridical perception. Again both concomitance and interaction conceive mind and matter as two entities self-centred and essentially disparate. That is dualism. But this theory regards them as two progressive expressions of one and the same reality which are most intimately connected.

prehend correctly—sight realizes itself, though from a different distance. Therefore on this theory we must not start from the side of the organs, but from the side of sense itself. In determining the normality of thought, we do not start from the side of the cerebrum. Indeed, in both cases, sense and thought, the method is direct. It is psychological experiment. We must estimate sense or thought itself. We must experiment whether a sense, *e.g.* the sight, apprehends all the distinctions others apprehend. If yes, it is normal; if not, not. The same holds of thought. And this is the method man actually always employs; even the physiologist, *e.g.* the eye-doctor, employs it.

The cases of abnormality which are of interest for a theory of perception are those of objective illusions and objective hallucinations. An instance of the former is the size of an object seen from a distance, that of the latter an after-image. The former are appearance. According to the theory advanced above, in them sense is defectively realized and hence reality is defectively apprehended. And this is but what man in general would say. But what are the latter? They are not appearance. No reality is appearing in them. And yet they are apparently very like sensa. On this theory the explanation would be this. They are not sensa, true or illusory, as the physiological explanation maintains; nor are they due to the modifications of sense-organs. They are of the nature of ideas, and due to a modification of the power of sense. The real or the mind or the power of sight exerted itself to realize itself—to see an object. It realized itself by veridical perception. Thereby it got modified in a definite direction. It was general at first, but now it took the form of the desire to see a definite object. When the eyes were closed, it did not stop its exertion. It had a kind of inertia. It continued to exert itself to see the same definite object. The object was not there. It created it in idea. Why it created a complementary image instead of a true copy of the object, can be answered *mutatis mutandis*, on the lines which the opposite theory takes, viz. the physiological explanation of after-images. But what from the standpoint of this theory is of great interest is that after some

unsuccessful attempts, it does succeed in creating a true copy. The colouring of sensa which these images have, seems to be due to two factors. Firstly they are involuntary; and secondly they are a creation of imagination in the service of sight, or of sight taking the rôle of imagination, which is indicated by the disposition of the optical apparatus of the eye. This explanation again, differs from that ordinarily accepted by the physiological mode of thought—indeed it takes an opposite turn. But it explains facts better, and is more in consonance with the dicta of human consciousness; though it must be admitted that it is, like its opponent, too abstruse to be termed its dictum.

Thus this metaphysical hypothesis fits in with the validity of the realistic instinct—with the dicta of human consciousness as to the independent existence of things, the directness of our perception of them, and the distinction of appearance and reality in sensa; in other words, it makes realism and the revelation theory of perception ultimately intelligible, and throws new light on some tough problems of the theory of knowledge[1].

There is one and only one difficulty that can be urged against realism which has a basis in experience, viz. the relativity of sensa. All other objections are metaphysically motived—they arise from attempts to go behind knowledge and explain its machinery by means of some simpler concept, and are in the end reducible to relativity. The objection from relativity turns on the difficulty of determining which sensum is real and which appearance, and has in principle been met above. We may now follow it more in detail. The facts are these: the table before me is oval and white. In the shade it looks different, and in the dark black or without colour, *i.e.* invisible. From one side it looks oval, from another round.

[1] This hypothesis looks, on the face of it, novel. But in truth it is not new. It has very much in common with the metaphysics of Hegel, and even that of the subjectivist Schopenhauer—to mention but two names. Its novelty consists, if there be any novelty about it, only in this. It brings that metaphysical position to bear on the problem of knowledge and specially perception; it makes explicit what was implicit in it;—though it is true it was not originally developed with any consciousness of its community with Hegel or Schopenhauer.

From a distance its shape and colour are different to what they are from near. To the colour-blind it looks grey, and to the jaundiced yellow. But all its appearances are equally sensa, presentations to sense, direct revelations of perception. Taken by themselves there is no way to distinguish between them. They seem to be all objective, external realities. Yet they conflict. The table cannot have all these shapes and all these colours. They are contradictory predicates and cannot be affirmed of the same subject. If we affirm only the oval shape and white colour, what right have we to reject the other sensa? If they are appearance, so must be the oval shape and the white colour. There is nothing to distinguish between the former and the latter. And in fact the false revelations of sense are enormously more numerous than its true ones. Consistency demands that we should put them all on one footing. None of them is real—they are all mere appearance[1].

Now the alleged relativity of sensa breaks up into their relativity (1) to physical conditions, (2) to the position or standpoint of the observer, (3) to his distance from the object, and (4) to the condition of sense-organs. Speaking generally we have in the first two cases reality, and in the last two appearance. But to take them one by one, the first is no objection. Things are essentially related. With the change of relations their qualities change. The colour of the table *is* different in shade from what it was in sunshine; and it is dark in the night. Light is a constitutive condition of the realization of colour-potentiality[2]. The object is no solitary thing in the universe. It is a member of a related whole, and its relation to other members of the whole and to the whole conditions its realizations. To yearn to know it as it is in itself out of all relations is to ask for the impossible. Things cannot

[1] Neo-realism admits the argument, but takes the alternative that all of them are real. It is thereby compelled to sacrifice the unity of the object, and falls into what may be called physical sensationalism, which, as we shall see in Russell, is indistinguishable from subjectivism for the theory of knowledge.

[2] Or perhaps light is normally a condition only of our vision, *i.e.* of the realization of our sight-potentiality. The fact of adaptation to changing light conditions and even to darkness, in the vision of men and animals, seems to suggest this alternative.

be taken out of the universe and put in isolation from it. The relativity of sensa to the position or standpoint of the observer is again no objection. To be an object, *i.e.* to be a spatial thing, necessarily involves that it must have innumerable aspects which can be apprehended only from different positions or standpoints. It cannot be otherwise. All these aspects or sensa are part of the object. There is no contradiction in attributing them all to the thing. Only the relativity of sensa to the distance from which the observer looks at them gives a real case of conflict. Not all of them can be real. Only some are, viz. those apprehended from normal distance; others are appearance. That they are different from different distances is no reason to brand them all unreal. For the object must look different from different distances. Even the object of thought does not look the same from all mental distances. To demand that it should be otherwise is to demand a complete removal of the limitations of our faculties in order to see what an object is. But in fact it is an impossible demand. Husserl indicates its impossibility by saying that even God would see differently from different distances. But what is of real importance, is that the demand is unnecessary. If fulfilled it will not enable us to know things better. We already possess in our limited powers of sense the means of knowing the real, of determining which is the real appearance of an object and which its mere appearance. We have standards in sense as well as in thought to distinguish error from truth. As to the relativity of sensa to sense-organs the reply is in principle the same. The objection builds mainly on the abnormal conditions of the organs and thereby contends that the organs are constitutive of sensa. But a concomitant variation does not necessarily mean causation. It may simply be an inseparable accident. Indeed the sense-organs are in no case constitutive of sensa. They and their conditions are simply indicative of the effective or defective realizations of sense-powers. Only in the former cases, sense apprehends reality. What it apprehends in the latter cases are partly its own creations like the after-images. The objection of the relativity of sensa to sense-organs, applies in fact, *mutatis*

mutandis, in all its stages equally to thought. The abnormalities, temporary or permanent, of brain are accompanied by abnormalities in thinking. But, it is not contended on that account, that thought is relative to brain and that conditions of brain are constitutive causes of the objects of thought. Apparently the reason is that in the case of sense we seem directly to experience that sense-organs and their conditions are connected with sensing and sensa, while we do not similarly observe the connectedness of brain and thought. But that is no vital difference. In both cases the relation is not that sense-organs are causes of sensing or sensa, and brain the cause of thinking or thoughts. On the contrary, it is rather sense that is the cause of sense-organs and thought that of brain—and the physical organs are only external expressions, indications, symbols of the realization of sense and thought.

But one feels inclined to question the parity of sense and thought on which stress has been laid above. In thought, one thinks, there is necessity, the individual is certain of his conclusions and has not to seek consensus; but in sense there is no necessity and certainty, the individual has to seek consensus in order to find out which is normal sensum and which is abnormal. Indeed the distinction of reality and appearance, in sensa, is simply arbitrary. If our powers of sense were to increase or decrease, our normal sensa would change, and those which we now hold to be normal and hence real would then become abnormal and hence appearance. But if our powers of thought were increased, we should apprehend truth better. Therefore sense is not, and thought is, an avenue of knowledge.

This argument springs at bottom from the habit of regarding sensa as relative to sense-organs. Once we accept relativity, all the points of the argument seem to follow from it with self-evidence, though in reverse order.

Leaving aside what has been said above in justification of the validity of sense as an avenue of knowledge, it must be urged here that sensa are not relative to sense-organs, that sense-organs are not constitutive causes of sensa, that increase or decrease in the powers of sense-organs does not

involve the changes in normal sensa that are contemplated by the argument, and that normal sensa are not arbitrary and determinable only by consensus any more than the dicta of thought are so.

To take all the points one by one, the feeling of necessity and objectivity that attaches to the dicta of thought is not greater than the sense of overwhelming constraint and stubborn reality which the dicta of sense inspire; and we are as clearly certain of our sensa as of our thoughts. Indeed we regard vision or intuition as the very ideal of true knowledge, and even philosophers like Kant and Spinoza do not disagree with the ordinary man on the point.

Nor is it true that the individual is independent of consensus or reference to others in thought and not in sense. Such reference is either necessary in both cases or in neither. If we accept Hegel, whom Bosanquet follows in his Psychology, objectivity is a social function, and we attain to certainty when we find our fellow-beings coming to the same views. This is so in all departments of knowledge—even in mathematics, if we follow the development of the mathematical consciousness in a child. It is by repetition of these agreements that we attain to the conviction that our mind is normal; and henceforth we believe in our individual apprehension. But really we seldom attain to perfect individuality. Our strongest convictions gradually vanish if we always encounter disagreement.

Nor is the distinction of normal and abnormal in sense any more arbitrary than in thought. We cannot get along without this distinction in thought. And we have the same criterion for making it in sense as in thought, viz. clearness and distinctness. And we make it with the same facility or difficulty in sense as in thought. It looks arbitrary in the case of sense only because the conditions of its determination are more complicated in sense than in thought, and perhaps also because philosophy has neglected to analyse and define those conditions precisely.

That an increase or decrease in our powers of apprehension entails disastrous consequences to sense and not to thought, is based on mistake. It is implied that in the case of thought

the object will remain qualitatively the same, and the increase would mean only more clearness and distinctness in our apprehension of it; but in the case of sense the object will change qualitatively as under a microscope and the increase would mean the apprehension of new sensa! But why this difference? Because the sensum is conceived as relative to sense-organs, and the object of thought is not conceived as relative to cerebrum. To put the two cases on an equal footing, increase and decrease should mean the same thing in both; and as soon as this is done, the argument loses its force. If increase means more clearness and distinctness in our apprehension, or the capacity of apprehending more distinctions than we ordinarily do, it will be welcome in both cases. It neither involves relativity of sense-knowledge nor of rational-knowledge—relativity in the sense in which it is subversive of knowledge. But if it means a qualitative change in the objects, then it is destruction of knowledge in both cases. Without therefore despairing of all knowledge, increase, properly conceived, of our powers of sense would mean increase in their scope like the sight of Yarqa who could see at longer distances than other men, or the taste of a tea-taster who can distinguish differences of flavour more markedly than others; and that of the powers of thought would mean the grasp of a Hegel or the keenness of a Kant, while decrease in sense would mean phenomena analogous to short-sightedness or long-sightedness, and in thought to dullness or obtuseness. In all these cases it is the conditions of the normal realisations of our powers that are changed, making them easier or more difficult of realization: but normal realizations and hence normal objects (sensum or thought) remain the same. But if the change of these conditions were such as to make normal realization impossible, *e.g.* colour-blindness in sense and insanity in intellect, the case would be different. There would be no normal realization and therefore no normal sensa or thoughts. All would be blindness and insanity, appearance and error—and no one knowing that it was so! We should then be in the very realm of relativity—the relativity of all knowledge.

But if there is but one individual who knows this, we are on the way to get outside it. For there is then one intellect that apprehends objective truth, that is normal; there is one sense that has objective, *i.e.* normal sensa. He apprehends reality. For, it is not necessary for the theory advanced above that normality should be universal, which the criticism by implication attributes to it. Normality and not universality is its point, whether realized in one individual or many; though as the theory which calls upon human consciousness for its ultimate witness, it assumes normality both of sense and thought to be general.

We may now pass to the objections that are metaphysically motived. It must be marked that there is but one metaphysics underlying them all. Let us therefore trace how this metaphysics arises, what it is, and what objections at its different stages it urges against realism.

The relativity of sensa sets us thinking about the nature of perception and knowledge. What is knowledge, and how does it come to be? The concept which naturally suggests itself to us as simpler and capable of explaining knowledge is existence—indeed physical existence. Therefore the subject is an existent, and the object is an existent; they are two substances, two atoms. They interact. The action of the object upon the subject generates knowledge. Knowledge is therefore a case of causality. This is the metaphysics of substance, and it lies at the basis of scientific subjectivism or representationism, subjective idealism, agnosticism and the kinds of idealism known as objective, viz. the epistemological idealism of Ward, Green and Royce, and the absolutism of the Oxford school—*i.e.* it lies at the basis of all the doctrines which impugn the validity of realism.

Now to start with, it must be observed that knowledge is not a case of causality;—it is a fact *sui generis*, as has been shown above. Further, that the subject is not substance in the sense implied, and consequently substance is not the ultimate category to which all else must be reduced.

To take these theories one by one. The scientific subjectivism or representationism conceives the subject and the

object as two physical entities, two substances. It holds that the object somehow acts upon the subject by contact, as one atom acts upon another atom. There results a modification in the mind. This modification is the sensum. It is representative of its cause, the object. This is the explanation of knowledge. Descartes takes this view, followed by Locke and others. This is also the view science takes and calls the physiological explanation of sensation. The rays of light, it says, start from the object, and impinge upon my retina; the movement is carried further by the optical nerves to brain centres, and there affects the mind. The mode of mind that results is the colour I see. The sensum is therefore necessarily mental. It is not an independent reality as realism maintains. Now it is not necessary to consider how the action of matter on mind is possible on Descartes' principle or on the scientific principle of the conservation of energy. But we have to inquire if this metaphysics which makes sensa mental explains the fact of knowledge at all. Accepting that it is a correct account of knowledge, the problem is, how can we pass from the sensum to the object? The only answer is: By the same way by which we came, viz. by causal inference. But the immediate cause which effected the modification in mind called a sensum is the cerebral movement, and not the object. Nor is the object its ultimate cause. For, the cause of this movement is, let us admit, the movement of the optical nerve, and of the latter that of the retina and so on until we come to the object from which the rays started. But the rays again have further causes, and these causes still further causes, and so on. The seeking of the causes of the causes is an infinite regress and expansion. Where are we to stop and say, This is the ultimate cause of the sensum, as Meinong asks? And how are we, who are confined to our sensum, to know what the nature of this cause is? The physiological explanation starts with a world to explain the knowledge of that world. It ends in creating a new world and cutting us off altogether from the world from which we started, and consequently from the knowledge of that world. I start from the world which I see, and try the physiological explanation of my perception of it. This world

disappears totally, and I am put in a new world of my own mental states. If I again start from this new world, the same happens to it. I never come to the world from which I started. This is introjection, to which Avenarius attributes subjective idealism and indeed all idealism and metaphysics; —and Mach agrees with him. But what is still more important is that it never explains the fact which it undertook to explain, viz. *knowledge* of the sensum, and in giving an explanation (which is not of knowledge but at best of the sensum) it gratuitously makes all knowledge impossible. And in doing this it contradicts the clearest data of human consciousness. For, nothing is clearer than the fact that in perception, percipience and perceived, act and object are co-present, are *contemporaneous*. So also thought and its object. Science, before it gets involved in the physiological explanation, assumes this. But the physiological explanation makes all knowledge knowledge of the past—the object is always an event which was and is no more—an event which has never been experienced and never can be experienced. Perception becomes memory, and a memory of something which was never perceived! This is the "time difficulty" of which an exaggerated and hypothetical form is the assertion that we still see distant stars which might have ceased to exist during the time the rays which started from them took in coming to us, and that from a distant star even now Adam and Eve can be seen walking in the garden of Eden[1]—that all perception is perception of something which is no more.

The absurdities to which it leads are enough condemnation of the physiological explanation. Logic and theory of knowledge cannot allow science to prescribe to them. The business of science is to study physical phenomena and their relations. When it undertakes to explain perception and knowledge it oversteps its boundaries and is no more science. Speculative scientists like Mach and Whitehead seem to realize the absurdity of the physiological explanation and are abandoning it[2].

[1] Cf. Dawes Hicks in *Symposium of the Time Difficulty* (*A.* 1911–12).

[2] Spengler says in his *Untergang des Abendlandes* that in modern times the place of priests has been taken up by scholars, as that of aristocracy by factory

The absurdities of representationism and of the physiological explanation lead directly to subjective idealism. We do not know, says the subjective idealist, nor can know that the cause of our sensa is matter—we cannot posit matter. All we know is that sensa are modes of our mind. Thus he gets rid of one of the two substances originally involved in the explanation of knowledge. But his view of sensa remains the same, because the category by means of which he grasps reality remains the same, viz. substance-mode. The mind is substance, and sensa are its modes. The other substance too he has not totally given up. It remains and only becomes unknowable. It is only religious motives that make Berkeley characterize it as God, and no logical ones. Because substance-mode is the category according to which mind and sensa are grasped, therefore it is that the ideality of sensa is a self-evident truth for Berkeley. Again, it is because of this that subjectivists find it inconceivable to separate act and object in perception. Another form of the same theory is to declare perception to be a whole of which subject and object are two aspects, and consequently inconceivable apart from each other. But it will be found that in reality the subject is conceived as the whole and the object as a part of it, and the inconceivability of their separation is at bottom the inconceivability of the separation of mode from substance. Now once this metaphysics of substance is seriously challenged, all these so formidable-looking arguments against realism fall to the ground. But secure in its metaphysics, subjective idealism seeks other considerations that might go to support its contention. Looking at the lower senses, it discovers that their sensa are not distinguishable from feeling. Organic sensations of hunger and thirst, tastes, smells, it contends, are feelings of pain and pleasure; and it is clear that pain and

proprietors. It would perhaps be more correct to substitute scientists for scholars and to say that ours is the age of science as the former was the age of religion and theology. Anything that is said in the name of science is accepted, howsoever absurd it apparently be, as all that was said in the name of religion was accepted in the former age. And philosophy seems to take the same rôle in relation to the pronouncements of scientists nowadays as it used to take in relation to the pronouncements of priests formerly.

pleasure are modes of mind. These sensa are therefore modes of mind. But other sensa are also sensa; they too must be modes of mind and therefore incapable of existing without it. But evidently the argument makes all sensa feelings of pleasure and pain. But the presentations of the higher senses, whatever else they may be, are not feelings of pleasure and pain. Nor are the presentations of lower senses *mere* pain or pleasure. Hunger is not mere pain, sweetness is not mere pleasure. Mixed with feeling tone there are *qualities* which we clearly apprehend, objects which are distinct from the feeling tone. In hunger, besides pain we apprehend a sensum, the muscular tension; and in taste, besides pleasure the sensum sweet. If the circumstance that two elements are mixed can justify their identification and entitles us to hold that all sensa are feelings of pleasure and pain and therefore mind-dependent, we can equally well maintain that feelings of pleasure and pain are sensa and like (veridical) sensa independent of mind. And neo-realists actually go the length of saying this. Another favourable consideration subjectivism finds when it looks to higher sensa. It finds that they are very like images; that images are their copies, and that there must be community of nature between the original and the copy. But images are admittedly mental. Therefore sensa too must be mental. They are ideas in our minds. The difference of sensa and images is only a difference of degree—the former are more vivid than the latter. But one may ask: is this difference a difference of degree? Can the one pass into the other? The verdict of common consciousness is against it. Indeed the difference is as great as that between real and imaginary; it is a difference of kind and not of degree. Both sensa and images are modes of being *sui generis*; one never passes into the other, as Bergson urges. Moreover, the argument which was believed to lead to the ideality of sensa, viz. that there must be community of nature between the original and the copy, cuts both ways. On this ground, we cannot only conclude that sensa are mental entities, we can also conclude that images are physical entities. And Alexander draws this conclusion. The argument is as favourable to his realism

as to subjectivism. But the argument is a doubtful argument. Representation does not require community of nature in this sense. Universals represent the particulars, and particulars represent the universals; yet the mode of being of the one is subsistence, and that of the other existence. Representationism holds sensa to be representatives of things; yet the mode of the first it holds to be mental, and that of the latter physical. Subjective idealism itself holds sensa to be mental and yet representatives of their causes which are real, whatever else their nature, knowable or unknowable.

In the explanation of knowledge agnosticism takes the next step. Sensa are not, it urges, effects only of the unknown external cause. The nature of the subject evidently contributes to its own mode. Sensa are therefore combined effects of two causes—the unknowable substance called object, and the unknowable substance called subject. Every immediate object is the result of their combined causation, and cannot therefore exist without the subject. Knowledge cannot go beyond this. It is relative—relative to our faculties. Now this is despair of all knowledge—the knowledge of reality. Perception is evidently regarded as a case of causality, and object as mode of a substance. It is not conceived as the unique fact it is. The objections of agnosticism to realism are therefore only metaphysically motived and have no basis in clear facts. Agnosticism is indeed subjective idealism made consistent.

Objective idealism is an attempt to find room for objects in idealism. Yet it impugns the validity of realism, because it is subjective idealism objectified. It intends to make objects independent of finite mind and yet to keep them dependent on mind. In order to do this, it takes an element or character of objects and shows it to be mind-dependent. But to give the objects independent existence, it postulates an infinite mind on whom the objects depend. Fechner and Ward take their stand on the qualities of objects, *i.e.* on presentations as such—on terms; Green on the relations of objects or presentations; and Royce on both, or the knowability in general of objects.

But it should be marked that the object is essentially con-

ceived as the mode of mind. That is why in order to make it independent of finite mind, the infinite mind is postulated. However, there is an inherent ambiguity in this conception. For, the object is the mode of the infinite, its presentation; therefore inconceivable without it. But when we come to the finite mind the object is *no more* conceived as the mode of the infinite mind;—it is a thing, which can be the common object of many minds. If it were the mode of a mind, it could not be the object of other minds. It is mode in one reference, and suddenly changes itself into a substance in the other reference. All the same, it is fundamentally conceived as a mode. That is why the hypothesis of an infinite mind had to be made. The category of thought is still substance-mode, and knowledge a case of causality. The objections which these species of objective idealism urge against realism are identical with those urged by subjective idealism—only objective idealism feels more secure in its position as it believes itself to have come into line with common consciousness by allowing independent existence to objects.

The idealisms of Ward, Green and Royce may be called epistemological idealism, because they start from the relation of subject and object in knowledge. The truth that lies at the basis of these doctrines is only the fact of the knowability of the object—of its qualities or relations or of both; and knowability necessarily involves relation to a knower. It undeniably and conclusively demonstrates that the object is related to the subject. Realism has nothing to say against this. Knowability of the real is indeed the very postulate of all knowledge. It may rightly be said to indicate a fundamental unity between object and subject, the world and the mind. But what is the nature of this unity, it does not indicate. What knowability clearly indicates is only the *possibility* of the relation of knowledge between object and subject; it does not indicate that this relation *actually* and necessarily exists. It indicates that there *is* a relation between object and subject which makes the relation of knowledge possible; but it does not indicate that it is the relation of dependence of object on subject. And without these conclusions, idealism can

neither build its hypothesis—make object a mode of the infinite mind—nor contradict realism. There is another form of epistemological idealism which builds its case on the thinkability of things: because every conceivable thing must be a possible object of thought, therefore it is essentially related to thought and cannot exist without it. The considerations urged with reference to the knowability of the object apply, *mutatis mutandis*, to this form of idealism also.

That species of idealism which is called absolutism and attributed to Bradley and Bosanquet is more metaphysical than epistemological. Its contention is that the universe or the absolute is a thoroughgoing unity; it alone has reality; the parts constituting it have no being whatsoever for themselves; they are real only inside the whole and by virtue of it. It bases this contention on the doctrine of the intrinsicality of relations, viz. that relations are intrinsic to the terms they relate, that terms have no being outside the relation; and holds that the absolute is a whole of intrinsically related terms. But because relation as such is inconceivable without a subject, as Green, believing himself to be following Kant contended, therefore the absolute is subject. Thus absolutism connects itself with, and has its last basis in epistemology, which is the characteristic of all post-Kantian or neo-Hegelian metaphysics.

But if all relations are intrinsic to their terms, and perception or knowledge is a relation, it is clear that the object cannot be outside the relation of knowledge what it is inside it. What it would then be, we cannot say. We cannot even say that it would at all be. In this way absolutism contradicts realism. Now the view of the object and of knowledge which absolutism is evidently taking is that knowledge is constitutive of the object. A kind of causality is ascribed to knowledge. Knowledge is a case of causality, though in a different sense from that of agnosticism. The rôle of Dinge-an-sich is played now not by terms, but relations. Indeed the Dinge-an-sich are still there. They are now the subject and object as outside the relation. The object inside the relation is a combined effect of them; and because a combined effect,

it is attributed to their relation. We are not quit of the categories with which agnosticism worked. This becomes clearer when absolutism goes further and ascribes to the subject the rôle of the whole. Not only is the subject an aspect of the relation of knowledge, it is also the whole of reality. All reality is in it. The subject is thus the substance of which objects are modes.

Not only is absolutism a refined form of the metaphysics of substance-mode; its objection to realism is essentially the same as that of other idealisms. Nor are the presuppositions of its objections quite unquestionable. Every relation, it holds, is constitutive of its terms, and perception or knowledge is a relation. Now evidently, perception or knowledge is conceived as a physical relation. For it is relations of objects that are constitutive of their terms. But that perception or knowledge is not. Perception or knowledge is precisely the relation which is *not* constitutive of its object. Is thought constitutive of the objects of thought, viz. the universals? Sense and thought both are forms of knowledge, and neither is constitutive of its object. Knowledge cannot be understood on the analogy of physical relations. It is a fact *sui generis*. Moreover, it appears that relation as such is a physical category, and knowledge is no relation. Relation presupposes two terms, which are prior to the relation and make it possible. In all experience, the terms seem to exist before entering into relation and after going out of relation, howsoever modified they might be conceived thereby to become. But in knowledge, firstly, experience finds only one term, the object, and with it the fact of knowledge. The other term, if there be any, is never experienced. And secondly, if there be such a term, which only thought can apprehend, it is a term which neither exists before the relation nor after it. With the cessation of consciousness, of awareness, of knowledge, it ceases to be.

But when metaphysics abandons the physical categories, the categories of substance, mode, etc. and comes to recognize the category of subject and its self-transcendence in knowledge, there remains for it really no reason to quarrel with realism. This is the case with Hegel's idealism. Realism is

indeed the very foundation on which Hegel builds his system. Without realism, the dialectical method as descriptive of the movement of reality—the method which is the very essence of Hegel's philosophy, would be inconceivable. But it is now religious motives entering philosophy that confuse the issue. Hegel's gaze is always fixed upon religion. Religion is *the* truth. Philosophy is for him nothing but the grasping of that in the pure medium of conceptual thought which religion realizes in the impure medium of feeling and imagination. The Menschwerden Gottes in Christ which religion grasps only by feeling or faith, is the highest truth. Translated into the conceptual and hence universal language of philosophy, it means the identity of God and man. The transcendental ego of Kant and the creation theory connected with it, offered a lever on which the whole universe could be raised and put within man—man identified with God. Hegel built upon this foundation.

This identification is the main source of the difficulties one feels in understanding Hegel. At first one gets the impression that God is at the beginning of all things, and is ruling the whole process of the world and history according to His will; that Hegel is preaching theism or a spiritual pantheism. But when one comes to the end, one finds that God has now come to be—He was not at the beginning, He comes to exist only at the end; that Hegel has not been preaching theism, but a Godless evolutionism. The reason of this constant Hin und Her is to be found in the religious motive at work. Now it is the difference of God and man that Hegel relies upon, and now the identity of God and man.

The effects of this motive are traceable in the whole development of Hegelianism. For the identification of God and man admits of the emphasis being put on one term of the relation or on the other. When it is put on the second term, we have the metaphysics of pure immanence—God disappears in man, and man becomes the absolute reality. Croce and McTaggart represent this metaphysics. When the emphasis falls on the first term, all reality, all substantiality passes over to God, and man becomes a mode that has only an adjectival being.

This is the metaphysics of Bradley and Bosanquet. In the theory of knowledge the religious motive shows itself in the Schwankung (fluctuation) of Hegelians between subjectivism and realism. If man is the ultimate reality, then the object must depend upon him—and we have subjectivism. But if God is the ultimate reality, then the object depends upon Him, and not on man—we have realism. This is why Hegelians cannot clearly cut themselves loose from Berkeley, and yet believe themselves to be realists.

We have now followed realism from the positive as well as from the negative side. The common consciousness of man affirms it with an unambiguity hardly surpassed by any of its other convictions. And it is a self-consistent position;—it offers the solution of the only real difficulty that can reasonably be raised against it, viz. the relativity of sensa. All other difficulties are *ab extra*—they have no footing in fact and experience and are purely metaphysically motived. We may now pass to the concrete development of realism and follow the course it has taken in history as exhibited by the thought of its chief representatives in European philosophy.

CHAPTER I

REALISM—ITS ORIGIN

That what we see with our eyes and touch with our hands is real and exists independently of us in space and time, is an instinctive belief of man. Its formulation and its vindication are a work of reflective thought. This is realism. The origin of realism therefore lies in the unconscious convictions of man. And its development consists in making it a conscious and logically grounded self-consistent theory.

But from instinct to thought, from an unconscious belief to a well-worked-out theory, there is a long and weary way. The validity of the instinct must be questioned. Then it will assert itself and struggle to become conscious and well-grounded thought. Conscious realism is the ideal which hovers before it; the struggle consists in realizing this ideal. Until this ideal is realized, the process consists in unsuccessful attempts at realizing it. These attempts are the beginnings of realism. But because they are unsuccessful, they incite to successful attempts. They also are therefore in part, but in part only, the origin of realism. Themselves they are only realistic.

The questioning of the validity of the realistic instinct consists in denying the directness of perception and the independent reality of objects—the two main theses of realism. The epistemological doctrine of representationism denies the former; the metaphysical doctrine of subjective idealism denies the latter. Both have a feature in common, namely, the subjectivity of sensa, the immediate objects of sense. Thus, in this inclusive sense, both may be termed subjectivism. It is therefore subjectivism which attacks the realistic instinct and awakens it to assert itself and to transform itself into thought.

But subjectivism is not the natural attitude of man. It needs a long development of human thought before it can in either of its forms appear. The conditions of its appearance were fulfilled only at the beginnings of modern philosophy.

Ancient philosophy remained in the attitude of instinct as to the reality and perception of the external world. It is innocent of subjectivism and is unconsciously realistic. It never questions the reality of objects and the objectivity of perception. Its gaze is directed outward. In objects and not in subjects it finds the true type of reality. Even when idealism makes its appearance as in Plato, it is a realism of Ideas—it puts Ideas outside the subject as particular self-existent entities rather than as objects within the subject. No doubt it makes the distinction of appearance and reality, and in this distinction subjectivism may be said to be latent. But the ancient mind is so objective that it conceives appearance also as objective. And what is true of Greek thought, is true also of Indian thought. Maya is not subjective illusion. It is illusion, but it is out there. It is *real*, though not *ultimately* real. It is like Plato's Phenomenon, and Kant's Erscheinung as interpreted by Vaihinger and Norman Smith.

Ancient thought never denies the independent existence of objects; it never becomes subjective idealism. Nor does it deny the directness of perception and the objectivity of sensa and become representationism. The scepticism of the sophists and the mechanical materialism of Democritus are only apparent exceptions. They hold, like the Eleatics and like Plato, that the percepts are not *ultimate* reality; but they do not deny that they are *real* and out there in the objects. The sophists made sensa private and temporary, but not subjective. They are *relative* to us, but they are objective[1]. Thus they maintain the relativity of perception and in fact of all knowledge, but not the subjectivity of sensa[2].

Philosophy passed from Athens to Baghdad and Cordova.

[1] Among modern thinkers, only Russell and Broad hold a similar position. Sensa are, according to them, physical effects of physical causes. They are private and temporary, but not subjective. Here the similarity ends. The sophist puts the sensum *in* the object and the objective public space. Russell and Broad do not put it in the object and in the public space, but assume a private space for it. Thus the ancient is more objectivistic even in his relativism, and the modern more subjectivistic even in his objectivism.

[2] Cf. Windelband's *History of Philosophy*, English Translation, pp. 92, 110–13; also Case, following Brandis, agrees; see his *Physical Realism*, chap. II, pp. 19–20.

In Greece the conditions were not given which make realism a really possible problem. The opposition of subject and object, soul and body, mind and matter, must be realized in its depths and in its immensity before the problem could be raised. For the Greek mind, the world was all of a piece. It was primarily object. The soul was a state of body, its idea, its form. The value and destiny of the individual was not its problem. Its moral consciousness was not strong. It was hardly differentiated from aesthetic consciousness. It was a mind in childlike harmony with life and the world. The seriousness of life had not dawned upon it and broken the harmony of its world. Sense and intellect—the theoretical reason and not the practical reason, not the reason of the categorical imperative—were its distinctive character. Beauty and truth were its ideals. It was not yearning for righteousness and holiness. Virtue is, for it, excellence or beauty; and when it is made a problem by itself, it is identified with knowledge. It is the Semitic mind that gets above the world of sense and intellect. It does not find satisfaction in the pleasures and pursuits of this life. It yearns for the world beyond. It grasps the seriousness and responsibility of this life; and freedom, immortality and a personal God become for it questions of life and death. All this must be realized, before the soul can be grasped as a self-existent reality which may exist after the death of the body and realize its transcendental destiny. The realization of this was given to Arabic thought by Islam. On the other hand the Arabic mind, by nature empirical and observant and with its gaze directed to the objective world, was strengthened in the sense of the reality thereof by Greek thought which it had made its own. Now the conditions are given for realizing and formulating the immense opposition of mind and matter, and for raising the problem of the knowledge of the external world. Avicenna (Ibn-i-Sina, 980–1037), *the* leading thinker of the East, is a dualist. Mind is defined as a substance whose essence is reason or self-consciousness, and matter as a substance filling space. Alhazen (al-Hasan, died 1038), a scientific philosopher who first propounded a modern

theory of optics, gives the physiological explanation of perception[1].

From the Arabs philosophy passes to modern Europe. When we come to Descartes, the conditions of the problem of realism realize themselves again. The religious life and thought of the Middle Ages had developed the consciousness of self as a self-subsistent entity other than and opposed to body. The growth of mechanical physics had deepened the sense of the opposition between matter and mind (see Windelband's *History of Philosophy*). Descartes gathers and formulates the results of these developments. Mind is consciousness—thinking, willing, imagining, etc.; it is non-spatial. Matter is extension, spatial; it is unconscious. Mind and matter are thus negations of each other. How can they be related? How can mind know matter? All I am certain of is, myself and my ideas. I do not perceive matter. The existence of matter is doubtful. The thought of Descartes gives the law to subsequent philosophy. It is essentially subjectivistic. It impugns the validity of the realistic instinct.

The struggle of the realistic instinct against its negation begins therefore first with the doubt of Descartes and is a phenomenon of modern times. It fills a tract of three centuries. But it is not quite continuous. It breaks up into two clearly distinct eras, the old and the new. The old lasts from the beginning of the 17th to the third quarter of the 19th century; the new starts from the fourth quarter of the 19th century and is still in progress. The first era is marked by the struggle against subjective idealism in Descartes and Berkeley and is chiefly interested in maintaining the independent *existence* of the external world[2]. It does not seriously concern itself with the other moment of realism, viz. the directness of perception, and consequently does not affirm the secondary qualities of objects. In spite of the claims of Reid it remains stuck in representationism. Thus it does not overcome

[1] See for Avicenna and Alhazen, *e.g.* De Boer's *History of Philosophy in Islam*, chap. IV, §§ 4, 5. English Translation (1903).

[2] It affirms only primary qualities; for the affirmation of primary qualities is involved in the affirmation of existence. Without them the world will not be external or physical at all.

subjectivism in the wider sense. It is a claim to realism but not its fulfilment. It is realistic but not realism; and in spite of its self-containedness and long history, we have in it only the beginnings of realism. Descartes, Locke, Reid and Hamilton are its chief representatives.

The new era, on the other hand, is mainly interested in the directness of perception and, in contrast with the old one, in the *nature* of objects. It is primarily opposed to representationism and only secondarily to subjective idealism. Not that it neglects the other moment of realism or fails to affirm the independent existence of objects. But it feels that the conviction of the existence of objects is too firmly rooted in human consciousness to be seriously endangered by subjectivism. Its chief emphasis is therefore on the directness of perception. This is so much the case that even those modern thinkers whose position is practically a reproduction of old realism, concentrate the whole weight of their arguments on the directness of perception. Thus it sets itself against representationism and after some unsuccessful attempts, comes to realism. The unsuccessful attempts are complementary to each other. One of their series brings out one moment of realism, viz. the directness of perception; the other, though contending for directness of perception, succeeds only in bringing out the other moment of realism, viz. the independence of objects. The former is represented by Schuppe, Mach and Avenarius; the latter by Meinong, Stout and the American "Critical-realists." Schuppe, etc., emphasize the presentative character of perception, but fail to overcome subjective idealism in a wider sense. That is, though they refuse to make the objects dependent on the subject, they do not make them independent. Meinong, etc., though they deny representationism, do not overcome it; while they may be said to have overcome subjective idealism. Meinong, "Critical-realists" and Stout, are, one may say, respectively the modern editions of Kant, Locke and Reid. Thus both these series are realistic, but do not come to realism. The series of writers who may rightly be called realists are those who combine both the chief moments of realism.

However, the two eras are not quite discontinuous. They deal with the same problem, and their speculations are parts of the same general history. Moreover, they cover periods bordering upon each other. If the old had solved the problem, the new would not have come into existence. And the new lays the emphasis exactly upon the point which the old had missed. The two therefore admit of being logically grasped as a continuous whole. The old starts with a world broken up into two parts—the domain of reals, and the domain of appearances or sensa. It only sought the way from the latter to the former. It could not bridge the gap. The fundamental category of its thought is that of substance and mode. It is necessarily representationistic. Perception is indirect. Reid intuitively felt its insufficiency, but could do nothing to remedy it, because his thought stuck in the same category. The new era rises above it; the category of its thought is subject. Subject can go out of itself and grasp reality. Knowledge is essentially self-transcendence. Perception is direct. Again, in the light of this fundamental distinction, the three series of unsuccessful attempts may be regarded as logically continuous. The first (Descartes, Locke, Reid) asserts only the existence of objects; the second (Schuppe, Mach, Avenarius) emphasizes only the directness of perception; the third (Meinong, Stout, "Critical-realists") aims at being a synthesis of both these moments, only the aim falls short of attainment. The attempt however succeeds in bringing out the paramount necessity of combining both the moments; it repeats more clearly and at a higher level the need which Reid had felt. The successful attempts dealt with in Chap. III are the fulfilment of this need.

Thus the origin of both eras is to be sought in the realistic instinct and its being challenged by subjectivism. The old era starts, as mentioned above, with the doubt of Descartes as to the existence of the external world. It is nourished by the subjective idealism of Leibniz and Berkeley, and receives a strong impetus from the scepticism of Hume.

The new era does not start immediately after the first and as a continuation to it, but some time later, viz. in the fourth quarter of the last century, and is not directly actuated by the

thought of the old era, but by the universal victory of the enemy, by the almost universal acceptance of subjectivism in philosophical and scientific circles. In 1879 Fechner describes the state of affairs as to the doctrine that the immediate objects of sense are only modifications of our mind, in these words: "This is the opinion of all the thinking men about me. In whatever else they may disagree, on this point the philosophers and the scientists, the materialists and the idealists, the Darwinians and the anti-Darwinians, the orthodox and the rationalists, are unanimous. It is not one stone in the fabric of the contemporary world-view, it is its foundation stone[1]." Amongst philosophers, Hegel is out of court, and Kant is understood phenomenalistically. Schopenhauer promulgates the subjectivity of the external world, and Lotze subscribes to the phenomenalism of Kant. The empiricism and subjectivism of Mill and Spencer are widely accepted. German thought is, in general, subjectivistic; so is English thought; and the one reinforces the other. In England, realism had for the time ended in the peculiar subjectivism of Hamilton. Empiricism is ruled by the doctrines of Mill and Spencer. Idealism, though inspired by Hegel, would fain take its start from Kant and accepts Lotze as guide. It is professedly objective idealism, but it never clearly and unambiguously breaks with the subjectivism of Berkeley. It is understood as subjectivistic.

Among scientists on the other hand, the representationism of Descartes and Locke finds acceptance. Helmholtz and others champion it. It is in harmony with the presuppositions of classical physics, though it puts reality behind the scenes and makes the immediate object illusory, is metaphysical and in conflict with the positivistic realistic spirit of science.

Thus in the fourth quarter of the last century the reaction against subjectivism starts, as well from the philosophical as from the scientific side. It is more intense and more sustained in comparison as the victory of the enemy was more complete and more far-reaching than in the first era; and probably for this very same reason, at last it reaches its goal in the beginning of the 20th century.

[1] *Die Tagesansicht gegenüber der Nachtansicht*, Eingang.

CHAPTER II

REALISM—ITS BEGINNINGS

The beginnings of realism are those attempts at a realistic theory which fall short of satisfying both the fundamental demands of the realistic instinct. They only succeed in maintaining *either* the independence of objects *or* the directness of perception. They fail because the two moments cannot be separated. If an object is independent but not directly perceived, we cannot say whether it is at all a physical thing; nor if it is directly perceived and is not an independent existent, can we say that it is a physical reality.

Such beginnings we meet in both eras of realism. The rationalism of Descartes and the empiricism of Locke stop short at the independence of objects. The common-sense school of Reid and Hamilton, however, also asserts the directness of perception. But the object which is declared to be directly perceived is not the external object. The perception of the latter therefore remains indirect and thought sticks, as in Descartes and Locke, in representationism and in asserting only the bare existence of objects.

Similar is the case in the new era. This utters a strong protest against representationism, and is in intention throughout presentationistic. Knowledge is self-transcendence. The series of its positivistic writers—Schuppe, Mach, Avenarius—starts the fight and lays the whole emphasis on the directness of perception. But it fails to make the objects independent. The metaphysically-minded thinkers of this era—Meinong, Stout, the "Critical-realists"—emphasize the independence of objects. And, in the spirit of this era, they also strongly assert the directness of perception. But perception is not really direct if what is directly presented is not the external object.

Thus the whole of the old era and a part of the new era offer an extensive view of realistic attempts which can be regarded as the beginnings of realism. We may now proceed to consider them more in detail.

§ I

DESCARTES, LOCKE, REID AND HAMILTON

Descartes, Locke and Reid are representationists. The immediate object of sense is a modification of the mind. It is caused by and represents the external reality. Descartes and Locke do not go beyond affirming one thesis of realism, viz. the independent existence of the object. The perception of it remains mediate—it is a causal inference from the sensum.

Reid goes further. He affirms also the second thesis of realism and tries to make perception immediate. But it remains mediate;—the immediate object, viz. the sensum, is conceived as a modification of mind. Hamilton continues the struggle: the immediate object is not a modification of mind, it is physical—it is a state of my organism. The external object, however, remains outside the reach of direct apprehension, and perception remains mediate.

Because old realism is essentially representationistic, again and again it ends in subjective idealism. This is its history in rationalism—from Descartes to Leibniz, in empiricism—from Locke to Berkeley and Hume, and in the school of common sense—from Reid to Hamilton and Mansel. This connects itself with the fact that in the second era the first series of attempts at realism start with getting rid of representationism.

(*a*) DESCARTES

Descartes (1596–1650) started with doubt—the doubt of the validity of the realistic instinct. However, he did not regard doubt as the final word in philosophy. It was therefore he himself who sought a way out to affirm the existence of the external world and the possibility of the knowledge of it. Thus it is he who opens the first era of realism. He does not only open it, he also gives the fundamental concepts as well as their consequences to all the thinkers of this era. It is his categories, his explanations and his results which they, even though they seem to differ in their method, repeat in different forms. Substance, attribute, mode, are Descartes' metaphysical categories. His results are realistic. He affirms

the independent existence of matter as a spatial reality. But this reality is not directly perceived; it is only causally inferred. Sensa are modes of mind caused by this reality. Physiological explanation of sensation is the only true explanation. Descartes is thus a representationist; and these are features common to all the realists of this era.

All that is real, is, according to Descartes, either substance, or attribute of substance, or mode of its attribute (cf. *e.g. Meditations*, III; *Principles*, I, § 48)[1]. This explains why Descartes thinks of space as attribute, and of a void as impossible (cf. *Principles*, II, § 14). But the epistemological consequences of these categories are still more important. Substance, attribute, mode, are essentially *physical* concepts, adequate to describe only physical reality. Substance is a sort of atom, attribute the static permanent qualities that inhere in it, and mode the modifications of these qualities or the motions of the atom. This makes self-transcendence inconceivable. The atom is a self-contained entity; its modes and qualities are *in* it; it cannot go *out* of itself. Perception, if it is an activity of the substance, cannot go out of it. A sensum can only be a mode of the substance and therefore is in it. Self-transcendence in knowledge thus becomes impossible, and there cannot be direct perception which consists in the apprehending substance transcending itself. Representationism is therefore a necessary consequence of these metaphysical categories. This explains why to all the pre-Kantian philosophers it is a self-evident position that sensa are modes of the apprehending substance, viz. of mind; and also why when they are realists, they are representationists.

But the concrete determination of the real—its characterization, its definition, is a result of Descartes' method. His method is rationalism. Not only is reason capable of grasping reality (cf. *Method*, p. 1; *Meditations*, pp. 117, 167, 169): that it can do this is the postulate of all thought, and is in fact

[1] The references to the *Discourse on Method* (1637), *Meditations* (1641), *Principles* (1644) and *Reply to Second Objections* are to the English translation of Veitch, 14th ed. 1907, and to the *Passions of the Soul* (1645–6) to the English translation of Descartes' Philosophical Works in two volumes by Haldane and Ross (1911).

his criterion of truth (cf. *Meditations*, p. 116, also pp. 34, 118, 145, 269), though he tries to guarantee it by a circular argument through the veracity of God; but also reason alone is capable of doing this. Hence he ascribes to sense no theoretical value (cf. *Method*, p. 38; *Meditations*, II, p. 111). This would by itself make the sensum subjective. But his rationalism goes further. It becomes a method of elimination. Not only what reason apprehends as necessary, is; but also what it does not apprehend as necessary, is not (cf. *Method*, IV, p. 33; *Meditations*, pp. 107, 157, 158; *Principles*, I, § 8)[1]. This makes substance for Descartes a thing of one attribute, and forces him to absolute dualism. For, "Whatever I can think away out of reality, does not belong to it." One feature after the other will thus have to be eliminated out of it, until we are left with the absolute minimum. This minimum in the case of mind is consciousness, or thought—mind is therefore a conscious or thinking substance. And in the case of matter, this minimum is spatiality or extension—matter is therefore a spatial substance (cf. *Principles*, I, § 62, p. 221). Thus two substances each with a single attribute arise, one non-spatial and conscious, the other spatial and unconscious[2]. All that can be further affirmed of mind must be modes of consciousness; and all that can be further affirmed of matter, must be modes of spatiality. The only way left to relate the two is a representationism—representationism of the sort in Leibniz' "pre-established harmony." But if somehow it could be assumed that they influence each other, then the only way conceivable is interaction. But interaction between mind and matter is inconceivable—there is no community of nature between the two, they are negations of each other. Descartes however, inconsistent though it be, posits interaction between mind and matter. But this interaction too must be of a physical nature. The substances are like atoms standing

[1] Norman Smith in his *Studies in Cartesian Philosophy* brings out this doctrine under the name of "the Doctrine of Essence," and traces it to Scholasticism.

[2] Descartes conceives the thinking substance to be active, and the spatial one to be essentially passive, inert. In this again he gives the law to philosophical thought. However, he as well as Locke and others, when explaining perception, take quite the contrary view; mind is passive and matter active.

against each other. They must be brought in *contact* with each other in order to act by *impact*. The effect produced by one substance upon the other would cause a *modification*. But it would be, like physical modification, *in* the other substance—*its* mode; if it is in the mind it must necessarily be mental. Thus we again reach representationism.

But the representationism of Descartes has still another and perhaps psychologically a more decisive source in his ideal of knowledge. It is the mathematico-mechanical sciences—the sciences of the spatial, in which he finds the ideal of knowledge realized (cf. *e.g. Method*, pp. 8, 19 ff.); and that is why he follows the geometrical method in philosophy (cf. *Reply to Second Objections*). His ideal of explanation is consequently explanation according to mechanical causation —causation by contact (cf. *Meditations*, VI, p. 165; *Principles*, IV, §§ 189–195 ff., also § 204). It is the only possible explanation of phenomena (cf. *Principles*, IV, §§ 200, 201, 206). This is further brought out in his search for an organ in the brain which is not duplicated, viz. the pineal gland (see *Passions of the Soul*, I, §§ 31–35). Now physical science explained the sensum physiologically; it is a mental effect caused by movements of particles which have only primary qualities. At first Descartes sees that it is an unverifiable hypothesis (*Principles*, IX, § 204); but he immediately tries to ascribe absolute certainty to it (*ibid.*, § 206). Thus Descartes is landed in representationism. Again he gives the ideal as well as the consequences to subsequent thinkers.

Thus from all sides led to representationism, how does Descartes come to affirm the existence of matter? His doubt has led him to the position that "I and my states or ideas" are the only undeniable fact. All else, if it is to lay claim to truth, must be deduced from them. Hence he proceeds to examine the "ideas" he has in his mind (cf. *Meditations*, III, pp. 117 ff.; *Principles*, I, § 48, p. 213). As his principle of progress he announces: *Every idea, in as much as it is significant*, i.e. *purports to stand for reality, must have for its cause an actual reality which actually contains in itself at least as much as the idea*. This is representationism raised to meta-

physical dignity. Descartes proves the existence of God on this principle (cf. *Meditations*, III, pp. 125 ff.). The existence of matter too he really proves on it (cf. *Reply*, Axiom V; *Meditations*, VI, specially p. 158; also *Principles*, II, § 1). Thus the existence of matter is a *causal inference* from the concept of matter. This is Descartes' real argument. Its weakness is evident. It is a form of the ontological proof of the existence of God. But Descartes also offers a more empirical argument. It does not start from the concept of matter, but from the existence of sensa or percepts. The existence of matter is, urges Descartes, the only explanation of the faculty of imagination (of sensa and images) in me; for, I am a purely rational being, and it cannot be a development of my own nature (*Meditations*, VI, pp. 151–3). This is again the causal argument, the argument of representationism, put rationalistically. But, at times, Descartes relapses into the standpoint of the ordinary man, and speaks of direct perception of matter (cf. *Meditations*, pp. 150–1; *Principles*, I, §§ 198, 200; II, § 1). Now, the causal inference is not in a position to yield the existence of *matter*. If it yields anything, it yields only the existence of an x, which is the cause of my sensa. At best, this x is other than myself. But the what of this x cannot be determined. It is a Ding-an-sich. It may be matter, it may be God (Berkeley), it may be my own self (Fichte), or it may be only my confused faculty of thought (Leibniz). Indeed, causal inference is incapable of leading to transcendent reality. We know no transcendent causation. All we know about causation is that one phenomenon conditions another phenomenon—one sensum another sensum. It is a principle of explanation only within the bounds of possible experience. That the cause of sensa is the transcendent reality matter, is only "probable" in the *Discourse on Method*. It becomes almost "certain" in the *Meditations*—the dictate of instinct ("strong inclination"); and only in the *Principles* does it become a metaphysical certainty, a clear and distinct "apprehension," *i.e.* a dictate of reason. But that it is not. What explains this increasing confidence seems to be the fact that Descartes is receding more and more from that initial doubt

in which he fully realized the precariousness of such arguments and doubted the existence of the world; has entered the path of dogmatic construction and is drawn more and more by his ideal of knowledge. He would fain believe that the subject-matter of mathematico-mechanical sciences must be real.

It is this ideal of knowledge, this view of reason and this method which are his grounds for denying objectivity to secondary qualities. Their unreality is a foregone conclusion, and the only argument Descartes advances is that "we are wholly unable to form any conception of them" as qualities of matter (*Principles*, I, § 68). They are inconceivable because they are not deducible from spatiality, which is the one attribute of matter—is its essence. But their inconceivability as qualities inhering in matter is made further evident by putting sensa on the same footing with feelings of pleasure and pain (*ibid.* § 67). Here again Descartes gives the law to all representationists and subjectivists. But sensa are evidently not feelings—the red surface I see before me, whatever else it may be, is not pain or pleasure. Descartes tries from another side to show that secondary qualities as characters of bodies are unintelligible and therefore unreal. They are so obscure and confused that one cannot determine whether they are being or non-being. For example, I cannot determine from the cold and heat themselves whether cold is privation of heat, or heat privation of cold (*Meditations*, IV, p. 124). Evidently what Descartes has in mind here is not heat or cold itself. In themselves, heat and cold are each a positive and self-sufficient character. What Descartes has in mind are the motions of particles which according to physical science cause them in us. From the experience of heat itself we cannot say whether it indicates an increase or decrease—being or non-being, in the motions of particles. But the question whether heat is accompanied by an increase in the motion of particles or by a decrease, has nothing to do with the reality of heat itself. It is there and has being; and so has cold. Thus it is plain that the unreality and subjectivity of secondary qualities, *i.e.* representationism, are not a consequence of this argument; but on the contrary the argument is a consequence of

representationism—of the view that cold and heat are mental effects of physical particles[1].

Thus Descartes' whole thought is governed by representationism. He inconsistently affirmed interaction between mind and matter and brought in the physiological explanation. Occasionalism is only a systematic repetition of Descartes' inconsistency. Spinoza makes Descartes consistent, puts mind and matter for ever apart, denies all interaction and carries representationism to its highest pitch. Sensa are not effects of bodies, they are pure modifications of mind; but somehow ideas represent bodies. The external world can now well be struck off altogether without any loss. Leibniz takes this step. He makes interaction impossible. Substance (monad) is force, activity; it cannot be passive and receive anything from outside. It has no windows. All it has is its own, its own development, the unfolding of its own nature. Percepts and thoughts are all my own acts, my own modifications. They are not effects of a spatial substance in me. A spatial substance is an impossibility. It is not self-existent, because it is essentially divisible and must be composed of parts *ad infinitum*. All substance is spirit, and spirit is self-active and self-creative. Its proper mode of being is conceptual thinking. Percepts are only confused concepts, mere appearance and nothing real[2]. Thus representationism passes into subjective idealism in the rationalistic school. Not only is there no direct perception, but also there is nothing to perceive.

(*b*) LOCKE

Locke (1632–1704) inherits from Descartes his metaphysical categories, his pluralism and dualism, his ideal of knowledge, his principle of explanation, and his consequent

[1] That all we see may be a dream, with which Descartes' doubt starts, is in fact a possibility only after representationism has been accepted. And it rather goes against the objectivity of matter than is a proof of the subjectivity of sensa. That senses err, Descartes does not use as an argument for the subjectivity of sensa, but only as one in favour of reason. The relativity of sensa, the empirical argument against this objectivity, Descartes never employs, though there is an indication of it in his later works (see *Principles*, I, § 71).

[2] The element of value in Leibniz' position is the conception that knowledge is activity and not passivity.

representationism and realism of primary qualities. However, his method is not rationalism—and he enters a strong protest against Descartes' rationalism in the First Book of his *Essay concerning Human Understanding* (1690). Locke's professed method is empiricism, but his thought is in serious conflict with the rationalism involved in his presuppositions.

Substance, quality and mode are his fundamental concepts. Because the ultimately real is conceived as self-sufficient, self-existent substances, therefore relations which can be attributed to them are, for Locke, "extrinsic denominations," and creations of ours. This is also the reason why he sticks to the reality of substance in spite of the fact that substance is a concept unintelligible and in contradiction with his empiricism, a simple "I-know-not-what" as bearer of qualities. It is again for the same reason that he makes space and time modes of the substance, God (*op. cit.* II, 15, § 3). Further it is why he finds no difficulty in making life and consciousness qualities of the body (*ibid.* 27, §§ 4–6), because substance is essentially a physical concept. And because substance, quality and mode are his metaphysical categories, representationism is a self-evident position for him. Like Descartes, "I and my ideas" is the first certainty, and ideas the only presentations. The "I" is the substance, and the "ideas" are its modes or states. It is true, as Gibson and Alexander respectively urge, that Locke never says that they are modes of mind or states of consciousness[1]. Indeed in his controversy with Malebranche Locke denies that ideas are modes of mind. Moreover, mind has its own modes and there is a separate class of ideas, which are ideas of the modes of mind. But the question is, if ideas are not modes or states of mind, what else can they be on Locke's metaphysics[2]?

Being an empiricist, Locke is not led by his metaphysical categories to a Spinozistic monism. He rather follows the lead of Descartes and is a pluralist. Again, Descartes' thought

[1] Gibson in his *Locke's Theory of Knowledge* (1917); and Alexander in his *Locke* (1908).

[2] Note that the sense in which Locke uses the term mode is not identical with the sense in which it is held above that ideas are for him modes of mind (cf. *Essay*, II, 12, §§ 4, 5).

would characterize his pluralism with dualism of mind and matter—of the conscious non-spatial substance and the unconscious spatial substance. The ideas must be modes of the former. There can be no self-transcendence as direct perception assumes, and Locke can only be a representationist. Hence also the four defects of Locke's position which Alexander finds, viz. individualism, atomism, severance of idea and thing, and two kinds of reality.

But the fundamental disparateness of the nature of the two kinds of reality does not stand in the way of their interaction for Locke as it did for Descartes. Locke is an empiricist. He can neglect the how of interaction, and can take it as a fact of experience. Moreover, mechanical science, his ideal of knowledge, like Descartes', is on his side. However, his unconscious rationalism dogs his footsteps. At times he tries to explain the how of perception as the occasionalists do (cf. *ibid.* IV, 3, § 28). Notwithstanding this, his explanation is the physiological explanation (see *ibid.* II, 8, §§ 11–12). And again there is no other conclusion but that sensa are modes of mind—in other words, representationism.

Thus "I and my ideas" are a closed circle. There is no way out of it. How then does Locke affirm the existence of the transcendent reality of matter? At times Locke is inclined to say that we directly perceive it (cf. *ibid.* IV, 2, § 14). As an empiricist this should have been his position. But this would be throwing all the presuppositions of his thought overboard. Locke therefore holds that ideas are signs of things, and from ideas we *infer* things (*ibid.* IV, 11, § 2). The inference is based on the absolute necessity and universality of causality. In other words, matter exists because it is the cause of our sensa. This is, in substance, the argument of Descartes. But Locke is still less entitled to it than Descartes. Locke is an empiricist. Where is the guarantee for the universality and necessity of causality in experience? And if there were such a guarantee, how can causality be applied beyond experience? Does experience give an instance of an "idea" caused by a transcendent reality? If not, how can we say that ideas are caused by transcendent realities? More-

over causality is a relation, and relations are extrinsic to things. They cannot bind them.

Again, why does Locke hold that the nature of the cause of our sensa is summed up in the primary qualities—solidity, extendedness, figure, motion and rest, divisibility and number? As an empiricist he should have been an agnostic, as he is sometimes inclined to be (cf. *ibid.* IV, 3, § 6). But like Descartes, he tells us that things have primary qualities because they cannot be conceived without these qualities. This, however, is untenable, unless things mean physical things, which is a *petitio principii*. The cause of our sensa may very well be a spirit, just as we ourselves are the cause of our images. Moreover, conceivability and inconceivability form the criterion of rationalism and not of empiricism. Further, motion and rest are qualities actually separable from things. The real reason for affirming the primary and denying the secondary qualities to things is that Locke has started with this assumption. It is the assumption of physical science.

Hence it is that there are in things primary qualities resembling our sensa (ideas), but no secondary qualities; the secondary qualities in things are only powers to excite in us the sensa having secondary qualities.

However, Locke also uses the argument from the relativity of sensa to prove the subjectivity of secondary qualities. But as Berkeley showed, the argument is equally applicable to primary qualities. Both are subjective. Sensa represent no qualities of a transcendent reality which causes them. Neither the primary nor the secondary belong to it. Indeed it cannot be spatial substance or matter at all. Matter is inert, according to Descartes as well as Locke. How can it cause anything? Least of all can it cause mental effects. There is no matter. The cause of these effects can only be a spirit, whose nature is to be active. Such a spirit is God. He is the cause of our sensa and of their order. In this way representationism passes by an inner necessity into subjective idealism, also in the empirical school. Berkeley stopped at the denial of the object as a self-existent substance, and retained the subject. Hume drew the consequences of

representationism and empiricism unflinchingly. He denied substantiality also to the soul. We know only impressions, ideas, feelings, etc.; but we do not find any self-identical substance called soul. Soul or mind is only a bundle of impressions and ideas without any bond to unite them. Hume went further. He not only banished substance, he also denied the objectivity of relations—of the connecting links on which the inferences of representationism were based. We do not apprehend any necessity binding one event to another. Causality has no objective validity; and all inferences based upon it are precarious. Thus the combination of representationism with empiricism led to a picture of the world, still consisting of "ideas," but without any stability or connection.

(*c*) REID AND HAMILTON

Reid (1710–1796). Hume's conclusions caused a great commotion in philosophy. Kant on one side, and Reid on the other started the inquiry into the causes of this catastrophe in order to put philosophy on a secure foundation. Kant's finding is that the cause consists in uncompromising empiricism, though he also rejected the representationism of Descartes. Reid found the cause primarily in representationism —in what he calls the "ideal system," though he also asserted the rights of reason as against empiricism. To overthrow representationism and to set "common sense" in philosophy in place of self-constructed first principles like "I and my ideas," was the task he proposed to himself (see *Inquiry*, 1764, Introduction). But he does not fully rise to the occasion. By the dictates of common sense he really meant the dictates of reason, the fundamental convictions of man, on which all science and philosophy necessarily rest, and which are in principle the same as Kant's synthetic judgments *a priori*. But the stress he laid was rather on their universality than on their necessity; and he easily came to speak of common sense as equivalent to the practical good sense of the ordinary man. One of those dictates is that there is an external world and that we perceive it directly. There is no "idea"

intervening between subject and object in perception. Such ideas are only a fiction of philosophers, and have no basis whatever in fact (*Works*, I, p. 226)[1]. Thus Reid would seem to combine both the chief moments of true realism, the directness of perception and the independence of objects. And so it was that Hamilton in his *Lectures* regarded Reid, and glorified him, and criticized Brown for misinterpreting him.

But Hamilton had soon to modify his views and to agree with Brown in regarding Reid as a "hypothetical realist," or a realist of the type of Descartes and Locke. Reid is a representationist (see *ibid.* vol. II, Hamilton's Dissertations). And this of necessity. The categories of his thought are the same as those of Descartes and Locke: he is a dualist: the physical sciences as constructed by Newton hover before his mind's eye, and he accepts their principle of explanation. The sensum is to be explained physiologically; it is a mode of mind caused by things. Things exist and have only primary qualities, and are instinctively inferred from sensa.

The account of perception Reid gives may be stated thus. The objects send out influences which, as physiological explanation tells us, affect my organism. Those effects in my organism excite affections in my soul. These affections of the soul are sensations. They are feelings. Though the distinction of act and object is present in these feelings, the object is inseparable from the act (*ibid.* p. 183). With the production of sensa there arises the "conception" of primary qualities, and with it also an instinctive belief in the existence of objects. Sensa are "signs" of the objects. They "suggest" objects. With them the belief in the existence of the objects is "conjured up" in me as if by magic (*ibid.* pp. 122, 188, 318). The process from sensation to perception, *i.e.* from sensum to the existence of the object, is not ratiocinative; it is not inference; "it is the immediate effect of my constitution" (*ibid.* p. 183); and consequently perception is direct.

Now it is evident that the sensum which is directly before the mind, is no part of the object. This is why a transition from it to the object is postulated. The object is other than

[1] The references are to Hamilton's edition of Reid's *Works* in two volumes.

the sensum. The sensum is in the mind, an affection of it; the object is out there. A leap of the mind from sensum to object is therefore necessary. This leap is taken instinctively and the existence of the object affirmed. But all the same, the object remains behind the scene. It is not *before* the mind. The mind does not stand face to face with the object. There is the wall of sensa between them. The perception is not *direct* but mediated by the mental reality, the sensum. This is representationism.

The case for directness of perception consists for Reid, not in the directness of *perception*, but in the directness of the *transition* from sensum to object. This is not mediated by argumentation. It is not inference. It is immediate. Similar is the contention of Stout. Now whether the psychological process involved in the transition from sensum to object be mediated by a third term or not, the point is that *logically* it is mediated by the principle of causation. The logical justification of the transition lies in this, that because the sensum is regarded as a mental effect of a physical object, therefore from it we can pass to its cause. The existence of the object is a causal inference. It is an inference for philosophy; it may not have remained a conscious inference for one to whom it has become customary and instinctive (cf. also *ibid.* p. 186, Hamilton's note). How far this inference is valid, has already been considered.

Thus perception on Reid's account of it is not direct. Reid's claim remains unsubstantiated. He is a representationist in spite of himself. He has not overcome the "ideal system." How is it that Reid believes himself to have overcome it? The reason seems to be this[1]. Reid understood by

[1] Why Reid believes that he has gone beyond representationism can more effectively be explained in this manner. His predecessor Locke held sensations to be representations of bodies. Reid is led to deny this by Berkeley. Hence he believes that he has overcome representationism, and that in the directness of the transition to the "conceptions" of objects he has made perception direct.

The steps his mind takes are the following:

"That sensations (= sensa) are modifications of mind," he accepts unreservedly from his predecessors (see *e.g. ibid.* pp. 108, 159, etc.);

"That being mental, sensations cannot resemble physical objects," he takes from Berkeley (see *e.g. ibid.* pp. 121, 140, 313);

"Hence the knowledge we have of physical objects is an inspiration at the occasion of sensations"—we have "notions" or "conceptions" of bodies, as

"idea" or image, a representation of a sensum (cf. *ibid.* pp. 208–9, also Hamilton's note). And this he did not find between the subject and the object. But Descartes and Locke did not mean image by "idea." For them idea includes sensum as well as image, presentation as well as representation. And thus Reid's sensations are as much ideas according to them as his images. Both are representations. They did not hold that images intervene between subject and object in perception. They held exactly what Reid holds, viz. that sensa intervene. And this was their representationism or "ideal system"; and this is also the system of Reid[1].

Stewart succeeded Reid; but he did not carry the argument further. Brown comes next and finds that Reid is in reality a "hypothetical realist" like Descartes, and subscribes to his creed (McCosh, *Scottish Philosophy*, 1875, p. 432). Only Hamilton makes a further attempt to get out of representationism and somehow to make perception direct. The direction he takes, says McCosh, is anticipated in Adam Smith's paper "On the External Senses" (*ibid.* pp. 171–2).

Hamilton (1788–1856) lays down that perception, in order to be direct, must have its object *present* to it (Reid's *Works*, p. 879). This, he seems to conceive, is possible only if the mind is in direct *contact* with the object. But the mind is in direct contact only with the body or with a thing which is in direct contact with the body. Consequently direct perception can only be of the body or of an object touching the body—of the latter only as cause of an affection in the body (*ibid.* pp. 876, 879). Now, this cuts off the external object altogether as a direct object of perception. It is known by causal inference, howsoever unmediated the inference may be. And there is no conclusive ground to regard it as a physical object. The external objects are known, according to Hamilton, as the causes of the states of my body, in direct contact with it or in

Berkeley had "notions" of spirits—thus this new step too is inspired by Berkeley's example (see *e.g. ibid.* pp. 207, 210).

[1] Representationism however seems to have led Reid to the position that the existence of the external world is a hypothesis; and that the hypothesis is true because it is verifiable (see Moore's *Philosophical Studies*, pp. 55–60).

contact mediated through media. The sensations they produce are states of my body. The perception of the objects is mediated through these states. This is representationism again, in which however the representations are somehow made physical. Only it is not clear, why, if the mind can go out of itself and directly apprehend the body, and as it were spread itself over it, it cannot go out of the body and apprehend the objects directly. But, in spite of this self-transcendence which Hamilton would ascribe to mind in relation to the body, Hamilton's thought is too deeply involved in the metaphysical categories of this era to get over representationism. His ultimate categories are the physical concepts, substance and quality. That is why he seeks to put the mind in immediate proximity to its immediate object.

The account of perception that seems to come out of his teaching is a modification of Reid's account. He conceives sensation on the analogy of feeling and keeps it subjective, like Reid (*Lectures*, XXIV). But he takes the primary qualities out of the sensum and unites them with the object. This object is the organism. All that has happened is that the organism has taken the place of Reid's object. The sensum remains in the mind and separated from the organism. Now the sky perceived cannot be said to be a state or mode of my organism. Its secondary quality, colour, is subjective (Reid's *Works*, pp. 810, 854, 857–8). And its primary qualities, its form and expanse too cannot be those of my organism. All that can be said is that these are the qualities of the organism enlarged and distorted (cf. *ibid.* p. 881, § 27). In the organism there is only the end of some infinitely small optical nerve that corresponds to them. It is this which may be said to be the nucleus of objectivity in the sensum. All else is the work of mind and in it. But this nucleus too is not objective on Hamilton's theory. For he is a relativist. But relativism is not an extraneous growth. It is a product of representationism itself. It is representationism made consistent. The two substances in interaction which representationism presupposed, it also presupposes. Representationism was inconsistent when it affirmed that the cause of the sensum is

matter. Relativism consistently holds that it is unknown and unknowable. It is also right in its contention, that the effect is a product of the two causes together. It is not in the object. The small nucleus of objectivity which the theory of perception had left in my sensum, is thus deprived of its objectivity by relativity. Thus the whole of the sensum becomes subjective, and a mode of mind. It is neither itself object nor represents the object. The object is absolutely unknowable. Thus in the Scottish school too representationism passes over to subjective idealism—subjective idealism of a type usually attributed to Kant.

Mansel follows Hamilton and understands him to hold the whole of the sensum—its primary as well as its secondary qualities—to be states of the organism (see his *Metaphysics*, pp. 108–15); Case works out this thesis apart from its involution with the relativity of knowledge, in his *Physical Realism* (1888)[1].

Thus the thought of this era is from beginning to end representationistic. It is governed by the causal notion of perception. There is a substance, mind, on one side, and another substance, matter, on the other. The latter causes an effect in the former. This is the sensum; and because it is an effect, it necessarily leads to the conclusion that its cause exists. Apprehension of an object is therefore an inference. Reid intuitively feels that there is no inference involved in perception, and raises a strong protest against this view. But his metaphysical position is the same as that of those whom he attacks. Sensum is for him, as for them, an effect in the mind produced by matter; it is a modification of the soul. And this modification is the immediate datum. From it the transition to the object can only be by means of causal inference. His assertions as to the immediacy of perception can consequently have no meaning but that the inference is instinctive or has become instantaneous by habit. For logic, it remains an inference. This inference is not capable of yielding the existence of *matter*. It is supposed to be so

[1] See Appendix: Case.

capable, because to start with, the existence of matter has been assumed. And this assumption again is the reason that primary qualities are attributed to this cause. Strictly speaking, representationism has no right to affirm the objectivity of any qualities, primary or secondary. Consistently it must be subjective idealism, and we saw that in all the three lines of thought—rationalism, empiricism and common sense, it ends in subjective idealism.

Thus the old era could bring out only one moment of realism, viz. the independent existence of objects. It did not bring out the other moment, viz. the directness of perception. Reid's claim as to the latter remained only a claim. We may now pass to the new era. It starts exactly with bringing out this moment. This difference harmonizes with the difference between the two ages. The former was the age of Descartes, governed by the category of substance. Mind finds itself confined in the circle of its ideas and seeks a way out to transcendent reality. The age believes in intellect. The latter is the age of Kant. The category of its thought is subject. Mind is not confined to its own modes. Its nature is to transcend itself. The object may well be out of it, the mind can see it face to face. It will have nothing to do with transcendent reality. Its object must be before it. The age believes in perception.

§ II

SCHUPPE, MACH, AVENARIUS

One moment of modern realism, viz. that perception is direct apprehension of the external world, finds its expression in Schuppe, Mach and Avenarius. As the direct corollaries of this view they maintain the objectivity of secondary qualities and discard the causal notion of perception. But the second moment of modern realism, viz. the independent existence of the object, does not attain to its full expression in them. They go indeed beyond subjectivism and maintain that the object is not dependent on the subject, and is *common*; but they fail to make it *independent.*

They are all positivists, opposed to metaphysics and transcendent reality. Only that is real which is immediately given. Thus both mind and matter as substances fall away. Schuppe retains the "formal" subject; Mach and Avenarius reject it, and retain only the "material" subject. According to Schuppe, the subject is the component element of all Sein; according to Mach and Avenarius, it is necessarily co-present with all reality. It has, however, no *activity* of knowing. Such an activity is no fact, and necessarily leads to subjectivism;—it places the object in the subject, which is the doctrine of introjection and projection, and the source of all subjectivism and idealism.

(*a*) WILHELM SCHUPPE

Schuppe[1] sets himself against the various forms of subjectivism—idealistic and representationistic. That what we directly sense, is real, is out there in space and time, has colour, tone, etc., and that it is identically the same for all percipients, is the most elementary truth (*G.* p. 35), and the clearest dictate of consciousness (*ibid.* pp. 31–2; *B. e.g.* pp.138, 141, 142, 143). "It is purely arbitrary to refuse to appearance (sensum) the corporeality of things and to conceive it as a mere idea which is mental and non-spatial and the exact opposite of the sensible and the spatial" (*B.* p. 144). It is the real thing itself and is the common object of many minds (*ibid.* p. 146).

How is it then that we fall into the error of subjectivism—of idealism and representationism? We conceive thought and thing, consciousness and object to be two substances placed over against each other in distinct portions of space and independent of each other. The conscious substance has an activity called knowledge or awareness. It exerts this activity in order to know. As long as this activity is directed to phenomena like images, feelings, etc., which are believed to be

[1] In his "Open Letter to Avenarius corroborating naïve realism," Schuppe calls attention to his book, the *Erkenntnistheoretische Logik*, in which he had propounded the doctrine as early as 1878. He quotes amply from it in the Open Letter, and repeats its argument in his *Grundriss der Erkenntnistheorie und Logik.*

inside the soul, no difficulty is felt. But when the object is outside the soul, is an external reality, knowledge of it becomes a difficult problem. How can the knowing activity go out of the soul and approach the object? In no way. The object has therefore somehow to be placed inside the soul; it has to be made an idea (see *G.* §§ 12–16 ff.); and then to be projected out (*ibid.* § 21).

There is no way out of subjectivism as long as thought and being are separated and thought or awareness is regarded as an activity. There is no thought or consciousness without being or object, and there is no being or object without thought or consciousness (*G.* p. 23; *B.* p. 157). The notion of knowledge as activity has to be discarded. Subject and object are two abstract moments which constitute being or Sein. Hence there is no mystery in knowledge. Being in its very essence is known being. It cannot be otherwise.

This would seem, on the face of it, subjective idealism (cf. *G.* §§ 22 and 28). But Schuppe contends that his doctrine does not make the object a modification of the subject (cf. however, *ibid.* § 28). The object is out there where it is seen to be. It is one element of Sein whose other element is the subject. Further, the objects are common, are numerically the same for many (*ibid.* pp. 30–1). In this case one element, viz. the object, is the same, and the other element, viz. the subject, too is the same. For, what is involved in the constitution of this object is not my concrete subject and your concrete subject, but the subject or "Bewusstsein überhaupt," which is identical in us all. The object is, moreover, independent. It is independent of this or that concrete subject. It is independent even of all subject, inasmuch as the conditions of its becoming an object lie in the necessary laws of nature, and are not subject to anybody's sweet will (*B.* pp. 158 ff.; *G.* p. 30). It is permanent and "unvernichtbar," because spatiality is one of its constituent factors and the principle of its individuality, and space is "unvernichtbar" (*G.* pp. 85, 90).

Now, that objects or things are permanent and independent existences, is an assertion that has no realistic meaning.

The permanence turns out to be nothing other than the similarity in quality and extension of recurring presentations (cf. *G.* pp. 112–3); and as space too, like quality, is an empirical and consequently an ephemeral character, its introduction does not help to make objects permanent (cf. *G.* p. 83). Independence is an element of permanence. Moreover, the independence which Schuppe affirms is not the independence of things as we know them, but of their *transcendent* conditions. He is thus falling into the metaphysics of Ding-an-sich which it is his main object to banish out of philosophy; and in admitting the existence of such conditions, unperceived conditions, he is giving up his notion of Sein which is necessarily a complex of object and subject. When we speak of such transcendent conditions of the objects of concrete experience, what we really have in mind is, as Meinong points out, the system of nature itself (cf. *E. u. W.* p. 87)—though Meinong himself is exposed to the same criticism. Indeed Schuppe would readily admit that the object as experienced does not exist when not experienced (cf. *B.* p. 161). But he would insist that the object is numerically the same for many observers.

Can the object be the same for many observers on his theory? Sein, or say, thing, *e.g.* a table, has two moments, objecthood and subjecthood. Let us admit that one moment, viz. objecthood, remains self-identical. The table is being perceived by the several observers one immediately after the other, or simultaneously. In the first case, one essential moment, viz. the subject, is changing. How can the table remain the same? In the second case, one subject was enough to constitute the table. But this moment is multiplied now—there are many subjects. If they are superfluous—then subject is an *essential* moment which can be superfluous—we have a case in which a subject is aware of an object *without constituting it.* If each is still essential, then each has a *different* object made of the identical object-element and his own subject. Thus in no case does the table remain the same for different observers. Indeed it looks strange that an *essential* moment should vary and yet the complex, the thing, should remain the same.

Schuppe's reply to this criticism would be that the subject-hood that is constitutive of the thing does not change. It is *identically* the same in various observers. It is "Bewusstsein überhaupt" which is self-same in us all. It is no concrete subject; it is an abstract element which is identical in all concrete subjects (cf. *e.g. G.* § 26). But the identity which Schuppe is thus asserting is *qualitative* identity and not *numerical* identity, *conceptual* identity and not *existential* identity. The various subjects are, no doubt, conceptually identical; but existentially they are different entities. The factor which is conceptually the same in them all, is not existentially the same. But it is as an existent entity and not as a conceptual one that it is a component moment of the thing; and as such it is different in each individual. Consequently the thing into whose composition it enters as an essential factor, is necessarily different for different individuals. It is not common and numerically the same for many. That Schuppe regards it to be numerically the same, is evidently due to the confusion of conceptual and existential identity. If subject is a component factor of Sein, there is no way out of subjective idealism. The objects are not only not permanent and independent, they are not even common.

In making consciousness a component factor or moment of Sein and denying all activity of knowledge to it, Schuppe does not overcome the initial assumptions of subjectivism, as he believes himself to have done. Subjectivism could not, as Schuppe says, get out of the circle of the subject, when once the subject is conceived as a material being occupying a portion of space and apart from objects. But the mistake of subjectivism was not so much the material conception of the subject, as Schuppe asserts, as the material conception of the activity of knowledge. It conceived this as a motion of the particles of the subject, which cannot naturally go out of it. It did not recognize the unique nature of this activity, which is essentially self-transcendent. And Schuppe repeats this mistake. In order to make knowledge possible, he brings the subject into the very being of the object as a constituent factor of it, because he could not conceive the knowledge-

activity of the subject to be self-transcendent. Both he and subjectivism regard, so to speak, only action by contact as possible, to the exclusion of action at a distance. Nor does Schuppe get rid of the physical notion of the subject. If subjectivism conceived it as spatial and put space in it, Schuppe makes it an element of the spatial and spreads it over space. For subjectivism the subject was like a house in which all the objects of the external world are accommodated; for Schuppe it is like colour with which all things are painted. In fact, subjectivism has an advantage which Schuppe has not. On his theory the self-identity of the subject is not intelligible. It is a moment of Sein, an abstract element of each object. The identity of this element in many things or experiences, is only *conceptual*; it is not existential identity.

(*b*) ERNST MACH

Mach is a speculative scientist who would reform the fundamental concepts of science[1]. He has exercised a great influence in forming the views of contemporary men of science and in giving them an expressly positivistic stamp. With philosophers too his influence has been considerable, and through William James, who stood in close contact with him, both the new American doctrines of neo-realism and pragmatism can be traced to him (see Appendix: William James). Both these doctrines are early determined for him. As a boy of fifteen he reads Kant's *Prolegomena*, and no book ever made so deep an impression on him. In the doctrine of Kant that our world is the world of Erscheinungen (appearances), lies the germ of neo-realism; and in his position that nature is our construction and we put the fundamental laws and concepts into it, the seed of pragmatism. Two or three years later it suddenly dawned upon Mach that the Ding-an-sich is an unnecessary hypothesis and can be safely dropped. Thus the way was cleared for him to phenomenalism pure and simple—to positivism. "On a bright summer day in the open

[1] The nature of this task is essentially philosophical though Mach refuses to have a philosophy of his own.

air the world with my ego suddenly appeared to me as *one* coherent mass of sensations[1], only more strongly coherent in the ego." This moment was, Mach admits, decisive for his whole view of life (*A.S.* p. 30). He could now construct a picture of the world as "a viscous mass, at certain places (as in the ego) more firmly coherent than in others" (*ibid.* p. 17), all of one stuff and one structure. The solution of the problem of the relation of mind and body in which he was early interested under the influence of Fechner's *Psycho-Physics*, is thus found.

The physical sciences work with conceptions which make such a unity of the physical and the psychical, as Mach desires, impossible. From qualityless quantitative *atoms* and molecules no fact of *experience*, nothing that is presented to the ego, can be constructed. But who has seen atoms, or who can see them? They are mere concepts hypostatized. They are not real. Only the sensa are real—sensa that are directly experienced by us. Not atoms, rather sensa are the ultimate elements of reality. "Things" are complexes of sensa, and not of atoms.

On the other hand, the psychological inquiry speaks of an ego which is an absolute unity, has sensations, ideas, etc., and stands over against the physical world and can never come into direct contact with it. Such an ego would make all knowledge impossible (*ibid.* p. 28). But where does such an ego exist? Who has seen it? The ego which we know is a relative unity. It is a complex of sensa and of ideas which are essentially of the nature of sensa (*ibid.* p. 20); a unity which comes into being to-day and breaks up into its elements and ceases to exist to-morrow.

Thus atoms on one side, and ego on the other are eliminated. What remains is a mass of directly perceived sensa. Of them is the world made, the physical as well as the psychical. Sensa are the ultimate elements of reality. They *associate* themselves with each other, and in this way come into being certain complexes—the entities called "things" and "egoes." Both are complexes of sensa, and the only constructive power

[1] Mach uses the word "sensation," but he means sensum.

is association[1]. These complexes, these relative unities are not permanent; only their elements, viz. sensa, are permanent —permanent at least relatively though not absolutely. What is really permanent are the laws of the association of sensa[2] (*ibid.* p. 331).

So far Mach's theory is indistinguishable from neo-realism. Things are directly apprehended, they are independent of perception, are constituted of sensa and consequently have primary as well as secondary qualities. More, *all* sensa are real, there is no difference of appearance and reality (*ibid.* p. 10 and note); and each *sensum*, colour, sound, hard, soft, is by itself a self-subsistent reality. Ideas are of the same nature as sensa. Both are common to many percipients— they may pass from one *I*-complex bodily to another *I*-complex (*ibid.* p. 24). While the ego is nothing but a complex of these same elements like physical things.

In this account we have only the object, physical or psychical, but no subject. There are percepts, but no perceiv*ing*, nor percipient. When it is asked who is aware of these percepts or sensa, Mach gets impatient and says it is returning to the old metaphysical ways of thought (see *ibid.* pp. 25 f.), which he has exploded, and it is this way of thought that is responsible for subjectivism. The object is put over against an entity called ego, the physiological explanation of sensation brings in the notion of causal sequence to explain sensation and puts sensa into the ego as effects and representatives of the object. The causal explanation of sensation must be given up, and in its place the mathematical notion of "functional relation" should be substituted, which is a relation of simultaneity, of mutual dependence, and not of sequence (*ibid.* pp. 35, 89–91, 363, 369).

But between what does this relation exist? It cannot be between mind and object, because mind and object are not two—they are the same complex of sensa. These sensa when considered by themselves are physical objects, when con-

[1] Cf. Bernhard Hell's *Ernst Mach's Philosophie* (1907), p. 65, quoting Mach's *Warmenlehre*, p. 383.

[2] Cf. Hell, pp. 30, 45, quoting Mach's *Erkenntnis und Irrtum*, p. 270.

sidered in relation to our bodies they are psychical entities constituting mind (*ibid.* pp. 14–16). The relation of which Mach is speaking is the relation between the physical objects and my body. It is between these two that this functional relation of mutual dependence holds; and between them this relation is thoroughgoing. There is complete *parallelism* between sensa and states of my nervous system: no sensum without a nervous change, and no nervous change with a sensum (*ibid.* chap. IV). There are physiological phenomena with all physical phenomena (*Mk.* pp. 482–5), and physical phenomena with all physiological phenomena (*A.S.* pp. 9–10, 10–11 and note; 17 note; 50–51, 60, 62, 344). Thus the true problem for investigation is not the problem of the relation between mind and object, but that between physiological body and physical bodies. More concretely, for every difference in sensa, a difference is to be assumed and discovered in the nervous apparatus.

Thus body and its states take the place of the subject and its acts of perceiving. Yet they remain subject and perception. Otherwise the substitution of the functional in place of the causal relation to explain perception has no meaning. For, firstly, the causal relation cannot be denied between the objects and the body, and secondly, it does not give rise to subjectivism when maintained between them. Subjectivism arises only when it is applied to the relation of subject and object, when perception is conceived as a case of causality. And it is avoided when the functional relation is substituted between subject and object. The conception is therefore an element of value in the theory of Mach. It is an advance to a more correct view of perception.

But how does it affect Mach's realism? The thesis of subjectivism, viz. the dependence of sensa on mind, is overcome. But its place is taken, not by independence, but by interdependence, just as was the case with Schuppe. For Schuppe the interdependence was between object and subject; for Mach it is between object and body. But in reality for him too it is as shown above, between object and subject. However, because of his strict positivism, Mach has an advantage

over Schuppe. He does not give a theory of Sein of which subject and object are abstract moments. For him, the body (or subject) and object are two co-present entities—they are always together; not that they constitute a single being. There may therefore be more than one body co-present with the same sensum. Thus sensa can be common sensa and the world a public world. But his theory too, like Schuppe's, makes objects indirectly dependent on subject (body)—they cannot be without a subject (body). They are ephemeral existences and not independently existent realities.

That this parallelism is in direct contradiction with what Mach held as to the ultimate elements of reality, is evident. Body (mind) is itself a complex of sensa. They are the ultimate elements of reality. They must exist independently if they are to constitute body. Mach perhaps can reply that both groups of sensa, sensa constituting body and sensa constituting objects, come into existence simultaneously. However it be, this is clear, that he does not hold the existence of sensa independent of the mind or body. He is a fore-runner of modern realism, but not a modern realist[1].

(*c*) RICHARD AVENARIUS

In Avenarius positivism comes to its completion. There is far-reaching affinity between him and Mach (see *A.S.* chap. III); but Avenarius is very systematic and thoroughgoing. He is the greatest representative of positivism, because, as Oswald[2] says, he does not only work out its thesis to its ultimate consequences, but also traces the origin of the opposite error, viz. metaphysics, and lays its mistaken foundations bare.

It is introjection in which Avenarius finds the origin of

[1] Karl Pearson, who follows Mach, falls into the subjectivism which is involved in Mach's position more pronouncedly (see his *Grammar of Science*, 2nd ed. 1900, specially chaps. II–V).

J. B. Stallo, who like Mach is fighting against metaphysics in science though not quite positivistically, and brings out the relatedness of objects, also makes them relative to subjects (see his *Concepts of Modern Physics*, chap. IX, 2nd ed. 1885).

[2] See Oskar Oswald's *Richard Avenarius, als Begründer des Empirio-kritizismus* (1905).

subjectivism and all metaphysics. The metaphysician starts with contemplation of the experience of other men instead of his own. First he reduces their experiences to their acts, which they *have*—they being the Träger (substances) *in* whom the experiences inhere, thus making their world subjective. Then, from others, he passes over to himself, and by analogy puts his own experiences into himself. The steps of this process are the following:

1. Perceptions, etc., of another man (T) are conceived as *acts*, and are thereby put into him as subject or Träger.

2. The phenomena of dreams help to turn T, the subject, into a *Geist* (spirit) which has its perception and ideas in itself.

3. The world thus gets split up into two, external and internal.

4. The internal is held to perceive the external by means of sense-organs.

5. The external is conceived to *affect* the sense-organs, and the internal directly to apprehend only the effects thus produced.

6. M (the metaphysician, the observer) changes place with T (*M.W.* chaps. II and III)[1].

Had the metaphysician started with his own experience and stuck to plain facts of experience, he would not have got involved in subjectivism and idealism. He would then have held (1) that the objects are as we experience them—they are

[1] If we take subjectivism as a given fact and proceed *regressively*, ask, namely, how M came to regard his world as only his idea, the analysis given by Avenarius would be found to be essentially correct. For, M first somehow comes to the conclusion that T's world is only ideal, and then he concludes that his own too is ideal (6). That T's world is ideal he concludes by resolving it into effects of an external world on T's mind (5). It is by means of the physiological explanation of sensation that he reduces T's world into such effects (4). And this explanation he attempts because he first is a dualist and divides the world into spirits and bodies (3). His dualistic position he reaches with the help of dream experience (2), which had its basis in conceiving T as a subject in whom perception, etc., inhere (1).

It may be said that the distinction of subject and object is original in M and prior to his attributing it to T (see Norman Smith's article "Richard Avenarius' Philosophy of Pure Experience" in *Mind*, 1906). Avenarius himself admits this distinction in his own sense (see *M.W.* § 111). But in point of fact we may first become conscious of it in relation to others.

sensa, are as "vorgefunden," there in space and time (*M.W.* §§ 4, 6, 18);—the character of our world is "Vorgefundensein," and its contents are things and ideas which are in essence identical with things (*ibid.* § 19); (2) that they are *common* to us all (*ibid.* § 161); and that they are *independent* of the percipient (*ibid.* §§ 21, 26, 34 Bemerkung, 116 Bemerkung).

This is the "naive Weltbegriff," and it is not affected at all whether we adopt the "absolute Betrachtungsweise" or the "relative Betrachtungsweise" (*ibid.* § 22). Ordinarily we adopt the former and believe that the objects are there and we only find them as they are. We do not take into consideration that, for example, the condition of our eyes makes a difference to our sensum. The "relative Betrachtungsweise" takes this circumstance into consideration, and it is important and necessary to do so. The objects consequently are not there, only in themselves; they are für mich, they are *my objects*.

When we work out the relative Betrachtungsweise scientifically, the position becomes this: $R - C - E$—changes in reality or objects (R) condition changes in cerebrum or central organs (C), and the two together condition Erfahrungsaussage (E) (see *ibid.* § 26). R and $C + E$ ($C + E$ = being = M = man = Ich) are always found together. We cannot even conceive otherwise (*ibid.* Anmerkung, 58). This is called "Prinzipialkoordination" (*ibid.* § 148).

The position is worked out scientifically in the *Kritik der reinen Erfahrung*. It is an account of perception. There is Umgebung—the physical reality including organisms; it is termed R. Within R are set men whose cerebral system is called C. These men make statements which are the expression of their Erfahrung and are named E[1]. The changes in R set C in action. The changes in C condition E which follow them (*K.E.* § 957). These E are Erfahrung when they have the character of being vorgefunden, wahrgenommen as opposed to erfunden, erdichtet (*ibid.* § 938). The changes in

[1] It is worth noting that Avenarius himself starts from the experience of other men, a procedure of which he accused the metaphysician and which leads to the fallacy of introjection. It is therefore natural that he should miss the subject.

R and *C* are the *whole* conditions of *E*. Both kinds of changes stand in temporal succession (*ibid.* §§ 44, 45). *E* are completely "abhängig" on *C* (*ibid.* § 42). That to which *E* refers, *i.e.* which is the content of *E*, is evidently *R*.

This is evidently a physiological explanation of perception. But like Mach's it steers clear of subjectivism because it does not make the succeeding changes *effects* of the preceding changes. It takes *R*, *C*, *E*, as three empirical *facts* in the relation of "Abhängigkeit" as antecedent and consequent, which is not the relation of cause and effect, but only temporal succession.

In the light of this description the Prinzipialkoordination which looked when taken in the "relative Betrachtungsweise" like Mach's parallelism of body and objects, would take on a different signification. The inseparable togetherness would be not between body and objects, but between *E* and *R* —between Erfahrung and Erfahrungsgegenstand—in the language of Avenarius, between Gedanke and Sache, between thought and things, or between *M* (= *C* + *E*) and *R*, between Ich-Bezeichnete and Umgebung—which all, in reality, means (as brought out before in relation to Mach) the inseparable togetherness of subject and object. Avenarius expressly refers to Mach, Schuppe, Schopenhauer, etc., and identifies his position with theirs (see *M.W.* Anmerkung, 54).

But the sole constituents of his world are Vorgefundene and Vorgestellte, Sache and Gedanke, sensa and ideas. There is no room for the subject. When Schuppe in his *Open Letter to Avenarius* points out that both sensa and ideas are object, are contents (Inhalt), and that the subject, the form, is missing in his account (*ibid.* pp. 168 ff.), Avenarius does not seem at all to understand Schuppe (see *ibid.* pp. 174–7)—such is the hold positivism has on his mind. He does not answer the question who is the experiencer, the knower; but asserts that it also is an experienced (*ibid.* § 152, Bemerkung). Nor does he realize, in spite of Schuppe's reminder, that the doctrines of "Prinzipialkoordination" and "relative Betrachtungsweise" have fundamentally modified the "naive Weltbegriff."

Now whether the "Prinzipialkoordination" be between body and objects or between man (consisting of body and experiences) and objects, or between ideas and objects, or between subject and objects, it involves that one is not without the other, that the object does not exist independently of the other. The independence of the object, which is a part of the "naive Weltbegriff," as Avenarius himself recognized and asserted (see above), is sacrificed. The Koordination is not empiriokritisch as Avenarius claims it to be. That the two factors are always found together is an empirical fact; but it is not a critical assertion that they cannot be found apart. When Avenarius tries to make it a necessity of thought (see Anmerkung, 58), he is overstepping the limits of positivism. The argument amounts to saying that I cannot think an Umgebung without also thinking myself to be there, that when an object is thought there is a thinker. But the Umgebung or object may very well exist without being thought of by any one; and even when thought of, independently of the thinker. In particular, if the Koordination is between body and object, the position has been considered (see section on Mach). If it is between Gedanke and Sachè, thought and things, ideas and sensa, then it is even empirically false. There can be sensa without co-present ideas, as in the case of animals and infants; and there can be ideas without co-present sensa, as in dreams and very deep thought.

But the "relative Betrachtungsweise," or the scientifically worked out description of perception, does not end with the "Prinzipialkoordination" and with taking away the independence of objects. It is a positivistically modified form of the physiological explanation of perception. *Causation* of sensa as modifications or effects in soul has been denied and subjective idealism avoided. But the temporal *succession* of sensa to physical and physiological conditions is retained, and the percipient conceived as passive (*K.E.* § 945). This cuts us off from reality. For if $R - C - E$ is a succession of events, then E cannot be the experience of R. For R is over by the time E comes. E is therefore the experience of something other than R, of non-R. What I call R falls always out-

side *E*. How can I assume it? It is a Ding-an-sich and what I experience (was ich vorfinde) is not *R*, but perhaps my creation (was ich erdichte). So long as the relation of known and knowing is conceived as temporal succession, knowledge remains impossible; and it has to be conceived as temporal succession so long as the knower is conceived as passive. It would appear therefore that the relation is, if it is to be expressed in temporal terms, of *co-presence*, and the knower is not passive in knowing but *active*.

Thus if we are to take Avenarius' description of perception seriously, he is hardly distinguishable from a subjectivist. The description not only does away with the independence of the object, but even makes it difficult to assert a common object. For, if it is *my* object, as Avenarius says, and the changes in my cerebral system are part of its necessary conditions, how can it be the same when another *C* is substituted or brought together? Avenarius can perhaps reply that the conditions are not *causes* but only events preceding the sensum. Thus in this respect positivism seems, as remarked in the section on Mach, to have an advantage over theories like Schuppe's.

Thus Schuppe, Mach, Avenarius overcome representationism as old realism does not, and make *perception direct*. They overcome subjective idealism in as much as they refuse to make the object dependent on the subject. The object is thereby taken out of its privacy, and made public. But the subject and object are made interdependent. The object has not yet become *independent*. This residue of subjectivism remains attached to their theories. We pass now to schools of thought whose main contention is the independence of objects.

§ III

MEINONG, STOUT, "CRITICAL-REALISTS"

In Schuppe, Mach and Avenarius realism overcomes the causal conception of perception and attains to the direct apprehension of the object. The sensum is claimed to be real. But it does not attain to full objectivity. It is common, but it is not real—real independently of all mind. This residue of subjectivism remains attached to their theories. Subjectivism is not fully overcome.

In Meinong, Stout and the "Critical-realists" of America it is the moment of the independent reality of the object that comes to the fore. The object is independent of all mind. It is also claimed to be directly apprehended. In emphasizing this claim they differ from old realism. But ultimately it remains only a claim. The object is conceived as the cause of sensa and lying behind immediate experiences. It is grasped directly by thought or instinct, it is not sensed. Sensa are its effects in us. They are subjective, they are unreal. Thus the fundamental thesis of subjectivism is not overcome.

According to Meinong and Stout sensa are particular mental existences. According to the "Critical-realists" they are universals and hence neutral beings[1].

In Meinong the object or thing remains very closely akin to the Ding-an-sich, only some logical characters are attributed to it. Stout and the "Critical-realists" endow it also with primary qualities, though not with secondary qualities[2]. In every case the nature of the object, its characters and qualities, are inferential. Their apprehension is not direct. What is direct is only the apprehension of the *existence* of the object. For Meinong this apprehension is direct because quality implies substance; for Stout because effect implies

[1] This is the position of Santayana, who gives the impetus and its really new feature to "Critical-realism"; though all "Critical-realists" have not made it quite their own. The position is, however, traceable to the influence of the American Neo-realists.

[2] Edmund Husserl, another representative of the school of Brentano, goes beyond Meinong and others as to the nature of the transcendent reality; it has also secondary qualities. Yet, like Meinong, he remains a subjectivist as to the nature of the sensum (see Appendix: Husserl).

cause; for the "Critical-realists" because essence implies existence—for all it is a necessity of thought, though the "Critical-realists" call it instinct, and not a datum of sense.

(*a*) MEINONG

The realistic moment in the theories of Schuppe, Mach and Avenarius is overshadowed by their anti-metaphysicism, so much so that they are taken for subjectivists and sensationalists. In opposing subjectivism they minimize the part played by the subject. They deny it self-activity. They deny it self-hood. It is an element in sensa and ideas or a complex of them. The object, on the other hand, is again an element of sensa or a complex of sensa, which has no independent existence. It has no transcendent reality. The world of matter and mind seems to be dissolved into a series of ephemeral presentations. This is a position very closely akin to Hume's. In Hume we have the classical prototype of positivism; and on him call all positivists. Meinong stands in the midst of this development. He therefore takes his start from a critical study of Hume. His work is a development which may be divided into two parts, the second arising from the first.

In the first part, he is engaged in asserting the rights of the subject against the nominalism and atomic associationism of Hume. His contention is very much like Green's, viz. that a consciousness of the general and of relations is impossible without the activity of the subject[1]. Yet it is the subjective nature of thought that he is considering. The universals are products of this activity, they are ideal, *i.e.* mental. He is in the domain of psychology. The consideration of these as the objects of thought pushes him out of psychology into the domain of epistemology[2]. It is thus that the problem of "Gegenstand" breaks upon him.

The emphasis falls now on the side of the object. What is object as such, what are its kinds, how we come to know them,

[1] For a fuller account see his "Hume-Studien," I and II, in his *Abhandlungen*, vols. I and II. Further see Dawes Hicks on the "Philosophical Researches of Meinong" in *Mind*, January, 1922.

[2] See Russell's article on Meinong, *Mind*, April, 1904.

are problems which occupy Meinong in the second stage of his work, and give rise to a new science called "Gegenstandstheorie."

Not only thought but every cognitive activity, and not only cognitive, but all mental activity has an object. It is the distinctive characteristic of mind that every phase of it has two aspects, subjective and objective. It is an activity, and is directed to an object. It transcends itself, and as it were leaps over to the object, which is beyond it and independent of it. This is a universal fact of the life of consciousness. And it is as well an ultimate fact, which cannot be further explained and has therefore to be accepted as such. No why and how is possible in this connection[1].

Thus Meinong has taken up his position firmly against subjectivism and on the side of objectivism. Leaving feeling and volition aside we may follow him further in his account of cognition.

Cognition is either Vorstellen or Denken and Urteilen. In both cases the activity is directed to something beyond. Wenn wir vorstellen, stellen wir etwas vor, wenn wir denken, denken wir etwas. This Etwas is the object which we grasp through the mental activity, and which at the same time transcends this activity and is independent of it. In the case of Vorstellen it is called "Objekt," in the case of Denken "Objektiv."

But the object may as well be unreal as real. It is a prejudice to think of reals alone as objects. When the objects are real, if they are of Vorstellung, they have Sein (existence); if of thought, they have Bestehen (subsistence). But when they are unreal, what is to be said of them? Have they Sein, have they Bestehen? Or can we simply say that they *are not*? But they *are* in some sense. They have being. How else could they be objects of my mind? In the *Gegenstandstheorie* Meinong proposes the term "Aussersein" for this mode of being. Thus the Gegenstandstheorie is the extreme expression of objectivism. Even the false and the impossible seem to

[1] In making the reference to object the distinctive mark of all psychical phenomena Meinong is following Brentano in the *Psychologie vom empirischen Standpunkt.* See Russell's *Analysis of Mind,* pp. 14–15.

attain to a sort of objective existence[1]. Meinong seems to have discovered a new kind of being by the side of Sein and Bestehen, namely Aussersein. It sounds strange that we have as it were a sphere beyond the real, in which the unreal, *e.g.* the golden mountain and the square circle live, and that when we imagine such objects, our mind makes a leap out of the infinitude of Sein into the still vaster domain of Aussersein. Meinong himself feels this (cf. *An.* p. 242), and in his subsequent development substitutes "Annahmesein" for Aussersein. In other words, the objects to which Aussersein was ascribed in the Gegenstandstheorie assume their natural form in the *Über Annahmen* and become suppositional objects. That they are only our creation and have no kind of being except what we call imaginary being, Meinong seems to admit in his later book *Über die Erfahrungsgrundlagen unseres Wissens.* In it the kind of being attached to them becomes "Pseudo-Existenz" and they "Pseudo-Objekte."

With this change subjectivism again becomes possible. The objects of perception which are included in Vorstellen may simply be "Pseudo-Objekte," be imaginary and have no existence by themselves. This possibility cannot be denied. The evidence of their independent being is not of certainty. But the objectivism of Meinong's thought is against such a subjectivistic turn. It is yearning for the independent reality of the object. The general principle of his *Gegenstandstheorie* that every Vorstellung has an object independent of it, is no longer sufficient. The case of the external object and of its perception must be considered for itself. Meinong does this in his *Über die Erfahrungsgrundlagen unseres Wissens.*

But he retains the general principle as well as its implications. Indeed the problem of the external world arises for him out of them. The sensum is Vorstellung and must have an object beyond itself. The presupposition of this is that sensa are other than objects. They are effects in our mind caused by external agencies; they are mere Vorstellungen, mere

[1] Besides Meinong, Moore and Frege come to similar positions. Russell followed them (see *M.* 1904, p. 204, note 2) and the American "Neo-realists" followed his lead. Thus a new species of realism came into being (see below, section on Holt).

"ideas." These presuppositions Meinong never questions. The relation of sensa and objects is, for him, that of effect and cause (*E. u. W.* pp. 36, 65). His problem only is whether perception is a causal inference, and whether it is certain.

If it were a causal inference, it would be indirect but certain. But evidently it is neither. It is no inference, but a direct apprehension of the object; and the value of its evidence is not apodeictic certainty but overwhelming probability. Meinong recognizes these facts. Yet they are in conflict with his presupposition. The struggle of his thought consequently consists in maintaining on the one hand, that perception is direct apprehension of things; and on the other, that sensa are other than things—they are mental effects of physical objects; and yet the evidence of perception is not of certainty, but only of probability.

"Things" are, holds Meinong, substances of which appearances are "properties." We cannot perceive appearances without something of which they are appearances, nor properties without something of which they are properties: with appearances and properties, the thing and the substance are given (*ibid.* §§ 5 and 19). For the something is a substance in which properties inhere. It is not merely a complex of properties, as some have tried to make it. In fact a manifold of properties is not at all necessary to engender the consciousness of substance. One property is enough (*ibid.* pp. 26–7). We necessarily pass to it from property. It is transcendent; but so are all objects, and therefore there is no special mystery in grasping it, no more than that which lies at the root of all knowing (*ibid.* p. 109). That there are things or substances is of course based on the consciousness of their appearances or properties. But it is no inference. The existence of things is no syllogistic conclusion. It is directly given with the property. The evidence is immediate. We directly know that there are things. It is far-fetched and futile to make this knowledge an inference through causality. Firstly, perception carries on its face the mark of directness. I cannot convince myself that I syllogistically conclude the existence of the blue sky as the cause of my blue-sensations

every time I look at it (*ibid.* pp. 88–9); and secondly, the inference through causality does not with certainty lead to the definite object of perception—the chain of causes is so long from cerebrum to periphery, from periphery to media, from media to the object, from the object to its causes, and so on, that I do not know where to stop. But in perception I directly know my object (*ibid.* § 25).

Meinong does not deny that sensa are effects of things. That they are. His contention only is that perception is not causal inference. To make it direct, he conceives of the relation of sensa and things as that of property and substance, of appearance and essence, which intuitively and therefore directly involve each other. This would bring sensa and things nearer. The position would be quite realistic in the modern sense. But Meinong does not give up the presupposition of his thought. Sensa are *effects* of things, and not their *properties or appearances.* Things are other than sensa. They lie behind sensa. They are transcendent not only with regard to mind, but also with regard to sensa. They are Dinge-an-sich. They are substances which are causes of sensa. Consequently though the Sein (existence) of things is directly given in perception, their So-sein (nature, properties) is not so given. However, we can conclude it from the data of perception. Though we cannot say that things are red and blue, hard and soft, cold and warm, etc., nor that they are in space and time, impenetrable, solid, round or square, etc., that is, though we cannot affirm either secondary or primary qualities of them, because the relativity or conflict of sensa is, as Berkeley showed, a conclusive proof of the subjectivity of these qualities (*ibid.* §§ 8 and 24; *Abhandlungen*, vol. II, p. 516)—yet we can with certainty affirm certain other characters. Warmth and cold may not be in the thing. Yet they are effects of things, and are different. Their causes too must be different. But again, the relativity of sensa comes in the way, the cause of both the two sensations may be the same—the same lukewarm water of Locke's example. Consequently Meinong constructs a "Wahrnehmungsforum," a tribunal to make sure of the differences of sensa. Two sensa are really different only when

all the conditions are the same, *e.g.* when the same hand at thesame temperature feels one thing cold and another warm (*E. u. W.* § 22). We can then conclude with certainty that the causes of the sensa, viz. the things, too are different. Thus we are not sure only of the existence of things, we also know that they are like and unlike, identical and different. Difference involves number. Therefore the category of number too is applicable to things. This further involves the application of the concepts of simple and compound, and of relation. And as the assertion of difference carries with it the concept of necessity[1], therefore necessity too is applicable to noumena. Causality is a case of necessary relation. Hence there is nothing in the way of its applying to objects. Thus we know that the categories of identity, difference, number, simplicity, complexity, relation, necessity, causality, apply to noumena. We know so much of the noumenal nature, and by pushing the inquiry further we may ascertain more of it.

This account would seem to make not only the perception direct, but also its evidence apodeictic. If the thing is the substance, of which appearances or sensa are properties, then the evidence of its existence is that of absolute certainty. Similarly, if differences of sensa necessarily denote differences in their cause—the thing, its nature so far is known with certainty. That this is not so, is evidenced by the case of Descartes and others, and it must be evident to Meinong who is a subjectivist as to sensa. He cannot therefore ascribe the rôle of apodeictic certainty to perception when he comes to consider the question for itself. What is perception and what is the value of its evidence?

Meinong says "Ein auf eine Wahrnehmungsvorstellung gegrundetes, unmittelbar evidentes, affirmatives Existenzurteil über ein gegenwärtiges Ding" can only be perception (*ibid.* p. 36). That is, perception is (*a*) a judgment affirming existence, (*b*) of a present thing, (*c*) for which the evidence is immediate and not inferential, and (*d*) which is based on a

[1] According to Meinong, the judgment "Red is different from blue" is *a priori* and therefore necessary, because the fact that red and blue are different does not depend for its validity upon experience.

sensum. This definition applies only to external perception, because in the case of internal perception the place of the sensum is taken by the object itself (see *ibid.* note, and § 15). It of course avoids, as Meinong says, a direct mention of the causal relation of sensum and thing, but it has that relation transparently underlying it. It is in consequence of this fact that Meinong soon gives up (*b*), viz. the *presence* of the thing. The thing is the cause of the sensum and must necessarily *precede* its effect (*ibid.* pp. 65 ff.). With this is taken away the possibility of certainty. Certainty can be had only with the presence of the object, and that is possible, if at all, only in internal perception (*ibid.* §§ 13, 14). The evidence of external perception can only be that of "Vermutung," of expectation, of probability, though as a rule, of overwhelming probability (*ibid.* p. 92)[1].

The difficulty of the situation consists in this. The object is conceived as a noumenon, a transcendent Ding-an-sich, which can never be experienced. How can we assert its existence on the authority of perception? If perception were a causal inference, perhaps we could. But perception is not an inference. It is direct, yet it is patently liable to error. It is the direct apprehension of an absent object and its evidence is only of probability. This looks paradoxical. How can it be explained? Meinong finds in memory a similar phenomenon. Like perception, its evidence is only probable. Yet it is direct, is immediate, and not derivative. In all attempts to verify memory we find that at bottom we are verifying memory by means of memory. Again like perception its object is absent[2]. We cannot give up memory as a function of knowledge for the reason that its object is absent, that it is unverifiable and its evidence is only probable. Similarly we

[1] The transition from effect to cause is not probable but necessary. But Meinong does not consider this point. Moreover, according to him, perception does not consist in this transition; if it consisted in this, it would become an inference, which it is not (cf. above). But the transition through cause-effect need not be mediate; it may be as immediate as that through substance-attribute which Meinong accepts. This point is brought out by Stout.

[2] Later Russell in his *Problems of Philosophy* (1912) and Stout in the Symposium on "The Status of Sense-Data" (*A.* July, 1914), also Pratt in *Critical Realism* (1920, pp. 110–1), faced by a similar situation, make use of this example.

cannot refuse to admit that perception is the direct apprehension of an absent object and yet only probable and unverifiable. Thus Meinong's argument amounts to this: *Most probably* there is *an external world of noumena* with a noumenal nature, and *we apprehend it directly in perception.*

Now the conception that the relation of things and sensa is that of cause and effect and the consequent separation of sensa from things makes both the directness of perception and the probability of its evidence untenable. Meinong's arguments for the directness of perception are twofold, viz. that a Vorstellung directly involves the consciousness of its object, and that the awareness of an appearance or property directly involves the consciousness of the thing or substance. Both the arguments are really variations of the notion of cause-effect. The former presupposes it, because it assumes sensa to be Vorstellungen, and this could be done only after they have been conceived to be mental effects of physical causes. In the latter the relation employed, viz. substance-attribute, is no doubt different from cause-effect, but it is not conceived as different. The appearance or property is regarded as the effect of thing or substance. Hence Meinong's contention for the noumenal reality of substance. Moreover, if it were not so, *i.e.* if Meinong did not conceive substance-attribute and cause-effect to be identical, the two accounts of sensum, viz. that it is a property of things, and that it is an effect of things, would be irreconcilable; and as perception apprehends an object as a substance in which sensa inhere while science regards it as a cause which produces sensa, perception will have to be condemned as essentially false—its directness would entail its falsity. And when once it is seen that the relation of sensum and object is conceived as that of effect and cause, perception does not remain direct—it becomes an inference[1].

[1] That perception, for this reason, does not lose its directness, is contended by Stout (see next section). However, his contention does not amount to more than accepting the criticism that the *inference* to the existence of things by means of causality is impossible, and therefore attempting to make the apprehension of the transcendent cause an unmediated and direct act of thought. But the nerve of the criticism does not lie in denying the possibility of *inference*, but the possibility of *transition* to noumenal reality by means of causality.

Nor does it remain only probable, because the inference from effect to cause is certain. And the call upon memory as an example of direct apprehension of absent objects but of only probable validity is unnecessary[1].

This conception of the relation of sensum and object is, as hinted above, also an important ingredient of the fundamental principle of the *Gegenstandstheorie*—the principle that every Vorstellung has an object beyond it. Without it the principle will not hold. For, an important portion of Vorstellungen are sensa; these must be regarded as other than objects, if the principle is to hold. And they cannot be regarded as other than objects unless they are conceived as effects of objects in us. However, though an important ingredient, the conception is in thoroughgoing conflict with the principle. Firstly, it is now wrong to say that every Vorstellung has an object. Sensa are effects, they *have causes* and not *objects*. Secondly, if sensa are Vorstellungen, they are not independent of us and have merely imaginary being—they are, as Meinong admits, "Pseudo-Objekte." The remaining kinds of Vorstellung, viz. images and concepts, have sensa for their objects. Their objects are therefore "Pseudo-Objekte." And of the causes of sensa which are noumena we have no Vorstellung—neither image as is evident, nor concept, because concept means the idea of the nature of a thing and the nature of noumena is unknown. Thus the principle that every Vorstellung has an object existing independently of us, which promised a thoroughgoing objectivism, totally collapses. The objects of which we have a Vorstellung are Pseudo-Objekte and dependent upon us, and of the objects which are independent of us we have no Vorstellung.

And what kind of realism does the causal conception of

[1] It is the difference between memory and this perception that is pertinent and not the resemblance. Memory is the apprehension of a *past* object which was once *experienced* and of which we have an *idea*. This perception is the apprehension of a *present* object which is *never experienced* and of which we have *no idea*. Consequently we understand our reliance upon memory in spite of its fallibility. But we do not understand reliance upon this perception if it can be fallible. We can verify memory by facts and by memory, but we cannot say we can verify this perception by means of this perception. It excludes all experience and the question of verification does not arise.

sensa and objects give us? It is only the realism of Dinge-an-sich of which all that can be affirmed is merely that they exist. Meinong himself refuses to ascribe either the material or the formal—the secondary or the primary qualities of phenomena to them. But the abstract characters which in antagonism to Kant he attempts to attribute to them, viz. identity, difference, number, simplicity, complexity, relation, necessity, causality—are all based on the attribution of difference to noumena. This attribution he himself finds difficult, and he constructs for its sake a Wahrnehmungsforum. His assumption therein is that if sensa, the effects, are really different, then their noumenal causes too are necessarily different. But this in reality is an affirmative conclusion from the consequent, the effects, to the antecedent, the causes, which is invalid. As to the nature of the transcendent reality no conclusion can be drawn from experience. We cannot even say that it is many, because this is based on the attribution of difference to it. Indeed the only competent witness on the point, namely the religious consciousness, declares against it. But the theoretical consciousness can neither say it is one nor many, because logically both alternatives are without evidence. And with number fall simplicity, complexity and relation. Necessity Meinong could attribute because he believed noumena can be *necessarily* held to be different, which is not the case. Causality falls with necessity. Moreover, by causality we understand the necessary succession of phenomena. As time is eliminated from noumena, no meaning is left for necessary succession. And this is what Kant meant. He did not confine categories (pure concepts of the understanding) to phenomena and say that they are not applicable to noumena. His contention was that outside phenomena they are empty concepts without any content.—A domain of reality which lacks all character and of which nothing whatsoever can consistently be said, can hardly be called the external world—and this remains the case even if we inconsistently admit the abstract characters which Meinong assigns to it. This is not the world which the subjectivist is interested in denying and in which in spite of his denial he believes.

Meinong himself did not mean *this* world when he accused the subjectivist and said: "What sort of knowledge is it then, viz. the denial of the external world, which cannot overcome the 'error' and falls again and again a victim to it. Is not this 'error' perhaps a better knowledge?" (*ibid.* pp. 89–90). The error to which the idealist again and again falls a victim is the belief in the existence of a world in space and time, of tone and colour, the world of phenomena and not of noumena. Of such an "external world" which Meinong's theory offers, neither the nature and characters, nor even the existence is secured by the causal principle; because this principle does not lead us out of the phenomenal domain. If sensa have causes, they have to be sought in other sensa or objects of experience. The only justification for the existence of noumena is that *we assume* sensa to be effects of noumenal causes.

This assumption is made because of the relativity of sensa. The same water appears cold to one hand and warm to the other. It cannot be both; consequently it is neither. The case of other senses is similar; hence no sensa are objective. They are effects in us of things. Thus the contradictions which infected the object seem to be transported into the mind. But the presupposition of this whole procedure is this: If perception is to give knowledge of objects, circumstances must make no difference to it. We should see the same colour and shape even if our eyes are disordered or even if a fog comes between them and the object. The difference in the organs of sense and conditions of perception should make no difference to perception. On the face of it, it is a false demand. It is based on an impossible ideal of knowledge; it wishes to know things outside their relations and conditions—it wishes to know things *in themselves*. Moreover, the ideal is a self-contradictory one. Because even if things could be known outside their relations, they would still have to be put *in relation* to mind in order to be known. And thus it necessarily leads to epistemological relativism—to the position that "all truth is subjective," which is a self-contradictory proposition.

(*b*) G. F. STOUT

The position of Stout is essentially the same with Meinong's[1]. The sensum is other than the object. It is an effect produced on the mind by the action of the object. The object however is not known by a causal inference. It is universally and immediately implied in the sensum, and is directly apprehended by thought. His difference from Meinong consists in basing the immediacy of the object not on epistemological but on metaphysical grounds—not on the doctrine that every Vorstellung is the Vorstellung of an object, but on the doctrine that the world is an organic whole and the sensum being a part necessarily refers beyond itself. Moreover, he tries to maintain the primary qualities of the object, and thus comes nearer to Locke as Meinong may be said to remain nearer to Kant[2].

But the yearning after modern realism is more pronounced in him than in Meinong. Besides the doctrine that the object is apprehended directly, he describes as early as 1900 "The Common Sense Conception of a Material Thing" (*A.* 1900–1), as a complex of *sensible* qualities and of active and passive powers—impenetrable, solid, coloured, rough and smooth, persisting and changing in time and space independently of a percipient. Sensible qualities are not powers in things as Locke held. But they are themselves in things. On this point "common sense seems to me to be in the right" as against the generally accepted scientific explanation (p. 5). In 1905 he urges that philosophy has to accept the view of common sense as to the existence and even the essential nature of objects (*T.S.* p. 1). In 1909 he speaks of things as yellow and green (*P.M.* pp. 232, 233). In 1911 he expressly identifies his position with common sense and writers like Moore and holds the thing to be "existentially present" in the sensum (*R.J.* p. 9). He emphasizes the continuity of sensum and thing and makes

[1] Stout admits this and claims priority (see *R.J.* p. 11, note), though he comes to maintain the necessary reference of every sensum (Vorstellung) to object later than Meinong (cf. *ibid.* p. 2).

[2] Louis Arnaud Reid's position in *Knowledge and Truth* (1923) seems to be, in essentials, similar to Stout's.

things sensa of an infinite mind (*ibid.* p. 13). As late as October 1922, he declares sensa to be material (*A.P.* p. 386), and makes their materiality and continuity of nature with things the absolutely indispensable condition of the knowledge of things (*ibid.* p. 389).

However, all these are only indications of a yearning. His constructive theory is not modern realism. The object is not immediately perceived. It is not existentially present in the sensum. The sensum is other than the object. But then how do we come to know the object? Evidently by some kind of inference. But Stout strongly sets himself against such a view. Such an inference is impossible. It can only be circular (*T.S.* pp. 9–10). The transition from the sensum to the object must be immediate. The sensum implies the object and the implication is directly apprehended by thought. Stout urges that every experience by itself is partial and as such necessarily implies the whole. In other words, the implication is based upon the unity and identity of the universe (cf. *e.g.* *R.J.* pp. 3–6; *A.P.* pp. 393 ff.). He comes to this contention again and again. But this position does not in principle lead us beyond experience—the whole which the part implies is an object of possible experience. But the implicate of the sensum is the object, which is *ex hypothesi* beyond all possible experience. Stout admits this (*T.S.* p. 10). In fact, the appeal to the philosophical hypothesis of the unity and identity of the world has no direct bearing on his position. The knowledge of the object is based by him on the principle of causality. "I agree," he says, "with those who find the key to our knowledge of an independent not-self in our awareness of passivity in undergoing sensations.... Our passivity in having sensations occur to us involves an agent which determines their occurrence" (*T.S.* p. 11). Besides sensa, it is the principle of causality or sufficient reason which is absolutely necessary to construct the universe (*R.J.* p. 2). Sensations thus necessarily have a causal implication. This implication is immediate and the cause is apprehended by thought directly. The knowledge thus obtained of the *existence* of the cause or object is *a priori*. But the implication is of a cause

("source") in general. It does not give us particular and definite causes. The differentiation of the indefinite general source into particular and definite ones is an empirical development (cf. *S.S.* pp. 383, 391 ff.).

So also is the knowledge of the spatial nature of the objects *a priori* (*R.J.* p. 7). Further, the qualities of the object are apprehended "quite independently of the bodily conditions of perceiving it.... We determine the independent nature of the object external to the sense-organs, not directly by their relation to our sense-experience but by certain relations which they have to each other, relations of such a kind that they *do not vary with the bodily conditions of perception*" (*A.P.* p. 397). As illustrations Stout refers only to causal relations and relations of magnitude. "Extension, temporal succession and change, degree of intensity, and, in general, what Mr Alexander would call categorial characters" are features of the nature of the objects (*ibid.* p. 394). But objects are without secondary qualities, because these qualities "are not determinable by the relations of external objects to each other" and are not therefore attributable to them (*ibid.* p. 398). The primary qualities of sensa have primary qualities of the physical reality as their source; but the secondary qualities have only the qualitative relations of resemblance and difference in the physical reality as their source (*S.S.* p. 401).

Thus the primary qualities are the basis on which the community of the nature of sensa and things is made to rest. But to bring the conception of thing as near to modern realism as possible, Stout would include also secondary qualities in it, indeed all possible sensa, as "powers" of the thing (cf. *M.T.* pp. 4–5; *S.S.* p. 403). To guarantee this community and continuity he goes a step further and turns things into sensa—he posits "an omniscient mind as experiencing the whole presentation-continuum which is shared out to finite individuals in partial allotments" (*R.J.* p. 13; cf. further, *A.P.* p. 389).

But the continuity "in existence and nature" of sensa and objects is once for all destroyed as soon as sensa are separated from objects. Sensa are "presentations" for Stout. They are

dependent on perception, and are other than things. Consistently with this view they are mental. In his polemic against Alexander, who held them to be physical, he once went so far as to make them not only mental but even subjective like attention and conation (see *P.M.*, specially pp. 242–6). Later he conceded to Alexander that they are physical or material, and admitted that unless they were so, not even the idea of physical reality could arise (cf. *A.P.* pp. 386, 389). Yet like Moore and Russell he does not place them in the physical world. They remain other than physical objects and have no abode unless they exist somehow in the mind. Thus the physicality of sensa is not, as Turner thinks (*M.* 1923, p. 345), the central position of Stout's realism. Sensa are, if anywhere, in the mind, and therefore mental. They are never identical with physical objects. The physiological explanation of their origin is "written on their face" (cf. *A.P.* p. 405). In other words, they are not identical with objects, because they are conceived as effects of physical causes on the mind.

But why are they conceived as effects? Because we are aware of passivity in undergoing sensation, which involves an agent that determines it. Now it has seldom been questioned that we are really aware of passivity in undergoing sensation. However, introspection at least does not seem to reveal any such passivity. Passivity in sensation is not a datum. It is on the contrary an inference—an inference from the assumption that knowledge involves a causal relation, that it is caused in us by the activity of the objects. Passivity which is, in truth, a conclusion from this assumption, is now brought forward as the premiss of it. Moreover, even if passivity in sensation were a datum, it cannot prove that a *sensum* is an effect for which a cause must be assumed. All it proves is that *sensing* is an effect—of which the cause should naturally be sought in the sensum rather than in a transcendent reality[1].

Thus the experience of the sensum does not imply any transcendent cause. Indeed the sensum as such has no causal implication. It has such an implication only when it is an

[1] Cf. Russell, *Our Knowledge of the External World*, p. 76.

event or is regarded as an event. And in that case the implication is to other actual or possible contents of experience. The causal principle does not take us beyond experience to the world of transcendent reality. It holds, as Kant taught, only in the empirical universe. The unity and identity of the universe on which Stout lays great stress in order to derive the causal principle from it, is only an expression of this principle itself, and does not take us beyond experience.

Even if the causal principle could take us to the world of transcendent reality, we remain confined to an empty assertion of the existence of something we-know-not-what, the Ding-an-sich of Kant which is unknown and unknowable. This may be "the source in general of phenomena." But it is only a creation of our theory. In perception, on the other hand, the original reference, if reference there be, is not, as Stout contends against Moore, to any such source or cause in general. The reference is from the very start to definite objects. It is particular objects that are directly perceived, and not a cause in general which is indirectly and laboriously differentiated into physical objects and organs of sense, etc. The plain fact is that there is no reference to a cause at all, as Meinong clearly indicates; and if it were there, we could never come to perceive any object whatsoever—the series of causes being so complicated and so endless. Moreover, when once the objects have been put in the transcendent world of Dinge-an-sich, it is impossible to determine any object as the special cause or source of the sensum.

The knowledge of the independent existence of the objects, can, on Stout's theory, be only *a priori*. The independent existence of the objects must be an absolutely necessary implicate of sensory experience. The external world must be an absolute certainty. But after Descartes' doubt, it is hard to say that it is such a certainty. It looks such a certainty only because it has been, to start with, *assumed* that sensa are effects of independently existing causes.

As to the nature of the objects, Stout can attribute primary qualities to them only because their spatial nature is, like their existence, an *a priori* concept for him. He does not argue

the point. But it is clear that nothing can be said *a priori* or *a posteriori* as to the nature of the transcendent reality. It may very well be mind, as Berkeley and Leibniz held and Stout himself once believed (*T.S.* § 9); or it may be neither mind nor matter—as Schelling thought. And without assuming the spatial nature of objects, there is no way to attribute primary *qualities* to them. For the method of determining their qualities which Stout suggests, *by itself* can lead only to ascertaining the *relations* of objects—though "quite independently" of a reference to sense it cannot lead even to this; and as we saw in criticizing Meinong this does not take us very far. The object remains a bare existence.

Stout does not attribute secondary qualities to objects, but tries to include them in the nature of the object by making them "powers" in the object. But evidently this is not retaining them and the position has no affinity whatsoever to modern realism. The hypothesis of an omniscient mind to which he has recourse in order to maintain the community and continuity in "existence and nature" of sensa and things, could have helped to maintain the objectivity of secondary qualities also. But Stout does not make this use of it.

This hypothesis, though it does not seem to have any internal connection with Stout's realism, is often used to make realism idealistic, or idealism realistic. Sensa are held to be essentially presentations. They do not exist when not perceived. So far this would be subjectivism. But in order to retain their existence when not perceived by finite minds, an infinite mind is assumed to perceive them. Thus sensa obtain an existence independent of me and you. They become physical things and yet remain psychical presentations. This is probably the reason why Stout could once insist upon their being mental and then later upon their physical being (see above); also why he could give up his first position that objects are monads and pass to the position that they are material entities. This wavering itself is an indication that there is some fundamental ambiguity in the hypothesis of an omniscient mind, when put forward in the service of realism. The ambiguity consists in this: "Presentation" is used in two

different senses. As the object of the finite mind it is a psychical entity, which is private to each individual and exists only as long as it is actually perceived. But as the object of the infinite mind it becomes a physical entity, which is common property. It is then no more "presentation." It is no mental affection; if it were, it could not be apprehended but by the mind of which it is the affection, viz. the infinite mind. It is something capable of existing apart from it. It is, in other words, a physical object. But if it is a physical object, the hypothesis of an omniscient mind is superfluous.

Besides the desire to secure existence of the object, there is also another motive which goes to encourage this hypothesis. It is believed that by means of it we can maintain the physical nature of the object. Stout appeals to it in order to maintain the community or continuity in "existence and nature" of sensa and things. That is, the hypothesis makes it possible to maintain that the nature of things is essentially the same as that of sensa or sensible objects. He inconsistently stops at the primary qualities. The hypothesis enables us equally well to maintain the objectivity of the secondary qualities. Fechner is clear on this point and uses the hypothesis to retain also colour, sound, etc., in the physical world[1]. The causal explanation of perception, contends Fechner, which is used also by science, makes the object a colourless, soundless, dark and silent something. This something is grasped as endowed with primary qualities. But this is arbitrary. Consistently it is only a Ding-an-sich. It obtains all its qualities from the mind when presented to it. But it loses them as soon as the mind is withdrawn. Hence he postulates an infinite mind to keep up these qualities. The physical world thus passes, thinks Fechner, from a dark night into a bright eternal day. But he does not mark that all this notwithstanding *it* remains a dark night. *It* in itself is still the unknown and unknowable Ding-an-sich. The qualities which it has obtained from being presented to the infinite mind are still not *its*. They are its just as they were its when it was presented to me. *They* do not remain in it when it is

[1] See *Die Tagesansicht gegenüber der Nachtansicht*, Eingang (opening Section).

not presented to me. They remain behind with the mind that bestowed them upon it. When presented to me I bestow *new* qualities on it.

Thus the hypothesis is useless for maintaining the community in existence and in nature of things and sensa. If we take it by itself—if we "posit an omniscient mind as experiencing the whole presentation-continuum which is shared out to finite individuals in partial allotments," the separation of thing and sensum on which Stout's realism rests, becomes impossible. If my presentations are a "partial allotment" of "the whole presentation-continuum" of the omniscient mind, they are evidently part and parcel of it. And because this continuum is the physical reality, my presentations too are physical reality. Nay, more, *all* my presentations or sensa are objective. There is no distinction of appearance and reality. The position becomes distinctively neo-realistic. We are not confined to appearances or presentations; we are always in possession of the truly physical reality. The question which Joseph raises against Stout, viz. why can I apprehend only presentations and not things, for knowledge is in both cases a mystery—does not now arise. It arises and is pertinent only when in neglect of this hypothesis, but in consistency with his realism, Stout separates things and presentations.

(*c*) "CRITICAL-REALISTS"

The line of thought pursued by the Critical-realists of America, G. Santayana, C. A. Strong[1], A. K. Rogers, D. Drake, J. B. Pratt, R. W. Sellars and A. O. Lovejoy, is in essentials the same as that of Meinong and Stout. Sensum is other than thing; the two are related as effect and cause; and yet the thing is perceived directly. Chronologically it makes its appearance after and indeed as a protest against neo-realism, which it takes for modern realism; but logically

[1] Strong's new position is a return to the old representationism of Reid and Stout, if that may be said "to lie midway between neo-realism and critical realism" (see *M.* 1926, pp. 39–58, 137–153); and is so far a step in advance. He in his *A Theory of Knowledge* (1923), and Drake in his *Mind and its Place in Nature* (1925), seem to have given up their "critical-realism" (see *ibid.* p. 40, note 1).

it is prior to it, being a return to old realism and thus representing a logically earlier stage of thought.

Subjectivism, says the critical-realist to himself, makes all sensa subjective and leaves no foothold for a belief in the external world. Neo-realism makes them all objective and leaves no room for illusion and error. But if we side with the subjectivist as to the nature of sensa, and with the realist as to the reality of things, we have the authority of science on our side. This was also the position of Locke. But then we are in the clutches of representationism—there is no way to break through the circle of our ideas and reach the transcendent reality.

But in what consists this impasse? Why does representationism, which is so completely in harmony with reason and science, make knowledge of the object impossible? It holds that our immediate data are sensa, and that sensa are mental existents. When once immediate data are made existents, perception must be held to terminate in them and we cannot go further. We are condemned to become subjectivists and in the end solipsists. But if instead of mental existents, we take them to be physical existents, we get involved in the absurdities of neo-realism. The hope of relief from these difficulties therefore lies in questioning whether our immediate data are existents at all. Santayana therefore declares that they are not existents; they are character-complexes, they are "essences," logical entities, universals. Strong welcomes this thought as pointing the way out of the difficulties of representationism and neo-realism (see *C.-R.* p. 224, note). He puts it to the service of "critical-realism," and others accept his point (see *ibid.* Preface).

The datum is not therefore an existent, mental or physical. It is an essence, which is presented to us by the activity of the object on our sense-organs. Itself a non-existent, subsistent entity, it involves an existent which caused it in us. That existent is the immediate object of perception. Perception is thus perception of object and immediate perception. The object is not placed behind the screen of existent data. The only existent that is perceived is the object itself. Data are

the essence of the object though not the existence of the object;—we directly possess the existence of nothing. However, datum being essence directly involves the existence of the object. This is the only way to grasp the existence of anything. The mind cannot go out of itself and grasp the thing bodily (cf. *e.g. ibid.* pp. 24, 200, 218). When an essence is presented, we instinctively affirm an object. The existence of the object is an inborn hypothesis which is corroborated by practical experience as well as science (*ibid.* pp. 109–10).

But the datum, the essence presented, does not necessarily give the true nature of the object. In fact it never gives that. All perception is partially false (*ibid.* p. 20). And the critical-realist may be in his metaphysics a panpsychist, a dualist, a Platonist or an idealist of some other type (*ibid.* p. 109). Nothing can be said with certainty as to the nature of the object. The knowledge we attain to in this respect is not direct but inferential (*ibid.*). It is the business of science and metaphysics to ascertain it. The critical-realist only sides with science and holds its conclusions to be knowledge of reality (*ibid.* p. 110). Things have primary qualities (*ibid.* p. 23), but neither secondary nor tertiary ones (*ibid.* pp. 9 and 11).

The fundamental features of this theory we have met with in Meinong's and Stout's. Like theirs it conceives subject and object to be two substances, and perception as a case of causality. They sought to make it direct by conceiving the relation of sensum and object to be that of quality and substance and of effect and cause. It seeks to conceive it as that of essence and existence; and this is its distinctive feature. But exactly on this point the critical-realists differ. Drake says that Santayana, Strong, Rogers and he himself hold datum to be pure essence, while Sellars, Pratt and Lovejoy hold it to be an essence that is embodied in an existent psychical state (*ibid.* p. 4, note). However, the differences among them seem to be still greater. Santayana identifies sensum with datum and holds datum to be pure essence (cf. *ibid.* pp. 179–81); Drake includes both essence and also the reference of essence to object in the datum (cf. *ibid.* p. 21, note). This

variety of opinion on this fundamental point *prima facie* suggests that the point is not really fundamental. However, the common position of the school is that sensum, which is other than object, does reveal an essence, and that this essence involves the existence of the object; and that thereby representationism is overcome and perception made direct[1]. We may therefore consider if this result is really obtained, and if the distinctive assumption on which it is claimed to have been obtained is really true, viz. if datum is essence.

Now perception is evidently mediated by the apprehension of essence. It is not direct, and representationism is not overcome. The substitution of a universal for a particular, *i.e.* of essence for presentation, does not improve the situation. There is a mediator between subject and object, and whether it is a universal or a particular makes no important difference. Indeed, representationism has always meant, what critical-realism expressly maintains, viz. that the presentation *represents* the object—and it represents the object because it presents *the same essence*. And it had this vital advantage over critical-realism. It kept its assumption clearly before it and concluded to the existence of the object accordingly. It held that the presentation which represents the object is the effect of the object, and that the existence of the object is a causal conclusion from the existence of the presentation. It thus reached a concrete definite, actual, existent object. But critical-realism leaves this assumption, which it really has in common with representationism, aside, and sets up a new principle in its stead, viz. that essence involves existence, thereby hoping to make the transition to the existence of the object immediate and perception direct. But the transition from effect to cause is at least as direct as from essence to existence; while the great disadvantage of the new principle is that it makes the existence or object reached by means of it absolutely indefinite. The essence being a universal does

[1] That essence involves existence is an implicit assumption of the school, which has not come to explicit formulation and clear consciousness. They usually speak of an "outer reference," or reference to an existent object, which is implied in the essence that is datum (see *ibid. e.g.* pp. 91, 92, 93, 96, 97, 99, 180); and that this reference is "instinctive," "inborn," etc.

not involve any existent in particular. At best, it involves *an* existent which is no existent in particular. The essence represents an infinity of objects. It is connotation, and logically has an unlimited denotation. Being a universal, the number of particulars to which it refers or which it involves is without limit. To call the transition from essence to existence perception is as good as to say that because I somehow have the concept man before me, I *perceive* Tom, Harry, John and all the individuals belonging to the human species, and yet without perceiving definitely any one of them. This knowledge is not perception. If anything it is conception. Strictly the essence "represents" nothing beyond itself, and the theory is not representationism. But then neither is it a theory of perception nor an improvement upon representationism. Further the principle of progress, essence-existence substituted for effect-cause, is itself untenable. It is a doctrine on which the ontological proof of the existence of God becomes very simple. But "purely mathematical and logical essences," as Pratt admits, do not involve existence (*ibid.* p. 92). Nor do illusory or false essences (*ibid.* p. 91). Indeed if secondary qualities are unreal, they are essences that involve no existence. Why should then the essence given in sense involve existence? Essence is a universal. No universal involves particulars. It is a subsistent, and stands in no need of an existent. But if somehow the essence given in sense involves existence, then the sensum or the mental state itself which is its vehicle may be that existence. Notwithstanding all this, if the existence involved is the transcendental object, perception loses its directness. For to grasp the essence involved in the sensum is an elaborate act of thought. There is a sensum present to sense. Thought must intervene to grasp the essence it reveals. This work of thought is extremely laborious and in fact inexhaustible, because the nature of the individual, namely of the sensum, cannot be fully resolved into terms of universal concepts. Supposing the task somehow to be adequately accomplished in finite time, there is another express act of thought necessary, viz. to posit the object the essence of which has been grasped. All

this may be possible and even necessary. But if such a process is required in order to perceive, perception cannot be called direct or immediate. The process may not be inference, but nevertheless it is there and is a result of elaborate thought. The objection to calling it inference is not really that it is *inference*, but that it makes perception a long-drawn process, mediate and not direct, which evidently conflicts with the fact.

Thus the theory neither overcomes representationism nor makes perception direct. It does not prove even the existence of the object, because, as we saw, essence does not involve existence. However, its real proof of the existence of a transcendent object is, like that of representationism, its *assumption* that sensa are effects of transcendental causes. The weakness of this assumption has been considered before. For the nature of the object, it relies upon science, just as representationism did, affirms the primary qualities and denies the secondary ones. But this again is an assumption for which no proof has been offered. Indeed Pratt admits that the critical-realist in epistemology may hold any doctrine in metaphysics. The reason thereof is that nothing is definitely known as to the nature of transcendent reality, and one may accept any metaphysical hypothesis that suits his taste. Thus in no wise does critical-realism show an advance on representationism, neither as to the nature of perception nor as to the reality and nature of the object. It is a new representationism; and its newness consists in this: that it asserts datum to be essence instead of existence. We may now consider if datum is really essence.

The sensum is either held to contain essence, or to suggest essence, or to be essence. That it contains essence may be passed over. In itself the position is true. Every particular is an instance of one or other universal. But when this is made the fulcrum of a new theory of perception, we are beset with difficulties, as we saw above. Moreover with what right can we in sense-perception take away the name datum from the immediate object of sense, viz. from the sensum, and give it to an object of thought, viz. to the essence discoverable in the sensum by thought? That the sensum suggests or in-

volves or implies essence, and that this essence is really the datum, is open to additional objections. A sensum of an end-wise grey wheel is presented to me. It is said, it suggests or involves the essence or character-complex a-round-wheel-in-front-of-me[1]. The latter might have been suggested to me by association, but it is hardly right to say that it, and not the sensum end-wise-grey-wheel, is my immediate datum. But in fact the sensum does not suggest anything beyond itself, be it essence or existence. Admitting that it suggests anything, it suggests a concrete existence, namely a *wheel*, and no abstract essence such-and-such-a-wheel*ness*. And in so far as it makes this concept possible, the difficulties of the theory have already been considered. The really new point about the theory is the position of Santayana, viz. that the datum is the sensum, and the sensum is essence. His other colleagues vaguely subscribe to this position, but they do not exactly maintain it. Strong hails it as a new position. But it is anticipated by the neo-realists (see Section on Holt), and is most probably suggested to Santayana by them. Thus the whole American thought, neo-realistic and old-realistic—for the critical-realists are old realists—agrees in holding sensa to be universals. How the neo-realists come hereto will be considered later when we come to them. But the reasons Santayana gives for it are the following: The sensum has an aesthetic individuality; but "being individuated by its internal quality, not by any dynamic or external relations...(it) is also a universal" (*ibid.* pp. 168, note, and 179–180). In itself it is a quality given absolutely without containing in itself a relation to a substance or to the complex of mental life in which it is given. It is a universal, and is identically the same for all (*ibid.* p. 181). It is an essence and no existence, because it is inert and produces no effects (*ibid.* p. 180), while to exist means to exert force (p. 181). I have a sensum, say a patch of red colour. Taken by itself it is a floating quality. As such it is not grasped as belonging to a self-existing entity; nor has it an internal relation to my stream of consciousness or to the surrounding objects. As a floating quality it has an aethereal

[1] The example is taken, with a modification, from Drake (*C.-R.* p. 29).

being which cannot set any object in motion. It is therefore essence and no existence. Being essence it is universal, and is the identical object of many. Thus what takes it out of the domain of existence and puts it in that of essence is its want of relations, together with its incapacity to produce changes in the world.

But this is not enough to make it an essence, a logical entity, a universal. It must be shown to be an entity which is not only common to many persons but which is numerically the same in all instances of the perception of a red surface This red patch, if it is a universal, must be itself present in all cases of the consciousness of redness. And that evidently it is not. The red patch I am at this moment seeing in my room is *other* than the red patch which my friend may be seeing in his room. It is not numerically identical with it. It is only *qualitatively* identical. And it is this *quality*, viz. redness, which is numerically identical, and not the red patch. It is only the aethereal being of the red patch and its being termed a quality which leads to its being conceived as a universal. But if quality, it is quality in quite a different sense from that in which a quality is a universal. Redness is quality and universal, but this red patch is only an attribute or aspect of a concrete thing and is itself a concrete existence. *It* cannot be conceived as apart from a substance; only the universal redness, the concept redness, can logically be so conceived. Nor can *it* be conceived as unrelated to other existents—substances and their attributes. It is produced and changed and destroyed by them. Nor is *it* without effects. It affects them as they affect it, and it directly affects me causally by producing mental and physical changes in me. When appealing to mystics, Kant and Schopenhauer (p. 181), Santayana makes existence a synonym for substantiality. They deny the *substantiality* of sensa, but not the *existence* of sensa. Sensa are not substances; but this does not prove that they are non-existents, essences, universals. They are *particulars, existents*; and according to Kant indeed the only particulars and existents of which we are directly aware. If the data of sense too be universals, while the objects of thought already

are, one does not know where to seek for the knowledge of the particular. The substances which are apparently allowed to be particulars and existents, must have some qualities which *exist*. To be a quality is not therefore necessarily to be an essence.

Not only are sensa not essences, but in truth the position is not vital to critical-realism. For this, it is enough that sensa reveal essence, so that its principle of progress, viz. essence involves existence, may find application. It is indifferent for it whether sensum is identical with, or only suggests or contains essence.

The realisms of Meinong, Stout and the "Critical-realists," like those of Descartes, Locke and Reid, bring out the moment of the independent reality of objects. But they place the object behind the screen of sensa. They are essentially representationistic, and though they claim to make perception direct, they fail to do so.

The relation of sensum and object, once conceived as that of effect and cause, as is done by them all, keeps perception mediate, and the doubtful attempts to make cause-effect immediate (Stout), or to transform it into substance-quality (Meinong) or essence-existence (Critical-realists), are of no avail. Perception remains indirect and the nature of the object unknown. As with old realism, thought is still stuck in representationism.

Schuppe, Mach and Avenarius steered clear of the causal conception of perception. They brought out the moment of directness in perception, but failed to give independent reality to the object. They did not really overcome subjective idealism.

Thus both these two recent series of attempts at realism, as well as that made by the old realists, remain unsuccessful. To all three subjectivism in a wider sense, which makes the sensum directly or indirectly dependent on the percipient, is common. The theories which fully overcome subjectivism and are a synthesis of both the moments of realism, viz. the directness of perception and the independence of objects, are true realism. They are modern, and may be called modern realism. We may now proceed to follow the development of modern realism in its chief representatives.

CHAPTER III

REALISM—ITS DEVELOPMENT

Modern realism maintains, like the old realism, the independent existence of the external world. Its distinctive position, however, is that we apprehend this world directly in perception. In this all the schools of modern realism agree.

Modern realism starts with Moore in the beginning of the century[1]. Moore's response to the call of realism, however, affirms the independent reality both of sensa and of objects. The claims of thought and sense are not yet settled. The conflict of these two gives rise to three species of realism, rationalistic, empirical and critical.

The rationalistic realism of Cook Wilson, Prichard and Joseph takes the side of thought: The object and not the sensum is real. In Joseph it ends in a Platonic idealism.

The empirical realism of the neo-realists, Alexander, Holt, Russell, sides with sense: Sensa and not objects are real. In Russell it ends in a Humean sensationalism.

The rationalistic realism of Cook Wilson tends to become, like the old realism and the realism of Meinong, Stout and the Critical-realists, representationistic in Prichard and Joseph. The empirical realism of the neo-realists tends to become, like the realism of Schuppe, Mach and Avenarius, subjective-idealistic in Russell. Subjectivism in a wider sense is not yet fully overcome. The ground of this lies in their method, viz. in the one-sided submission either to thought or to sense. The claims of thought and sense in the problem of realism have therefore to be reconciled: the object and the sensum have both to be retained and harmonized, and the problem of their relation solved. The realism which undertakes this task and carries it out, may well be called critical on the analogy of Kant's use of the word. Again Moore leads

[1] In Hobhouse's *Theory of Knowledge* (1895), the beginnings of the new position may be traced (see Appendix: Hobhouse).

Bergson (*Matter and Memory*, 1896) too may perhaps be taken as a forerunner (see Appendix: Bergson).

the way in this direction. Dawes Hicks and Laird, among others, are following the same path.

This chapter is accordingly divided into three sections. Section I deals with the rationalistic realism of Cook Wilson, Prichard and Joseph; Section II with the empirical realism of Alexander, Holt and Russell, which may be called distinctively neo-realism or new realism; and Section III with Moore.

§ I

RATIONALISTIC REALISM

WILSON, PRICHARD, JOSEPH

The method of Wilson, Prichard and Joseph may be called rationalism. That in perception is real which is intelligible, that which we can understand to exist independently. The independent existence of the object is of course involved in the very conception of knowledge or perception. But as to its nature the three differ from one another. Wilson eliminates the secondary qualities, perhaps with the exception of colour, because their objective existence has no meaning—their conception involves dependence on mind. Prichard follows Wilson closely and definitely includes colour also in the list. Joseph goes beyond Wilson and Prichard and draws the ultimate conclusion of the method. He rejects the primary qualities also.

(*a*) J. COOK WILSON

John Cook Wilson, professor of logic from 1889 to 1915, one of the most influential teachers Oxford has ever possessed, was an idealist in his earlier years. Gradually he seems to have broken away from the idealistic tradition of Oxford and about the beginning of the century come to hold a realistic position, gathering a circle of disciples and admirers around him. Prichard and Joseph may be regarded as the most distinguished representatives of this school.

Unfortunately, Cook Wilson was unwilling to publish his views till the process of self-criticism had completed itself, and this process did not complete itself till about the time of his death. It was then that he found himself, as Prichard says,

but then it was too late. Consequently we have only his *Printed Papers* which served as lecture-notes and were constantly rewritten.

Prichard, it is true, did come to publication with his *Kant's Theory of Knowledge* in 1909[1]. But the book did not make the impression which, as Joseph thinks, it deserved. One of the reasons seems to be that the view, viz. realism, which it was intended to represent, was involved with the interpretation and criticism of a philosopher whose position is ever a subject of inquiry and interest to the students of philosophy; and consequently attention gets directed to ascertaining the correct position of Kant rather than that of his critic. But the fact that Prichard took Kant as his text to develop his own position, throws a light on the point from which Wilson and his followers seem to take their start in the direction of realism. It is the denial of a theory of knowledge, and of a theory of knowledge such as Kant is held to teach. And it is Kant's theory of knowledge which would, at Oxford, seem to be the foundation of anti-realistic doctrines. A thinker of Wilson's competence would therefore take his start from a criticism of Kant's theory of knowledge.

Wilson consequently denies that there can be a *theory of knowledge*. An inquiry into the definition and meaning of knowledge is absurd. There can be no definition of knowledge, because knowledge is an ultimate unanalysable fact, like feeling and conation, and cannot be broken up into genus and differentia. Moreover, it is presupposed in every inquiry concerning it that we know what knowledge is (means) (*P.P.* § 7). Prichard repeats the argument as stated by Wilson (cf. *K.K.* Preface and p. 245), viz. that knowledge is a relation *sui generis* and cannot be explained in terms of any other relation, *e.g.* of making, as Kant would explain it. (Cf. also Wilson's letter quoted in *Mind*, 1919, p. 309.)

Thus it is this conception of knowledge as making which is commonly attributed to Kant and serves as the foundation

[1] In fact, he announces his position as early as April 1906 in a short article under the designation "Appearance and Reality" in *Mind*, which contains all the essentials of his realism.

stone of idealism, that explains the deep-seated antagonism of Wilson and his school to all theory of knowledge. The antagonism however does not seem to be well-founded, and the denial is too sweeping. For the view, so strenuously advanced and upheld by Wilson, that knowledge is discovery and not making, that it is an ultimate and unanalysable fact, that it is a relation *sui generis*, that perception and thought are direct apprehension of the object, that the object is independent of them and its independent existence is presupposed by them—is itself nothing but a theory of knowledge.

Moreover the criticism directed against Kant in special is beside the mark. Kant is not inquiring into the nature of knowledge as such. His problem is not: What is knowing or awareness (in the sense in which it is *sui generis*)? His problem primarily refers not to knowledge as such, but to a species of knowledge, viz. to the nature of scientific knowledge. It does, indeed, become quite general. But even then it does not refer to knowledge in the sense in which it is *sui generis*. It refers not to subject-knowledge but to object-knowledge, if we may so express it—not to the faculty of knowing as such, but to the nature of its object, *i.e.* truth. That is why the truth and value in essentials of his analysis cannot be denied. Percept and concept *are* the two necessary constituents of truth—the individual is the universal, as Hegel would say. But percept and concept are not constituents of knowing. Nor does Kant say so. Whatever metaphysical theory as to the nature of reality may be wrongly or rightly attributed to Kant, and howsoever false that theory may be, we are not justified in taking his ontology for his theory of knowledge, and then rejecting the theory of knowledge as such. That is a valid inquiry, as valid as logic. All that is urged against it applies with full force to logic. Knowledge is *sui generis*. So is thought. Knowledge is presupposed in all inquiry about knowledge. So is thought presupposed in all inquiry about thought. Perhaps the same may be said even of grammar.

To repeat, as Prichard does, the objection which Hegel wrongly urged against Kant and which Caird in his book on

Kant urges against not Kant but Locke, namely that to make the inquiry into the nature and limits of knowledge the prerequisite of philosophy is like "investigating a telescope before turning it upon the stars, to determine its competence for work," or like trying to learn swimming without entering the water—is to make objections which flagrantly neglect what Kant himself says of the inquiry. The telescope has been tried long, Kant would say, but in vain. Now, after long trial and disappointment we ought to look into it to see if there is not something wrong with it, and if we are not using it for purposes which are beyond its powers.

But the antagonism to Kant and to the theory of knowledge explains the fundamental characteristic of the school. Not only does the Kantian theory make the object mind-dependent, it also puts *limits* on human knowledge. The ultimate nature of reality, according to it, cannot be known. Thought by itself yields no knowledge. To ascertain the nature of reality by mere analysis of concepts is impossible. It is the method by which the metaphysicians tried to discover the nature of ultimate reality and of all reality. It is the method of the scholastics. Kant calls it dogmatism, and in distinction from it, his own position criticism, which is a synthesis of empiricism and rationalism.

Now it is this rejection of rationalism and consequent limitation of knowledge which stands in fundamental opposition to Wilson and his school. Their method is to ascertain the reality or unreality of an object by the analysis of its *conception*—by asking what its very nature *involves*, what it *means*; to assume that only the intelligible is real, and that no limit can be set to thought and knowledge. This is implied in their whole discussion on the reality of objects, and becomes more and more clear as we advance. In fact, Prichard more than once expressly claims that "dogmatism" is the right and the only right method (cf. *K.K.* pp. 274–5, 279–81).

This also explains some further peculiarities of Wilson and his followers. Like the scholastics he was primarily a logician and a controversialist. He could go on analysing a concept to its minutest details, and follow even a trifling topic to its furthest ramifications, so much so that even his greatest

admirers would lose patience, as Joseph tells us. Prichard seems to think that important philosophical issues turn on certain terms, *e.g.* the term "appearance," a misuse of which is, according to him, at the bottom of phenomenalism and subjectivism in general and the transcendental idealism of Kant and the sensa-realism of Russell in particular, and the remedy thereof lies in the analysis of the conception of appearance, which is *of* something—this refutes idealism, and *to* someone—this refutes the realism of sensa[1].

Thus Kant's theory of knowledge is, on its positive as well as on its negative side—in what it affirms, viz. that knowledge is by way of experience and is of phenomena only, and in what it denies, viz. that knowledge is not by way of pure thought nor of ultimate reality—in sharp antagonism to Wilson and his mode of thought. And as Kant's is the only theory that deserved the name of a theory of knowledge, the criticism and denial of it was of vital importance for his school.

The rejection of the Kantian theory of knowledge, understood as meaning that knowledge is making the object, implies *realism*. Wilson is a realist. He holds that the nature of knowledge implies "that the being of what is known is independent of the act of our knowing it" (*J.* p. 9). This is true in regard both to the object of perception and to that of thought. But he came to this position gradually, as remarked above. "In his earlier years he would have called himself an idealist. From this position, or at least from any easy or ordinary form of it, he gradually moved away" (*ibid*). This process seems to have taken long, and, as said above, completed itself only towards the end of his life.

Wilson's realism, as contained in his *Printed Papers*, is as follows: He "seemed more and more convinced that perception should be included among such intelligibles," with knowledge, space, time, the distinction of the discrete and the continuous, of universal and particular, as are ultimate and intelligible by themselves. However "he would not definitely

[1] Cf. his *Appearance and Reality* (*M.* 1906); *K.K.* (1909), specially the chapter: "Phenomena and Things in Themselves," and his *Russell, On Our Knowledge of the External World* (*M.* 1915).

commit himself" (*P.* pp. 306–7). In the *Printed Papers* we find him saying that the objects of perception are not states of consciousness. They are present to consciousness. We are "immediately conscious of" them; they are in no way dependent on us, but exist independently. Perception is the only way by which we come to know objects. The position which subjective idealism takes, that they are states of consciousness, is merely an assumption, unsubstantiated by any proof. And scientific realism too makes the same assumption unconsciously, and is reducible to subjective idealism. For, when once objects of perception are reduced to subjective states, there is no way out to the knowledge of things. Perception alone can give us such knowledge. Objective idealism does not deny the objectivity of the objects of perception. It does not make them states of consciousness, but believes that they are somehow constituted by thought, that thought is somehow objective and that reality is the realization of thought.

But thought is *of* things, *about* objects. It is an apprehension of the thing itself and not of an idea or copy of it. Now the ordinary consciousness believes that things, though related to thought, are entirely independent of it, that their relation to thought is external. And it is quite clear that however intimate the relation be, it presupposes terms existing independently before the relation came into existence. There must have been things if there is to be an apprehension of them by way of thought. Objective idealism overstates the relation so far as it makes the relation (viz. apprehension by thought) absorb one of its terms, viz. thing.

Wilson considers objective idealism with much caution. He had held it long. To the idealistic doctrine that the relation of subject and object, thought and thing is intrinsic, he is inclined to give much weight. He only recoils from the position in so far as it makes one term absorb the other. It is not clear that he definitely gave up all idealism, as Prichard maintains. What kind of idealism it is that he gave up and how he gave it up, is indicated in Prichard's paper on him.

In 1904 he is found to have come to the conclusion that knowledge is an ultimate fact *sui generis*, and a theory of it

in the sense of explaining it in terms of some other relation, *e.g.* of making, as Kant's or of copying, as Locke's, is impossible. This has, by itself, nothing to do with any metaphysical theory. But it casts a doubt on certain sorts of current idealism, which seemed to originate in theories of knowledge, namely the subjective idealism of Berkeley and the transcendental idealism of Kant. It is why Wilson at this stage held a denial of the theory of knowledge "to be compatible with the metaphysical view that the unity of all reality, the unity of which every particular thing is a manifestation, is an apprehending unity." "And for years he continued to hold that logic and science should be distinguished as dealing respectively with the subjective and the objective side of thought" (*P.* pp. 309–10)—a position which he is found to have held as early as 1880. He hesitated to abandon this position, says Prichard, partly because of "the conviction that it was first necessary to be satisfied about the nature of hypothetical thinking" (apparently because the metaphysical view in question is after all a hypothesis), "and partly because of the fear that, unless we maintain that what we apprehend is *part* of the apprehension, we find ourselves abstracting what we apprehend from the apprehension, and then the act of apprehension becomes empty" (evidently because this is the argument on which the metaphysical view in question is taken to be based). This indicates the nature of the objective idealism, which Wilson is represented to have abandoned later. Clearly it is nothing other than what may be termed epistemological idealism—that easy sort of idealism which postulates an infinite subject to save the existence of the object when the finite subject is removed, because it conceives the object as an inseparable aspect of the percipience. This is further substantiated by the consideration which, according to Prichard, led Wilson to abandon it. "Eventually, however, he overcame this fear by an analysis of the problem as regards relations generally[1]," and Prichard quotes certain sentences of Wilson from this analysis.

[1] That Wilson, in order to overcome subjectivism, thought it necessary to analyse the nature of relation, is common to him with all modern realists. If the

We have then here (sc. in the case of a collision of two bodies *A* and *B*) a case where a relation, though empty and meaningless, if we abstract from it the terms related, is so far from necessitating their inclusion in itself that it necessitates the contrary; for it necessitates that these terms must have a being of their own which is not included in the being of the relation. This seems enough to show that the inseparableness of the apprehension from what is apprehended does not warrant the conclusion which it seemed to suggest. The truth is that just as the collision with *B* is only possible through a being of *B* other than its coming into collision, and it is with *B* as having such being that the collision takes place, so also the apprehension of an object is only possible through a being of the object other than its being apprehended, and it is this being, no part itself of the apprehending thought, which is what is apprehended. Thus, if an object is apprehended, it does not follow that merely because it is apprehended it must be part of the nature of the apprehension, part of the apprehending consciousness, which would make it entirely mental or in general a state of consciousness. (*Ibid.* p. 310.)

But as can easily be recognized, the idealism here rejected is not the objective idealism which Wilson is represented to have held since 1880—the idealism which made him maintain that science deals with the objective and logic with the subjective thought, that "by the real or the objective we can only mean that which is completely object of thought. But that which is object of thought must conform to every law of being an object of thought, that is to every law of thinking. Thus the laws of the nature of the subject are the laws of the nature of the object—and therefore the antithesis between thought and its object is overcome." This language can be understood only as indicating an idealism of Hegel's type. It is compatible with the most pronounced realism which holds the necessities of thought to be the necessities of things, and throws overboard all explanation of this fact

idealistic theory of relation is true, *i.e.* if relation is intrinsic to the terms related, if all relations are internal, then realism cannot be true. The relation of knowledge must make a difference to the object. Consequently it must be established that relation as such is not internal to the terms, that there are external relations and consequently knowledge may be such. The form of objective idealism in vogue at Oxford is therefore certainly concerned in the issue of the controversy about the nature of relation. This is probably the reason why Prichard thinks that Wilson overcame all idealism by an analysis of the nature of relation.

such as makes the object a construction of ours. It cannot be refuted, as Prichard thinks, by an analysis of the relation of perception. If refuted, it can be refuted by an analysis of the nature of hypothetical thinking, which Prichard does not mention. Moreover, the species of objective idealism which Wilson criticizes in the extract from the *Printed Papers* given above, is a form of idealism which is hardly distinguishable from subjective idealism. Only it makes the object dependent on thought instead of perception. But the subject of this thought is no other than the finite individual. In view of these considerations, it does not appear that Wilson at last abandoned idealism altogether, though "with great hesitation and without emphasis," as Prichard represents. But the more cautious statement of Joseph seems to be nearer the truth, that from idealism, "or at least from *any easy or ordinary form*[1] of it he gradually moved away," and the Hegelian form is neither easy nor ordinary.

Howsoever it be, this much is clear from the above extract that Wilson extricated himself from all forms of idealism which are subjective or are based on its premisses and therefore conflict with realism. Moreover he is a modern realist. In thought as well as in perception it is the object itself which we directly apprehend, and no copy or idea of it. The object is not dependent on the apprehending mind. Its independent existence is presupposed in all knowledge. Knowledge is revelation, discovery; and not making or changing the object. "The very idea of it," says he in a letter written in 1904, "is incompatible with any such *action* upon or *suffering* in the object known."

It would appear from this that Wilson takes perception to be *fully* objective; what it reveals is there; the external object exists independently of the percipient with all its qualities, primary as well as secondary. But in fact, this is not so. His method prohibits him from doing this. Though knowing *means* knowing something which exists independently of it; and though "the very *idea of it*" is incompatible with any change wrought in the object by the act of knowing; yet the

[1] Italics mine.

external object and its qualities as perceived are objective only *prima facie*. We have further to take its qualities one by one and see if we can *understand* their independent existence; to inquire if their *very idea* is compatible with their existence in the object—if they are conceivable as objective. Besides being a logician, Wilson was also a mathematician, and in mathematics he believed man to be in certain possession of truth. Mathematics and geometry are to him as to the rationalists of the 17th century, the ideal of knowledge. Space was for him an ultimate reality. To him, as a realist, the external object would seem to lose all meaning if it were not spatial. *Primary qualities* therefore he held to be objective qualities which are in so far rational that they are the subject-matter of the rational science of mathematics and admit of exact scientific calculation. But the secondary qualities had no meaning for him as apart from the perception of them. They were subjective[1]. Only he is said to be inclined to hold *colour* objective[2], because objects seem to be inconceivable without colour, or because colour is conceivable as objective. Prichard gives up the objectivity of colour; and Joseph the objectivity also of the primary qualities and of space. This seems to be involved in the method. We may now turn to these thinkers, who have carried on the tradition of Wilson at Oxford.

It may however be noted that it is difficult to determine how far Wilson's argument makes a forward advance in

[1] That secondary qualities are inconceivable without the mind and hence are subjective, is the argument also used by Descartes (see his *Principles*, I, § 68).

The rationalism of Descartes and of Cook Wilson are one in principle. For both conceivability and inconceivability is the criterion. Only Descartes starts from the side of the object: Primary qualities are objective, because matter is inconceivable without them; secondary qualities are not objective, because matter is conceivable without them—while Wilson starts from the side of the subject: Primary qualities are not subjective because they are conceivable without reference to the subject; secondary qualities are subjective, because they are inconceivable without reference to the subject.

The difference in starting points, object and subject, calls to mind the distinctive categories of the two eras of modern philosophy.

[2] It has been said, like Reid. But Reid did not hold colour as seen by the eye to be objective. This mistake seems to be due to the fact that Reid uses the term "colour" for that modification of primary qualities in the object which excite in us the colour as seen.

Prichard. Prichard seems to follow him rather closely. He is, no doubt, more confident and positive, and his views we possess in detail though entangled in criticism. The main interest of his work consequently lies in the insight it tends to give into the method of the master and the trend of his teaching[1]. But Joseph's case is different. More cautious and modest, and open to the influence of the opposite school, he does however mark a real development of Wilson's principles, though he has indicated his views very shortly and seldom.

(*b*) H. A. PRICHARD

Prichard says of Cook Wilson that he "seemed more and more convinced that perception should be included among such intelligibles" as are ultimate, unanalysable and certain. But this process seems to have completed itself in Prichard as he came to the task of realism. He starts with the complete objectivity of perception and the direct apprehension of the physical reality.

It is upon the distinction of appearance and reality involved in judgments of perception, and, in harmony with the rationalistic method, upon the *implications* of this distinction that Prichard would take his stand against subjectivism. Sometimes we see a thing and say: 'It looks or appears so and so.' But then it is always its 'looks' or 'appearances' that we perceive. Hence the subjectivist says that 'it is only appearance that we perceive.' But this is false. Perception is strictly objective. It is direct apprehension of object, and not of appearances. Its formula is: 'Something *is* so and so.' The correct statement of the situation is that "a thing looks or appears so, though we know that it is not so in reality." *E.g.* railway lines look convergent. Now what does this statement involve? It involves, firstly, that there is a real thing which has real characters, that we know its general nature and that the doubt refers only to its details; secondly, as we are questioning an immediate judgment of perception, this fact "presupposes that at least in certain cases such

[1] It is said, however, that it was Prichard who led Cook Wilson to realism, and not *vice versa*.

judgments are not to be questioned, but give us things as they are"; and thirdly, that we understand how our apprehension of objects is conditioned by their (spatial) relation to us as observers, and can therefore determine whether the object is appearing as it is or not. For, in every case, it is the object that we are perceiving, howsoever distorted it may appear. The reality of the object and the objectivity of perception are therefore the implications of all such statements (cf. *Ap.*).

In his *Kant's Theory of Knowledge*, Prichard takes up the question again, and deals with it more in detail. Kant holds that the objects of perception are appearances. This leads Prichard to investigate again the question of appearance and reality. The analysis is substantially the same as given above. But the question is discussed with reference to primary and secondary qualities separately. That the railway lines look convergent involves (1) that what we perceive is *real*; (2) that we know what its general nature is, namely, that it is spatial, and only are not sure of it in detail; and (3) that perception is in some cases of the real *as it is*, that is there are cases in which the objects *look* as they *are*. Similarly the analysis of a judgment concerning secondary qualities, *e.g.* 'Something looks red,' involves (1) that the object of perception is *real*; and (2) that it is *spatial*. It seems to involve also the third implication, viz. that in some cases we perceive the *real* colour of bodies. Prichard admits that the ordinary consciousness with which he identifies his own standpoint, makes the distinction of appearance and reality also in the case of all secondary qualities. But he feels that it is not in the right here. He would however accept the first two implications to maintain the realism of all perception. His reasons for rejecting the third implication, and holding that the secondary qualities are not real but are only subjective and dependent on perception, are the following: "As the history of philosophy shows," says Prichard, "it takes little reflection to throw doubt on the reality of these qualities." It is not possible to hold them objective, because (1) it is impossible to find a principle to determine the right or real

quality; (2) "but also and *mainly*[1] from misgivings as to the possible reality of heat, taste, smell, noise and colour, apart from a percipient....This misgiving is well founded,...these supposed real qualities do *presuppose* a percipient and cannot be qualities of things....No one...who is familiar with and really faces the issue, will maintain that sounds, smells, tastes and sensations of touch exist apart from a sensitive subject. So much is this the case that when once the issue is raised, it is difficult, and *in the end* impossible to use the word 'appear' in connection with these qualities. Thus it is difficult and in the end impossible to say that a bell appears noisy, or that sugar appears sweet. We say rather that the bell and the sugar produce certain sensations in us." "The case of colour," proceeds Prichard, "however, is more difficult...Yet...it must, *in the end*, be allowed, that colour does *presuppose* a sensitive subject *in virtue of its own nature*, and quite apart from the difficulty—which is in itself insuperable—of determining the right colour of individual bodies" (*K.K.* pp. 86–87). He is so convinced of the subjectivity of colour, that he is ready to concede to subjectivism that things may *look* what they never *are*, namely coloured, and thereby in principle to weaken (which he soon realizes, for he changes his argument) and in the end to destroy (which he does not realize, until perhaps later) the value of the distinction of appearance and reality on which he based his case for realism. Now this strong language, and want of any usual arguments, *e.g.* from the relativity of sensa, becomes intelligible only if we remember the peculiarity of the rationalistic method. The subjectivity of the secondary qualities is conceived to be *involved* in their very *conception*; they *presuppose* a sensitive subject in virtue of their very *nature*. In other words, the decisive reason is, as Joseph would put it, that apart from a percipient they seem to have no *meaning*, *i.e.* are not conceivable. Hence also the air of self-evidence the position has about it.

This self-evidence is of the same nature as that which Berkeley saw in the identity of object and idea; and it is

[1] Italics in quotations are generally mine.

based on the same ground and on the same theory of knowledge. Prichard has, under the influence of physical science and the physiological explanation of sensation, so *accustomed* himself to think of colour and other secondary qualities as "effects" produced in our mind by objects that he cannot again assume the natural attitude. For, on his own admission, the natural attitude of man is to hold them objective, and to make the same distinction of appearance and reality with regard to them and with the same implications as with regard to primary qualities. Nor is it due to want of reflection. For, reflective men, indeed philosophers, realists as well as idealists, do not find it inconceivable to believe in their objectivity. The inconceivability which Prichard is implying, is not an objective but a subjective necessity of thought, of the nature to which Hume reduced all necessity. And his appeal to the history of philosophy only corroborates this. For, it shows nothing more than that since *man has started explaining sensation as effects produced in us by external causes, he necessarily conceives secondary qualities as mental*—which is evidently no argument. In fact, this mode of thinking of the secondary qualities is the foundation of subjectivism since Descartes. Nor does it help that this conception lies at the basis of scientific explanations, because, as Cook Wilson indicated, science has thereby unconsciously fallen into the abyss of subjective idealism and no way is left for it to the knowledge of things.

Nor are there any "insuperable" difficulties in setting up such a standard for the secondary qualities any more than for the primary qualities. The ordinary consciousness does invariably set up such a standard[1], and it is this standard which is at the basis of the distinction it makes of appearance and reality with reference to these qualities. And this standard is actually used to explain, and does explain the apparent variations of, say colour, just as the reality of shape explained the various looks of the body—and this practically on the same principles, viz. the laws of optics, *and* the possibility of a case in which the colour *looks* as it *is*.

[1] H. H. Price seems to admit this and yet rejects secondary qualities (see Appendix: Price).

It may further be submitted that, if the reality of colour is untenable, so must the other implications of the assertion of colour be. No exception need be taken to the analysis of ordinary consciousness which Prichard gives. But if its express judgment has been found to be untenable, how can the implications of this judgment be appealed to in favour of realism? They fall with the judgment. *As far as* this judgment is concerned, there is neither something real (non-mental and non-momentary), nor spatial (= in space). If colour is mental, so is the reality which is coloured mind, and this mind spatial. Prichard seems to realize this. For when (cf. *K.K.* pp. 89 ff.) the objection to the reality of things and to their spatiality is based on the case of colour, he does not answer by saying that the reality and spatiality of objects is implied in statements of colour, as he ought to have done if he were sure of these implications. On the contrary he changes front and turns to the nature of the perception of space and the spatial, and uses Wilson's argument to show that the spatial, being three-dimensional, can never be perceived, and therefore can never be merely that which necessarily refers to perception and is mere appearance.

He is thus gradually moving to the position that the apprehension of the spatial is not the function of perception, but of thought or intuition, which is, in fact, from the outset involved in his position that the reality and spatiality of objects are the *implications* of every judgment of perception. For, in the above argument, Prichard says, "It is admitted that we perceive things as they look and not as they are. How, then, is it possible for the belief that things *are* spatial to arise?...Again given that the belief has arisen, may it not after all be illusion?" His answer is that

> From the very beginning, our consciousness of what a thing appears in respect of spatial characters *implies* the consciousness of it as spatial and therefore also as, in particular, three-dimensional. If we suppose the latter consciousness absent, any assertion as to what a thing appears in respect of spatial characters loses significance. Thus, although there is a process by which we come to learn that railway lines are really parallel, there is *no*

process by which we come to learn that they are really spatial. Similarly, although there is a process by which we come to learn that a body is a cube, there is *no process* by which we become aware that it has a solid shape of some kind; the process is only concerned with the determination of the precise shape of the body. (*Ibid.* pp. 91–92.)

So also there is no process by which we become aware of the reality of things (cf. *ibid.* pp. 115 and 294). Evidently therefore the *reality* and *spatiality* of objects are not *perceived*, because perception *is* process. They are, in Kant's language, *a priori* elements of which we are intuitively certain.

Thus it would seem that because Prichard admitted the necessary reference of secondary qualities to perception which made them appearance, he had to remove the reality and spatiality of objects from perception and to raise them to necessities of thought. This may be more in harmony with rationalism. But the reality and spatiality in question have now obtained a necessary reference to thought, and consequently may be again simply ideal, as another species of subjectivism, viz. a so-called objective idealism, maintains. Further the assertion of a necessity of thought or intuition does not make the reality and spatiality of objects really necessary. Realism is not an apodeictically certain doctrine, as it ought to have been if the reality and spatiality of objects were a necessity of thought or intuition. We do not really *know* with certainty that there is an objective world, and that it is spatial. Descartes' doubt was not impossible. The implications of perception may not indeed lead us beyond postulating another spirit which excites sensations in us, with Berkeley, or an unconscious activity of our own self, with Fichte. The reality and spatiality of objects, it appears, cannot be made a necessity of thought or intuition however great a psychological necessity it may be, as Sigwart points out. It may be a very reasonable belief; but it is devoid of demonstrative or intuitive certainty and is not, in the strict sense, knowledge. In fact, even its reasonableness becomes extremely doubtful when once the subjectivity of secondary qualities is admitted. With them also the primary qualities

seem to fall—and with qualities things and their reality. The contentions of Berkeley and Bradley are in this respect more convincing. Distrust the objectivity of perception, as Prichard is in principle doing, and no appeal to processless apprehension, thought or intuition, can save the reality and spatiality of the object.

Thus the subjectivity of secondary qualities makes the apprehension of the primary a mystery; the subjectivity of the special senses makes the tenure of perception in general precarious. The fissure thus wrought in perception—admitting that primary qualities are perceived, undermines the validity of perception altogether—the validity on which the whole case of realism is based, for which Prichard has been fighting[1,2].

[1] It is reported that Prichard no more holds that even primary qualities of objects are directly apprehended.

[2] Norman Kemp Smith's position in the *Prolegomena to an Idealistic Theory of Knowledge* (1924), apart from its metaphysical setting, is more akin to Cook Wilson and Prichard than to Alexander and Stout with whom he connects it, inasmuch as he maintains direct perception and the objectivity only of primary qualities. But he does not hold secondary qualities to be mental. Like Broad following Russell, he regards them as physical effects due to the combined causation of objects and organism which have only primary qualities. They are physical for Broad because they are spatial, though the space in which they are is private space. The private spaces are as it were children of the public space as the secondary qualities are those of the primary qualities (see *Scientific Thought*, chap. XIII). But this is subjectivism or representationism in a broader sense—all that is immediately apprehended is private and only in some way representative of the physical reality. Consequently Smith denies the doctrine of private spaces. Sensa and hence secondary qualities are in public or physical space. But they have been placed or projected there by us. In themselves they are not spatial or extended. In themselves they are mere qualities.

But in what sense then are they physical? As events in a brain, *i.e.* physical effects, they are motions of particles and not qualities. As qualities they are neither in a brain, nor in objects. They are not at all spatial. Their spatiality is an illusion. Thus there seems to remain no sense in which they can be called physical and "constituents of nature." All that can be said is that they are physical because they are conditioned by physical causes. But this is no sufficient ground. Even consciousness itself is thus conditioned.

The factors in Smith's position that all physical events are modifications of primary qualities and consequently also the events in the brain, that these latter events give rise to non-physical non-spatial qualities, namely secondary qualities which are in themselves nowhere, and that the mind projects them into space, suggest but one conclusion, viz. that the secondary qualities are creations of the mind and of the nature of "ideas" or images, to be explained in a manner conceived on the lines of the physical explanation of sensation.

(*c*) H. W. B. JOSEPH[1]

Joseph accepts the standpoint of Prichard's *Kant's Theory of Knowledge* (see *M.* 1910, p. 467); and criticizes Stout as the representative of the school of representationists, of those who hold that the perception of objects is not immediate, but is mediated by subjective presentations. Stout holds that only *presentations* are *experienced*, and that the *objects* are not experienced but are only *thought*. Joseph's contention is that starting from mere presentations, *i.e.* mental affections, we can never reach external objects. No development can change the nature of presentations and turn them into external objects. Even their involuntariness, their relative independence, can at best lead to the assumption of a cause like Berkeley's God, but not to the apprehension of objects in space. We have therefore to begin with the apprehension of things from the very outset. This conception is in no way more difficult than to start with the apprehension of presentations and then to attempt the impossible task of deriving the apprehension of objects from it. For the *apprehension* of presentations is as much a mystery as the direct apprehension of objects. That which is "in the mind" does not by being in the mind become less mysterious to apprehend. In fact, what we apprehend initially is not something in the mind. It is in space, and is independent of being perceived. Perception and thought refer to the same object. "We learn about things by perceiving *them* and by thinking about *them*." In fact, the word "presentation" is chosen by Stout and others "as a half-acknowledged assumption that we are presented with *objects*, *i.e.* there are things in space of which our bodies are some, and that *the things are before us*." But, repeats Joseph, "if we can experience presentations, why may we not experience things? and again, *why may we not dismiss presentations*," which are a mere assumption, and involve us in difficulties. It is matter, and not "presentations," holds Joseph,

[1] The views of Joseph are contained in his three papers on "The Psychological Explanation of the Development of the Perception of External Objects" (*M.* 1910–11) and in a short article "On Occupying Space" (*M.* 1919); also in his lectures on "The Revolt against Idealism" (1920).

which is present to me in consciousness. "This at any rate it is, of which *I* suppose that I get an aspect in presentation." To Stout's reply which attempts to maintain the subjective character of presentations and yet turn them into objects by assuming an infinite subject whose presentations they are, Joseph pertinently rejoins that if so, why should presentations be separated from objects and the former assigned to perception and the latter to thought. "I must urge," says he, "that on such a view what is perceived is the very thing which is thought of: that it is an object in space, not a presentation ...in the mind."

Thus Joseph fully agrees with Cook Wilson and his school. Perception is direct apprehension of spatial objects which exist independently of perception. But he is more consistent in pursuing the method, and carries it further, to its ultimate consequences. It is not only the secondary, but also the primary qualities which have *no meaning* by themselves. They have a necessary reference to perception and must therefore be subjective. And further, only that which can be grasped by thought is really intelligible and therefore real.

Thus Joseph confesses at the end of his second paper (*M.* 1910) that he is not satisfied that space, solidity and magnitude are independent of mind.

In questioning altogether the view that what we initially apprehend is something "in the mind" or mental, I am conscious of many difficulties, for which, at present, I see no solution; in particular I am not happy about supposing that *space* is real *independently of all consciousness*[1]: I do not understand what I *mean* by *solidity*, nor by *what fills space*; nor what by the real *magnitude* of things. Nevertheless I still think that "to be is one thing, to be perceived another," and that, when I perceive I perceive something in space, existing independently of its being perceived; it is a further question, which of its qualities belong to it thus independently, but at any rate the "external object" is not a mere x, that I posit as the cause of "perceptions" in me. Perhaps it may turn out that, though independent of perception, things in space and the minds that perceive them are both so dependent somehow on one real, as to justify us in saying the existence of things is not

[1] Italics mine.

independent of the existence of minds; but it would be still independent of their being perceived by mind. (*Ibid.* pp. 468–9.)

Thus at this stage the two tendencies, viz. realism and rationalism, are in conflict, and Joseph cannot yet decide in favour of the one or the other. Realism makes him assert that the object is spatial and independent of perception; rationalism makes him unhappy if space and spatial determinations are real and independent of consciousness. He hopes to find a third real at the basis of object and subject, perhaps the substance of Spinoza or the subject of Hegel, which may enable him to maintain and reconcile both the theses. But the requirements of the method do not admit of such a reconciliation. A logical difficulty cannot be overcome by any metaphysical hypothesis. The question is: Are spatiality, solidity, magnitude, independent of perception or not? The method demands that the question be put thus: Has, *e.g.*, solidity a necessary reference to perception or not? Has it any meaning without perception? If not, then it is not independent of perception. If yes, then it is independent of perception. In neither case has any metaphysical hypothesis any bearing on the question.

Joseph should have realized this; because he does not anywhere attempt a mediation through a metaphysical hypothesis. On the contrary, he frankly indicates the bearing of the position on realism and draws attention to it in his article "On Occupying Space" (*M.* 1919, p. 339)[1]. In fact the doubts he expressed as to the objectivity of space and the spatial determinations of objects in 1910 remain substantially the same in his later expressions, with the difference that he becomes more and more conscious of their incompatibility with realism.

It was a requirement of the rationalistic method to start from the conception of things in order to discover their nature. Prichard announced this in the spirit of the master,

[1] Indeed he openly admits in his lectures on the "Revolt against Idealism" (1920) that in virtue of it realism breaks down. For, says he, there are two characters of things to which, though a realistic position requires me, I cannot find it intelligible to ascribe any meaning out of relation to a percipient. These are solidity and size or magnitude.

but did not carry it out. However, it did lead him to sacrifice the objectivity of the secondary qualities. As only these qualities were sacrificed, it was possible to interpret the reason thereof in rather a different way (see above). But now, when the primary qualities too are sacrificed, and the fact is not capable of interpretation in this way, one must look more closely into the nature of the method. What does it mean that the secondary as well as the primary qualities have a necessary reference to perception and cannot therefore be independent of it? This must be involved in their very conception according to the rationalistic method. What is the conception, *e.g.*, of colour? How can we *define* it? There is no way to define or conceive these simple elements but with reference to the faculty which apprehends them. Hence apprehension or perception is involved in their very conception. And, as scholasticism held, the conception of an object denotes its essence and essence is its being[1]. Consequently the object cannot be other than what its definition involves. The qualities cannot therefore exist without perception which is involved in their definition. Thus the truth of rationalism demands that one and all the qualities should be dependent on percipience.

It is a further step in the same direction to hold that only conceptions are intelligible. It is involved in the nature of the rationalistic method. In fact it was its presupposition when it asked what the object *means*. It thus asked for its definition, for its concept. And a concept is a universal. Only the universal is therefore intelligible. And the prepossession in favour of the "intelligible" would naturally incline one to ascribe reality exclusively to it. Thus the modern realism of percepts looks like passing over into the mediaeval realism of concepts through the instrumentality of rationalism. Joseph seems, as would presently appear, to have taken this step also, though probably not with full consciousness.

Joseph says that he does not understand solidity and magnitude or size—evidently because they have a necessary reference to perception; but geometrical figure and ratio he

[1] Cf. N. Smith's *Studies in Cartesian Philosophy*, p. 61.

does understand. Now ratio is plainly a concept, a universal. But the figure or contour of a body is something particular. But, as *particular*, it necessarily involves the apprehension of magnitude, and magnitude has been declared to be unintelligible. How therefore can Joseph say that he understands figure? In fact, it is not the particular figure of this or that body, which he understands, but the concept figure, the geometrical solid, "*to the nature of which size makes no difference*[1]" (*O.S.* p. 338). And although he understands geometrical figure and ratio (the relation of magnitudes), he does not understand space, which is their presupposition, because space is not a concept—is not a universal, but an individual[2]. His remarks on movement now become intelligible. He is puzzled by the movement of a solid body, but he understands the change of place of a geometrical figure or solid. On the face of it, it looks paradoxical, because it is exactly the geometrical solid which seems incapable of movement. But if we take the geometrical solid to be a concept, a Platonic idea which appears now here, now there, the difficulty is removed. As such it is intelligible, and not a spatial entity. Consequently the absurdity of a part of space, moving in or occupying another part of space—thus it was that Joseph conceived the movement of a solid body—does not occur in its case. Joseph is evidently thinking in terms of Plato's idealism. He does not make any secret of it. Indeed he quotes Plato at length and claims Plato's authority in support of his contentions.

This development throws a serious doubt on the validity of the rationalistic method. "Dogmatism," or the procedure of arguing "from the conception" of a thing, does not seem to be the true, much less the only, method of discovery. At least it is not compatible with realism. Joseph has the great merit of being a consistent thinker. His thought brings out the implications of the method fully. His results are the logical consequences of rationalism. All that remains of the object is nothing more than an x, a Ding-an-sich, a bare

[1] Italics mine.
[2] Similarly he admits that time too is unintelligible.

existent, which thought posits as the ground or cause of percepts, while all that perception reveals of its qualities and characters has been eliminated.

But concepts or universals are not *really* intelligible *by themselves*. Take the concept ratio or figure. We do not really understand it if reference to empirical magnitudes were *completely* eliminated from it. The concept seems to be, as Kant expresses it, empty without a percept; the universal seems to be a mere word without the individual. It was the great merit of Kant to have brought this homely truth home; and whatever we may have to say of his metaphysics, if he had any, his theory of knowledge is not quite invalid and seems to contain truths of fundamental importance. The percept or the individual *is* intelligible, at least because it makes the concept or the universal intelligible. Intelligibility in the wider sense cannot therefore be restricted to conception, to the exclusion of experience and perception. In one sense, the individual is *not* intelligible, because it *cannot* be reduced to concept. But there is no reason to restrict the term to this one sense. *In a wider sense*, whether this sense agrees with the trend of rationalism or not, all that is ultimate—and percept or individual is such—is intelligible to us, as Prichard reports Cook Wilson to have held (cf. *P.* p. 306).

Nor is there any reason in favour of the position that only the intelligible, in the narrower sense, namely the concept, the universal, is objective, and that the percept, though individual, must be subjective. On the contrary, it is the independent existence of the universal, which the human mind finds difficult to grasp. This is why Plato's world of ideas has always tended to become a world of particular ideal existences.

The rationalistic argument that the conception or rather definition of percepts, *i.e.* of qualities of objects, involves a necessary reference to sense, and therefore the percepts must be subjective, seems to be based on a questionable hypothesis of a metaphysical nature. Reality is conceived as a system of concepts (and not of existents) and to define things to reproduce parts of this system. Howsoever it be, it is clear that

all ultimate elements in our experience are definable, if at all, only with reference to our faculties. We cannot in truth define them, *i.e.* analyse their objective nature, simply because they are ultimate. What we do is only *describing* them through an accident which is *inseparable so far as we are concerned.* This accident is their being objects of this or that faculty of ours. Hence the so-called "necessary" reference to our faculties. But this reference does not indicate the nature of the object. The object is not therefore dependent on the faculty cognizant of it for its *existence*; only the *knowledge* of it is so dependent. Otherwise not only will the qualities of physical objects be dependent on our perception, but also the universals will have to be made dependent on our conception, because, like the former, they too are ultimate elements of our experience and can be defined, rather described, only with reference to the faculty cognizant of them, namely, conception or thought[1].

§ II

NEO-REALISM

ALEXANDER, HOLT, RUSSELL

The rationalistic method of Cook Wilson and his school tends, as we saw, to eliminate the qualities of the object one by one by denying reality to its appearances or sensa, until we are left with the mere assertion of its existence. We now pass to a school of realists whose method is outspoken empiricism. It is the turn of the appearances or sensa now to have unmitigated reality, and of the object to be eliminated. This school may distinctively be called "neo-realism" or "new realism," because it neither resembles the old realism of philosophers, nor the age-old realism of the common man. The common thesis of this school is that *all sensa are real.* Alexander, Holt and Russell are its chief representatives. Alexander influences Holt, and Holt influences Russell. The ways in which they try, one after the other, to maintain their

[1] Joseph is now more and more dissatisfied with realism, and consciously moving towards idealism.

thesis, show the features of a dialectic development. Alexander tries to keep sensa percepts and in objective space. This does not succeed; the sensa conflict. Holt turns them into concepts and roundly puts them into another realm, the realm of "neutral" or conceptual entities. But this clashes with the very nature of sensa. Russell keeps them percepts like Alexander, and puts them in another space like Holt—though not in the neutral one of Holt, but in the private spaces of individual percipients. Sensa do not conflict any more. The difficulties of the neo-realistic position are thus overcome. But realism now passes over into its opposite; it is hardly distinguishable from subjectivism.

The over-emphasis on the sense-side of experience inherent in empiricism leads them all to a materialistic metaphysics. Alexander resolves the universe, matter and mind, subject and object, into the form-elements of sense—into point-instants; Holt and Russell reduce them to the content-elements of sense—into sensa. Thus the elimination of the subject takes a clearer form in the latter, and Alexander feels attracted to throw in his lot with them.

The synthesis of rationalism and empiricism, of the reality of object with the reality of sensum, as it is working itself out in Moore, we shall meet in Section III.

(*a*) S. ALEXANDER

In Alexander a thoroughgoing metaphysician comes to the task of realism, one who is, as Bosanquet says, "learned in all the wisdom of the Egyptians." Taking his cue from Moore and the distinction of act and object in perception (cf. *M.* 1921, p. 421), he starts thinking on the nature of knowledge, on the motives of idealism, and on the requirements of realism; and ends with giving a comprehensive realistic theory of the universe.

The spirit of idealism is to over-estimate the mind and hold the subject as all in all, and to under-estimate the thing, the object, to make it an appendix to mind. It is this which realism has to fight. The spirit of realism therefore is to assert the independent reality of the object and to bring the subject

down to the level of the object, to show that the mind is a thing among other things, without any prerogatives (*B.R.* § 1)—to show that if we have to choose between the two, it is the object which is primary, substantial, independent, and the subject which is secondary, adjectival, and dependent (*ibid.* § 9). In comprehending reality we should therefore start, not from the side of the subject, as idealism does; but from the side of the object. We must start with observation, experience, perception, not with thought. Empiricism and not rationalism is the true method of metaphysics as of all science[1].

Realism therefore in order to maintain itself must deny the propositions on which idealism builds, or in which it originates.

What are these propositions? We may perhaps make here the distinction of subjective and objective idealism, though, as a rule, they pass into each other, as Alexander points out in the *Basis of Realism*. Subjective idealism builds on the conflict of sensa—the same object having conflicting appearances, and hence concludes that none of them is real and all of them are psychical (*S.-T.* II, p. 185). Further, in the case of organic sensations (feelings) it finds that the sensa cannot exist without the percipience. Hence this is the nature of all sensa (*ibid.* pp. 171 ff.). It starts from the side of ideation, and explains perception as a case of it, viz. maintains that the world is a dream. That is, it bases its case on the mentality of ideas and images and the continuity of image with percept (*ibid.* p. 139; *A.* IX, p. 43). It should therefore naturally hold concepts to be mental, and this carries with it the conclusion

[1] Alexander is a metaphysician. As such, his problems are concerned with the nature of ultimate being and how this universal nature specifies itself into the various departments of existence. Consequently, the subject-matter of his inquiry is essentially non-empirical, *a priori*, as he admits. But the *method*, he contends, is *empirical*, because it is actual existence with which he is dealing, and this is known to us through *experience*. *Thought* is as much experience as sensation. *Description* and *analysis* of the facts experienced is the method of empirical science. This is the method of philosophy too.

The spirit of empiricism comes out in Alexander in his finding the ultimate reality in Space-Time and maintaining the independent reality of all presentations.

that all the elements of reality (for which the concepts stand) are mental (*A.* IX, p. 17). Realism must contest all these positions and show that no sensum, no feeling, no image, and no concept, *i.e.* no object of any kind whatsoever, is mental. They are all non-mental, and exist independently of mind.

But there are still some propositions on which, though not the subjective, yet the objective, idealism builds. One is that thought is the measure of reality (*S.-T.* II, p. 371). This is the false assumption of rationalism. Another is that the problem of values gives the clue to the nature of reality. This assumes that reality constructs itself according to our requirements, our likes and dislikes; and so, as with Kant, makes it our construction (*ibid.* p. 314). Realism therefore must show that value is not an *a priori* but an *a posteriori* character of reality, that it is a human construction or an empirical arrangement. But the real foundation of objective idealism lies in the doctrine of self-consciousness. Trained in the idealistic atmosphere of Oxford, Alexander lays his finger on the right place, and penetrates to the heart of the problem. Since Reid, every realist had been finding the source of the trouble in the doctrine of representative perception. Even Moore, though he touched upon other characteristic doctrines of idealism (*e.g.* the unity of the world, identity in difference, etc.), took "esse is percipi" to be the stronghold of all idealism. But, says Alexander, one cannot say which of these two doctrines—the doctrine of representative ideas, or the doctrine of self-consciousness—"has worked the greater havoc" (*B.R.* § 3, p. 283; cf. also *A.* IX, specially p. 39, and *S.-T.* II, p. 332).

It was on this doctrine of self-consciousness that Fichte laid the foundation of the post-Kantian idealism. It is through this doctrine that the Hegelian dictum "Das Wahre ist das Ganze" charms the metaphysician, because "das Ganze" could be shown to be "der Geist." And it was with this doctrine that Green unfurled the banner of idealism at Oxford; and it is to this doctrine that Bosanquet subscribes against Alexander in *The Mind and its Object.*

This doctrine therefore must be attacked. It ought to be shown to be false; and a correct account of the nature of self-

consciousness substituted in its place. This Alexander attempts, and the substitute which he offers he naturally sets great value on, and calls it his contribution (cf. *M.* 1921, p. 419).

The doctrine in question is that in self-consciousness the mind makes itself its own object, yet it distinguishes itself from its object, and stands over against it. It is a "self-distinguishing, self-objectifying" self-consciousness. From this idealism draws a number of very important conclusions. For example, (1) That mind is capable of breaking itself into subject and object. Hence in it we have a unity out of which the empirical duality of subject and object, mind and body, can be developed. Objects therefore are the mind in its self-objectifying capacity—the mind as going out of itself; (2) Yet the objects remain in the mind, as parts of it. For, in self-objectification, mind keeps itself to itself and does not let itself go wholly out of itself; (3) Mind therefore is a whole containing both the subject and the object in it—objects being only fragments in this whole. Clearly these are results sufficiently repugnant to realism. But when the emphasis is laid on the self-distinguishing aspect of self-consciousness, conclusions are drawn which are, if anything, still more repugnant. For, then, *e.g.*, (4) Self-consciousness is, as such, never an object. It is always subject, over against objects; (5) It is this that relates the objects and in relating gives them their constitution: "the understanding makes nature," as Kant would say. Consequently, (6) Itself, it is above those relations and laws which it gives to the object. It is therefore absolutely free.

Now, as will be readily seen, realism is interested in holding positions diametrically opposed to all these theses—realism as Alexander conceives it. Namely, that (1) the object is not mind nor an aspect of it; (2) it is independent of mind; and (3), it is no part of which mind is the whole. Further (4) mind is a thing among other things, without any special prerogatives; hence (5) it is related to objects as objects are related to each other and is subject to the same laws to which they are subject; and consequently (6) it is no more free than any other thing is free.

The substitute which Alexander offers for the idealistic doctrine of self-knowledge, consists in his doctrine of "enjoyment" and "contemplation," which will occupy us later.

The same realistic motive which was active in overthrowing all the characteristic doctrines of idealism, we find working in Alexander on the constructive side. The negation of the pretensions of the mind has its positive aspect in the affirmation of the reality of the object. *The* real is to be sought, not on the subjective but on the objective side. Thus realism, when it passes over from the question of knowledge to that of being, from epistemology to metaphysics, is bound to become a form of materialism. And this we find fully corroborated in Alexander's metaphysics.

Realism therefore starts from the object-side—what is first in the order of objects, and being metaphysics from the *a priori*—the universal object of which all else is a development or modification. Such original stuff of reality was to the ancients and in the modern classical conception of physical science, matter and motion. But after Minkowski, Einstein, Lorenz, etc. (see *S.-T.* I, p. 58) it should be space-time (Ortzeit). Yet, contrary to the doctrine of some of these physicists, *e.g.* Whitehead, space and time, being absolute reality, must be conceived as absolute and not relative. But space and time are not two entities. They are one indivisible unity. There is no space *and* time; there is only one space-time. As such it is motion, pure motion, and the matrix of all being. Everything else is only a modification of space-time, a mere quality of which the substance is space-time. Materiality, the so-called secondary qualities, life, mentality, are all empirical characters of this original stuff. Thus mind is not a substantial existence over against the objective reality, as idealistic metaphysics would have it; it is only adjectival to this reality. The only true substance is space-time. In fact, mind is nothing but a mode of motion—motion which is space-time. Space-time, this motion, develops itself into a certain complication, and a new empirical quality arises, viz. materiality. This complex of motions develops itself into a still complexer form, and again a new empirical quality arises, viz. sensibilia

("secondary qualities"). This latter complex similarly takes a new form, and the new empirical quality of life arises. This last complex develops itself into a more intricate complex, and the new empirical quality of mentality arises. This is what is called mind. It is the latest mode of space-time; its peculiarity consists in this that it is awareness, and in nothing more. All else that is referred to it as peculiar and *sui generis*, is common to it and to the other empirical existents. *E.g. knowledge* is not a peculiarity of mind. It is the most universal relation of compresence between the empiricals. In knowing, the mind "enjoys" its own activity and "contemplates" the orders of qualities below it. Every one of these qualities has, like the mind, both the aspects of "enjoyment" and "contemplation." It has an existence of its own and an activity, which it lives. This is its "enjoyment." And it is related to the orders below it. This is its "contemplation." The lower is the "body," the higher the "mind" in each case. Nor is *freedom* a prerogative of mind. Every being is free in its own self, *i.e.* so far as its activity is determined by a part of its own. Like the mind it lives in self-activity, it "enjoys" its freedom. Nor is the domain of *values*, the activity determined by ideals, a preserve of mind. Values are nothing but adaptation to specific surroundings, which is clearly traceable in organisms, and, Alexander thinks, is also the law of the life of lower orders of qualitied empiricals; because he conceives the whole development from the lowest to the highest to be governed by the mechanical principle of natural selection.

The mind of idealistic metaphysics receives a further blow in Alexander's theory of religion. After the blows it had already received, it could hardly be doubted that its idealistic rôle of being God Himself in me and in you has become quite inconceivable. There is no such universal mind, but only finite minds which we know by experience. But there is no room in Alexander's theory even for a more moderate and theistic idealism. The mind, the soul, is only a modification of the next lower empirical reality, viz. of cerebral activity. With cerebral activity it must pass away. Immortality, as life after the death of the body, is altogether inconceivable.

And God, or gods, what could he or they be? Clearly empirically we do not know such a being, while all arguments to prove his existence have long been seen to be untenable. In fact the ultimate reality is only space-time. All else is only an empirical modification of it. If there be a God, he too must be a modification of space-time. As such, Godhead should be a quality, a higher quality than mind. This quality is to be named Deity. We do not know if it exists. But if it exists, we cannot know it. For, according to Alexander's principle, the mind can only know qualities lower than itself.

In this process of levelling down and minimizing the mind to a mere act of enjoyment, there remains only one more step to be taken; viz. that of denying its distinctive existence altogether, and of passing over to a behaviouristic theory of its nature. This is the most earnest problem that is weighing on Alexander (cf. *M.* 1921, p. 419, and 1922, p. 11); because on the one hand it seems to lie so directly in line with his thought, and on the other, if taken it will most vitally affect his system.

We may now consider Alexander's theory of knowledge. He himself describes the situation thus:

> The experience of this relation (the relation of knowledge) of knower to known declares that mind and its object are two separate existences connected together by the relation of togetherness or compresence, where the word compresence is not taken to imply existence in the same moment of time, but only the fact of belonging to one experienced world. The mental partner is the act of mind which apprehends the object.... The object is what it declares itself to be, square, table, colour or the like....

This statement means

> that the object of the mental act is a distinct existence (or subsistence) from the mental act.... But the intent of the proposition is not merely to assert the independent existence of the object, which is therefore non-mental, but even more to assert that mind is also a thing existent side by side with it, itself one of the things which make up the universe, and one of a number. This is the harder part of the principle to realize, and perhaps the more important. It is best realized by contrast with the doctrine that the mind apprehends itself and things alike, being as it were spectator both of the me and the not-me.... Now experience tells us that the

mind does not experience itself as an object, but lives through its own self...the objects of which it is aware are distinct from its awareness, the self of which it is (said to be) aware consists in its awareness.

This is what is meant by saying that in knowing the mind "enjoys" itself and "contemplates" the object. But

our compresence with physical things, in virtue of which we are conscious of them, is a situation of the same sort as the compresence of the physical things with one another. To recognize that my consciousness of a physical thing is only a particular case of the universal compresence of finites is in fact the best way to realize the analysis which has been given (*B.R.* § 3).

In other words, an experience, say by way of perception, directly attests:

1. That the object as such is an independent non-mental entity, known through "contemplation";

2. That the percipient too is an existent alongside the object. This is known through "enjoyment" of its own being, and not through "contemplation";

3. That the relation between the two entities, "enjoyed" and "contemplated," is merely that of compresence, just as is the relation between the table and the floor. That compresence is knowledge in the former and not in the latter case is due to the difference in the nature of the terms in the two, and not to any difference in the nature of the relation itself[1].

Now in all these propositions Alexander has his foot on solid ground. The first contains the important truth that reality reveals itself directly in perception and in knowledge. The second is based on the fact that the nature of the knowledge of object and of self is fundamentally different. And the third expresses the fact that knowledge does not modify the object. All these are truths of the greatest importance to realism. But the form Alexander gives to his propositions and the unrestricted universality in which he maintains them, call for careful examination and criticism.

[1] It may be noticed that Moore in his *Nature and Reality of the Objects of Perception*, 1906, propounded the view that the relation of the object and percipient is a spatial one, is of togetherness in one space, just as the relation between the table and the floor, cf. *Ph.S.* pp. 70–71.

According to Alexander *all* objects of knowledge whatever they be are non-mental and independent of the mind; sensa, images, concepts, no matter what they be. They are all real and aspects of reality.

From the very outset this thesis involves Alexander in the difficulty that the mind can never be an object to itself, can neither observe nor imagine nor conceive itself. Consistently therefore he cannot at all talk of mind, and hence of knowledge, and consequently also not of object at all. But the consideration of this difficulty may perhaps better be taken with his second position, viz. that concerning self-knowledge.

Waiving the question of concepts, *i.e.* of universals, which Alexander went at first so far as to call physical realities (*A.* IX), and then explained his meaning to be that only the concepts of physical things are physical, though all concepts whatsoever are non-mental realities like Plato's ideas, having existence and not only validity (*A.* X), he at last accepts the more moderate position of Meinong, that concepts as such have only subsistence and not existence, that they attain to existence only in particulars (*S.-T.*)—let us consider the case of sensa and images. They are not only non-mental and real, but they are all physical.

That images are physical objects is a position which can hardly be claimed to be a dictate of direct experience. Nothing can be more astounding to the unsophisticated man than that his images have a physical reality. Alexander is depriving mind of its most private possessions. He therefore falls back on the assertion that it is a question of metaphysics. In other words, it is on principle that he asserts the physicality of images—the principle that *all* objects must be placed outside the mind in order to secure thought against the pitfalls of idealism, and the mind reduced to mere acts which it enjoys. As in perception, so in ideation, it is according to Alexander the reality itself which is revealing itself to us. It is the real itself that we are apprehending. The difference of sensa and images is one of the modes of the real. The aspects it presents to sense are sensa, and the aspects it presents to ideation are images. In perception it directly affects us, is

present to the mind, and, so to speak, thrusts itself upon us; in ideation, it affects us indirectly, in fact, the mind goes out to it, it is not present to us. The difference of the two kinds of apprehension is like that between apprehending an object in front of us and another behind our back which we have to turn round to apprehend. Even when we apprehend an object in ordinary perception, we apprehend both these modes of its being. Part of the object is apprehended by sense, and part by ideation. I sense only the colour and form of the table; the rest, *e.g.* weight, smoothness, etc., I ideate. One part of it is revealing itself to me in the mode of sensum, the other in the mode of image. Both are its constituent parts. In representative imagination[1] it is not a representation of the object which I see, but the object itself in its ideational mode of being. The image is the object itself, and not its substitute or representation. The memory-image, again, is the object itself, but as past; and not a picture of it, made by me. In expectation again it is the object itself, but as future; and not a representation of it. In fancy, dreams, and constructive imagination, it is not that we are creating something which does not exist. All the elements of these constructions exist in the real physical world, in the ideational mode. What we create is only a new combination of these already existing real ideational elements; just as we do in constructing a machine or in any other practical activity with sensible elements.—This view of images seems to be a very good evidence of the lengths to which Alexander has been led by his extreme realism. The plain fact seems to be that images and ideas are mental existences and have a representative character. If idealism took its cue from the representative character of images and their mental existence, and reduced reality to mere ideas, that is no reason to fall into the opposite extreme and to deny that images are mental and of representative character, and put them on the same footing with sensa. The real issue between idealism and realism is over the nature of sensa. That sensa

[1] Alexander does not deal with the case of representative imagination. But the above account is a fair representation of what he would say. See, however, *A.* x, pp. 162 ff.

and images are continuous, is true. But this they must be if images are to serve as representatives, of which the sensa are the originals. The very fact of knowledge assumes continuity of some sort between the two terms of the relation. Extremely separated as they seem to be in his theory, Alexander has to reinstate this continuity by holding that the activity of the object passes over into the self-enjoying activity of the subject in sense-perception. Yet, the one remains physical and the other mental. Why should not the same be the case with sensa and images?—Now what picture should we form of a thing on this theory of ideas; say of a tree? It is a definite physical object, occupying a definite position in space and in time, composed of material particles, acting and interacting with other physical objects. So far as its sensible mode of being is concerned, Alexander would agree. But now let us add to it its ideational mode of being, its appearance to representative imagination, to memory, and to fancy. In this mode, too, it seems to be in space, to have a form, etc., and according to Alexander, it is physical. Before it came into sensible existence it was an object of expectation; now during its sensible life it is an object of representation; after this life it is an object of memory. So in its ideational mode, it exists in the whole of time. Again, as an object of representation and constructive imagination, it may fill the whole of space; and this in the whole of time. Thus if it is a physical object in this mode, no room is left for any other physical object whatsoever. Consequently, on Alexander's theory of images no other physical object than this tree has existed or will or can exist! To reply as he does (*A.* x) that images may be physical and occupy space without displacing other objects, like secondary qualities, is not open to him. For, according to him, the secondary qualities, no less than other "qualities," including consciousness, do occupy definite portions of space: and *e.g.* the colour and the softness of a body are in different portions of the space of that body, each being a definite part of the motion of which the body is composed (cf. *S.-T.* I, p. 275). And does the tree in the mode of image interact with other physical objects, or is it made of material particles, governed

by physical laws, as Stout asks? (*A.* IX). Alexander's reply does not seem to touch the point. He only points out that, *e.g.* in dreams, we should apprehend it as doing so (*ibid.* X). But the question refers not to what it seems to be in dreams, but to what it actually really is and does. One may further ask: Why is it that I apprehend my images as occupying space, but I cannot touch and handle them? For, even according to Alexander, it is through touch that we apprehend the physicality (materiality) of an object. If therefore images are physical, their physicality must reveal itself to touch. Yet they seem to evade apprehension by it. And why is it that they do not become objects of common apprehension, *i.e.* public objects? It is the very mark of a physical reality that it is an object open to the gaze of all. But the images seem to be eminently private property. Alexander, no doubt, makes an attempt to make images public property. But his account goes only so far as to say that with the help of common sensa we can construct similar images, and no further. They still remain private to individuals. For we never have the same certainty of common apprehension about them, as we clearly have with reference to objects of perception and of thought. Moreover, if they are physical objects, which have a being of their own, it is a fair question to ask the whereabouts of their abodes. There seems to be no room for them in the objective space and time. Perhaps a new, an ideational space-time must be instituted to hold them. And that would be, when carefully considered, an imaginary space-time after all. With regard to fancy or constructive imagination, though it may be true in a sense that all the elements of its constructions are there in the real world, yet there remains a difficulty. Imagination is a sensuous mode of apprehension and can work only in a way natural to it. Colour and form make a simple unity for sense and imagination. Thought may dislocate them—but then they are not sensa or images, but concepts; sense and imagination cannot. How is it that an image may have the colour of one thing and the form of another? Further, how can it be multiplied into a hundred images? The number hundred may "exist" in the

world; but it does not exist by itself as a physical reality to be added to the image, as in a mechanical whole one part may be added to another. According to Alexander, in constructive imagination we are dealing with ideational elements, just as in practical activity we deal with sensible elements. We cannot take the colour of one thing, and the form and volume of another, and the number of still others, and bring them together to form a new thing.

Alexander's account of memory deserves a closer consideration. In memory, according to him, it is the images themselves which are objects of the mind. The image is the past event or the thing itself in its ideational mode of being. It is distinct from its appearance in representative imagination in this that it has, so to say, a mark on its face which indicates its pastness. Memory is the apprehension of the event or thing *as past*. A curious conclusion seems to follow, that is, whether an event has been experienced by someone or not, and if experienced, whether it be remembered or not; all the same, it exists as a memory-image somewhere in the depths of real space. The question arises, why is it not apprehended directly without the intervention of sense-experience? Why should sense-experience be the pre-condition of memory-experience? On Alexander's principle there seems to be no answer. To say, as he does, that in sense the object directly affects us and in memory indirectly, would imply that the indirect influencing can take place only through the mediation of the direct. But this is exactly the question, why the memory-images influence us only indirectly, viz. through the mediation of sensa. In fact, on Alexander's principle, both kinds of apprehension and both kinds of objects are direct; and no satisfactory reply can be given to the question why the ideational mode of the being of an object (memory-image being one example of this mode) cannot be experienced directly without the mediation of sense-experience. Now there is in this account of memory the denial of a fact which seems to be plain to the ordinary man—namely, the fact that the memory-image is not the past event or thing itself, but only a mental representative of it, which is the vehicle of our

remembering an object that no more exists. But what Alexander's account further involves is that the object still exists; but it exists only *as past*, and in the ideational mode. To say that it still exists, but exists as past, seems to be equivalent to saying that it is actual and is not actual. What evidence can be given for the present existence of a past object? In reply Alexander refers to cases, *e.g.* of inheritance, which are not cases of the preservation of the object itself, but of its effects. And though the effect may be nothing other than the cause itself in a new form, as Alexander holds, yet it is in a new form and is a new thing and not the old thing to which the question refers. Then these past events somehow still existing in the ideational mode of their being, would be rather strangely active entities. For the sign of pastness which they carry on their faces must be of a definite past; and as the past recedes more and more every moment of time, these entities must be incessantly busy in modifying their signs. And yet, when we take the case of a substance and not of an event, the sign of pastness which attaches to the memory-image seems to be the sign of the pastness rather of the mind's apprehension of it in sense. Or is it throwing out, every moment of its life, ideational modes of its being with the shifting signs of pastness on their face?

As to sensa[1], the immediate objects of sense, their conflict

[1] To this class belong, for Alexander, also feelings. The higher feelings are a complex of the lower, and the lower, *e.g.* hunger, thirst, etc., are sensa. They are appearances of the living organism. That these feelings are sensa of body, are objects and not modes of the mind (subjective) is clear from the fact that they are perceived as located in a body (*S.-T.* II, pp. 122–5). Now as a retort to subjectivism one can understand these statements. Subjectivism takes organic sensations and assumes that they are feelings and therefore modes of mind, and hence also that similarly all sensations (sensa) are modes of mind. Alexander retorts by accepting the premisses and denying the conclusion. Organic sensations are feelings, but because they are located in body, they are not modes of mind, but of body. Hence all feelings are modes of body, existing independently of the mind.

But if organic sensations are feelings, whether located or not, the conclusion is inevitable that they are modes of mind. For no sense could be attached to the assertion that a feeling can exist without someone to feel it, or rather without being the mode of a feeling, conscious agent. It simply cannot be conceived to be existing by itself in a "cosmic reservoir" and "from time to time drawn into individual experience" as Nunn would have it (*A.* x, p. 196). The question, on the contrary, is, whether organic sensations are mere feelings, as the statement

is the strongest argument of subjective idealism—because the same object appears now thus and now thus, it is neither. The argument denies all objective validity to sensa and makes them modifications of consciousness. Realism in Alexander takes an equally extreme form as to the status of sensa. They are *all* objective. They are appearances of the things themselves. The thing is the whole containing all its appearances as its parts. This would seem to deny all possibility of mistake in sense-perception. According to Alexander, in sensa of course there is no mistake. They are all objective, they are in space. The possibility of mistake lies in the percipient, in his wrong reference of sensa to this or that thing. Alexander therefore divides sensa into three classes: real appearances, mere appearances, and illusions, corresponding to a thing as a unity in itself, a thing in inter-relation with other things, and a thing in relation to the organism or mind of the percipient. If the appearance of the thing is not interfered with by other things or the percipient, it is real and is contained in the thing itself; if it is interfered with by other things, then it is the mere appearance of the thing in question, though a real appearance of the complex object made up of the things in relation; if the interference comes from the side, not of the things but of the mind, then this is the case of illusion—a mere appearance as referred to the thing, but a real appearance of the complex made up of the thing and the mind.

I see a coloured surface. From near, it is bright. But as I

implies. The organic sensations are, in this respect, on a par with special sensations of the lower kind, viz. taste and smell. In all of them, besides feeling, there is an element of cognition (of quality and localization). These two elements, one subjective and the other objective, are so mixed together and so hard to separate, that the whole can be mistaken for an instance of mere feeling. This entanglement of the two elements suggests the hypothesis that feeling and cognition proper are perhaps the differentiations of one mental "Urphänomen." The organic sensation seems moreover to indicate that the stage of animality is the stage of feeling, and therefore of a degree of consciousness. In man, this stage is retained, but the consciousness has risen to a higher stage and can look upon the lower stage and its states as objects. All the same, the feeling still remains a mode of consciousness. Whatever reflections of a metaphysical nature the mixture of feeling and cognitive elements in organic sensation may suggest, the business of analysis however is to distinguish the two and to assign them to their proper places, and not to draw far-reaching conclusions by neglecting the one or the other.

recede from it, it gets dimmer and dimmer. So also, *mutatis mutandis*, a sound, the warmth of a body, its size, its form. In all these cases the appearance of the objects changes, though there is no interference from the surrounding bodies, or the perceiving mind. For every normal seer apprehends the same changes in the appearance of the thing, and the only difference in the objective conditions of apprehension consists, not in any interference from surrounding things, but only in our distance from the object. These appearances are all of the object and in the object itself. Their difference consists in this, that some of them are appearances of the whole object, and others only of a part of it. The mind from a distance selects only a part of the object. Yet the part is contained in the whole, and hence its appearance is as objective, physical and real, as that of the whole. It should be noted that, though Alexander is asserting the complete objectivity of all appearances, and thus, with Nunn, preparing the way for the American new-realists (*A.* x, p. 193, note; *N.R.* p. 303), he is not making the thing a mere collection, or in the language of Russell, a mere class of appearances. For him the thing is a substantive existent with definite contour in space-time, and with definite properties. The appearances are the thing itself, revealing itself to us. Hence it is that he has to give an explanation of the differences in its appearances. If his explanation could be made to fall in line with facts of experience, there could be no better way to silence the subjectivists. But on closer examination it is hard to maintain its validity. It does, of course, explain the various appearances of the same thing from the same distance, as different perspectives of the thing from various sides. But with the change of distance, enter the changes of intensity and size; and neither the change in intensity nor in size can, as Stout was not slow in pointing out (*M.* 1922), be explained as the partial appearances of the thing. The intensity of the colour or of the sound of an object cannot be conceived as made up of all the lower intensities, and the lower intensities as parts which it contains in itself. Every intensity is a simple indivisible unity. The same is true of size. The size of a thing

is not made up of all the possible smaller sizes, which could be taken out of it as its parts. In fact, when we see a plate from a distance, we see it, of course, smaller, but we see the whole of its size and not a part of it.

Seen under a microscope the appearance of the size of the object is larger. The appearance of a man before the mirror is behind the mirror. In water the appearance of the stick is bent. In haze the colour of the mountain is different. These are all cases of "mere appearance." They are mere appearance, because the real size of the object is smaller, the man is not behind the mirror, the stick is not bent, the colour of the mountain is not thus different; *i.e.* as far as the appearance is referred to the single object and not to the complex. For, in fact, they are real appearances of the complexes, the object-under-the-microscope, the man-before-the-mirror, the stick-in-water, the mountain-in-haze; and are objective.

In asserting that these are real appearances of the complex objects, Alexander seems to be thinking that an object by entering into a complex has developed itself into a new thing with new qualities. It may then have a new colour, a new size, a new form, etc. And so when taken in the abstract, his explanation, which amounts to asserting of mere appearance that it is not mere appearance, but is real, seems plausible. But if taken concretely and applied to various cases, it does not work. For example, what meaning can be given to the statement that the size of the object-under-the-microscope *is* as large as we see, or the man-before-the-mirror *is* behind the mirror? Nothing but that the object *really* looks larger or that the man really looks to be behind the mirror. But it or he only *looks* to be so. It or he is not *really* so or there. In other words, the appearance still remains *mere* appearance. The *actuality* of mere appearance Alexander seems to have taken for its *reality* instead of accepting the distinction of mere appearance and reality. A mere appearance is actual, is a fact, but is not therefore reality. In asserting the reality both of real and of mere appearance, the motive power seems to be the fact that the appearances are grounded in reality, in the nature of the thing, and are therefore objective. But

they are objective in quite a different sense from that in which Alexander takes them to be so. They are objective in the Kantian and not in the ordinary sense of the word, while it is the latter which Alexander means by their reality[1].

The case of illusions is, *mutatis mutandis*, the same as that of mere appearances. Only the interfering influence comes from the perceiving mind, instead of from the surrounding objects. The illusion is illusion, only if the appearance is referred to the object immediately present. But it is a real appearance of the complex of mind and the objects. Now the case of illusion is in so far different from that of mere appearance that it is not objective even in the Kantian sense. It is not grounded in the universal nature of mind or in the nature of things. It is totally subjective, a peculiarity or an accident of the percipient. In what sense is it then the real

[1] Turner, who in his *Direct Realism* accepts Alexander's position, makes an attempt to improve upon Alexander's explanation of "mere appearance." According to Turner mere appearances are cases either of reflection or of refraction. In both cases they are physical entities. Only they are "*duplicated*" or "*dissociated*" qualities of objects; and qualities of objects may be dissociated "spatially" as well as "temporally"—indeed, says Turner, all "sensed-contents" are more or less temporally dissociated qualities (p. 80).

The conceptions of duplication and dissociation are probably suggested to Turner by the neo-realistic thought of America (cf. below, section on Holt). But duplication and dissociation are terms which, when used in connection with *qualities*, seem to have no meaning. For, a quality, as duplicated or dissociated, obtains a being apart from the object—it is conceived to exist by itself; and this it can not.

Of all the modern realists, Turner comes nearest to the standpoint of this book. But he parts company with naïve realism when he comes to its third thesis. No doubt he accepts the distinction of normal and not normal in "real appearances," and holds that the normal ones are true and real in the final sense (p. 84). But he refuses to make those which are not normal, appearance. For, he thinks, it is inconsistent on the part of naïve realism to make the former real and the latter unreal. The apprehension of both, contends he, is determined equally by physical causes; we have no right to pronounce one set real and the other unreal (p. 72).

But in spite of this contention, Turner himself makes a distinction between them. He himself maintains that the former are perfectly identical with reality, and the latter imperfectly—that the former reveal an aspect of reality fully and adequately, and the latter only partially and inadequately (p. 78). On what ground is this distinction introduced? Evidently on the principle of consistency itself. The two are *different*, and cannot, in the same sense, be affirmed of reality. And this is exactly the reason why naïve realism distinguishes between them. Now which of the two distinctions is tenable—the one made by naïve realism or the one set up by the neo-realism of Alexander and Turner, is a question which is already covered by the criticism of Alexander's "real appearances" in the text.

appearance of things? It is a real appearance, Alexander holds, in this way. Firstly, what we sense in illusion is a real character of things existing somewhere in the world. The mind, by an obliquity, a squint, dislocates it from its proper place and sees it in the space of the object before it, just as we dislocate an object before the mirror and see it behind the mirror, or by pressing one of the eyeballs see an object in a place different from its real place. What the mind does in constructive imagination with the ideational mode of the being of the object, it does in illusion with its sensible mode of being. Secondly, the illusion is a mere appearance in so far as the sensum is referred to the object immediately before the mind; but it is a real appearance of the complex entity formed by the object and this eccentric or defective mind. That illusion is a real appearance of the complex mind-and-the-object, seems to be exposed to the same criticism as similar assertions about mere appearance. The case is indeed worse here. For no meaning can be attached to the expression "an object which is the combination of mind and a physical thing." For, the mind is exactly what cannot be an object, cannot be contemplated, according to Alexander. That the mind has dislocated a real sensum and put it in the space of the object before it, is again a statement beset with difficulties. The objection which Broad has raised (*M.* 1921) seems, on the face of it, formidable. Namely, if the mind has dislocated a real sensum and put it in the space of the object, then there is no illusion. What the mind sees is really there and at the place where it sees it. Alexander makes no reply to this objection in his "Explanations" (*M.* 1921). Yet it appears that Broad has overlooked the point in Alexander's calling this dislocation a squint. The sensum has not *really* been dislocated and put here in the space of the object. It is only seen here, and is *seemingly* here. The real difficulty rather seems to be how this seeming transference is to be explained. To explain it as a squint or an obliquity, is to explain one illusion by another illusion. Moreover, in the case of a squint, we can trace the reality as well as the physical and physiological conditions of its transference; while we cannot

do this in the case of illusion. We have therefore to take it as an ultimate fact. Yet the difficulty remains: where in the world is exactly this sensum to be found? Take the case of a colour-blind man. He sees everything grey. Now there may be grey objects of the same tint somewhere in the world. But they all have their forms. For sense, colour and form make an indivisible unity. When the obliquity of his mind transfers grey to the space of some colour, it must transfer it in the form and size in which the hypothetical grey really exists. Can it be maintained that somewhere in the universe grey objects are present of exactly the same forms and sizes as the coloured objects which the man sees grey—and that he is seeing them and not the objects before him? Similarly through blue spectacles, we see the whole world blue. This too, on Alexander's principle, should be taken to be a case of illusion. For the change wrought is wrought in the organs of perception, in the percipient, and it is because of the change in the percipient that the object looks differently coloured. Can it be said that there are somewhere in space objects of exactly this blue colour and these forms, and that the vision of them has now been transferred by the mind through an obliquity in the space of the world in which we are—and that it is seeing them and not the objects before it?

We may now pass from one term of the relation of knowledge, viz. the object, to the other term of this relation, viz. the subject, and inquire what is Alexander's theory of the knowledge of it.

It will be remembered that Alexander lays the greatest emphasis on this, that in order to understand the relation of knowledge, it is necessary to realize that the subject is a thing among other things, and in order to realize this there is no better way than to grasp that the mind is never its own object, and that the object is always other than the mind. It is to bring out these positions of fundamental importance that he introduces the distinction of "enjoyment" and "contemplation" as the two kinds of knowledge.

There is an act of knowing on one side, and an object on the other. The act of knowing is lived by the mind. The mind

"enjoys" it. It enjoys itself in its own act. Thus it is conscious of its own self as a distinct entity by the side of the object. For in "enjoying" its act of knowing, it "contemplates" the object as an entity distinct from itself. Every act of knowledge has therefore two aspects, of enjoyment and contemplation. Through enjoyment we know ourselves as a definite entity in a definite space-time. Through contemplation we know the object as another entity different from us in another position in space-time. One is the knowledge of self, the other the knowledge of not-self. The difference of the two kinds of knowledge consists in this, that the "of" indicative of the relation of knowledge has a different meaning in each case. In "knowledge of an object," "of" means reference; in "knowledge of self," "of" means apposition. In the former it means that the act is directed upon an object; in the latter that it consists in knowledge. That is, the latter is not knowledge of self in the ordinary sense in which self would be an object of knowledge; it is only knowledge itself. "My self-knowledge is," says Alexander in this connection, "knowledge consisting in myself" (*A.* IX, pp. 26–7).

The intention of this distinction and these explanations is that I know directly that I am this act of knowing, an empirical, temporal, finite being existing here and now, a thing among other things, whose essence is consciousness. In other words, that I am a psychological and no metaphysical self. This seems to be implied in all that is said about enjoyment, and also in the assertion that "of" in the "knowledge of self" is an "of" of apposition. But something more is involved in this last assertion. It is also meant to deny that the self can make itself its own object. The self is not a "self-objectifying" principle and its self-consciousness is not to be allowed to militate against the distinct reality of objects.

These are motives of fundamental importance for Alexander's realism, as was pointed out before; and only motives of such importance could lead him to doubt or deny a fact of such importance as self-consciousness or self-knowledge. For, in the above description of enjoyment which plays the rôle of self-consciousness he has in fact denied that there can be

knowledge of self. The "of" in the "knowledge of self" is that of apposition, and reduces knowledge of self to a self which is knowledge, or knowledge which is self. The enjoyment of the act of knowing only means that the act is lived by the self as a part of itself. There is no question of the knowledge of the self, or of the knowledge of the act of knowledge. There is awareness; this is all that is said; but not that there is awareness of awareness.

Alexander, no doubt, also asserts that awareness is, as such, awareness of awareness. But this is highly doubtful. Moreover, if admitted, it contradicts Alexander's principle that consciousness can never be an object to itself.

Evidently then the denial of self-knowledge makes the position of Alexander difficult. For, if self can never be object, how can we know the acts of mind, or remember or conceive them? How can we have a science of mind, as psychology professes to be? Alexander, of course, admits that we know our acts, and remember, imagine and conceive them. But if so then they become objects. Alexander cannot admit this. The difference, he says, in the two cases of knowledge, the knowledge of objects and the knowledge of self, is not that the one we know and remember and the other not; but that, what is known or remembered is in one case physical, and in the other mental (*A.* IX, p. 33). Alexander does not realize that in this reply he has given up his whole case and made the mental an object. Yet he would not have it an object. Consequently he attempts to make his position more definite.

Knowledge (perception, immediate apprehension) of self there is; but it is not knowledge of self in the same sense in which knowledge of an object is knowledge. In the latter, the act of knowledge and the object are two distinct entities, and the "of" indicates that the act is directed upon the object. But in the former, there is no such duality of act and object and the "of" means that the act consists in knowing, it is an act of consciousness, is a conscious act. Hence Alexander maintains that consciousness is, *eo ipso*, consciousness of consciousness, is self-consciousness. Evidently all this is "enjoyment." Now, in the first place, enjoyment is described as a mode of

being, the mode of being of the mind; in other words, "*consciousness as existing.*" In the second place, with the help of "contemplation" it is turned into knowledge, it is thus made "*consciousness as knowing.*" In the third place, it is transformed, as it seems, by a turn of the phrase, into self-consciousness, *i.e.* into *consciousness of the consciousness of knowing.* Now, it may be tenable to maintain that the first two are inseparable, consciousness as existing is *eo ipso* consciousness as knowing; that existence as such is knowing in this case, that knowing as such is existing, that "I know, hence I exist" and "I exist, hence I know" are here interchangeable. But it is not tenable to maintain that consciousness as knowing is as such consciousness of this consciousness, that "I know" implies "I know that I know," that awareness involves awareness of awareness. The "I know" may accompany all my acts of knowing, as Kant would say; but it is not identical with or involved in the latter. That would be equivalent to saying that because a being perceives, therefore it also thinks, that the lowest animals are endowed with the faculty of reflective thought; that "know thyself" is a superfluous injunction.

It cannot therefore be admitted that consciousness as such is self-consciousness and knowledge (enjoyment) self-knowledge. But that Alexander identified the two, has its meaning. He thereby admits that self-consciousness, knowledge of self is a fact. And by identifying it with mere knowing through making the "of" one of apposition, he intends to deny that in consciousness of consciousness, consciousness becomes its own object, that in self-consciousness self is the object of consciousness. Yet consciousness of consciousness has no other meaning. And he has to admit that we do "observe" our own mental activities and that there is something called introspection which consists in "immediate apprehension" of the mental processes (*A.* IX, p. 32).

Memory of mental acts, as implying representative ideas of mental acts and hence putting them on the same footing as physical objects, is again unpalatable to Alexander. Consequently he denies any such memory. Memory-images we can

have only of physical entities. In fact the images are themselves physical entities. Further, they are of absent entities. But self is neither physical nor absent. It is mental and present. How then is memory of it possible?

In memory, according to Alexander's theory, the past events are presented to the mind *as past*. Along with them the corresponding mental acts are renewed, but not exactly in their original colouring. These *present* acts are the memory of the past mental acts.

The question therefore is: are they such memories as *present* acts? Clearly not. Or is it the changed colouring which makes them past? Again, no; for that too, as such, is a present fact. Then, what is it that makes them past? The only answer open to Alexander is, that they are *present realities* experienced *as past*, i.e. along with them there is a consciousness of their pasthood. But this is to put them exactly on the footing of the memory-images of physical objects. They too are, according to his theory, present entities experienced as past. And as the memory-image is a dim copy and representative of the original physical event, so may the renewed act with a different colouring be a copy and representative of the original mental act.

Alexander goes a step further to make the past present, and finds (as has been indicated above, see p. 145) the analogue of memory in the physical phenomenon of inheritance. He finds himself "here at one with M. Bergson who thinks of its whole past as gathered up into the present moment of the soul's life" (*ibid.* p. 38). He thus apparently succeeds in making out his case. But then *memory* is given up. The "*present*," of inheritance is not memory but mere *reproduction*.

Having, in the paper on "Mental Activity in Willing and in Ideas," made concepts like images physical, Alexander tries to deny a concept of mental acts or self. We have a percept of ourselves and not a concept. His argument is that it is so because we have only one self and cannot compare it with others, in order thus to form a concept. But in accepting a percept of self, Alexander has already surrendered his posi-

tion. It puts self on the same level with objects. One does not, moreover, see why it should be necessary to have several entities in order to form a concept. Thought can form a concept, indeed a number of concepts, out of the experience of one single entity. And all the time in speaking of self or mental act, Alexander has been using concepts of these entities and not their percepts.

Later Alexander ceases to call concepts physical (*A.* x), and recognizes universality as identity in kind, to be a category, and hence a universal character of all existents (*S.-T.* I, pp. 208 ff.). Mind too is, undoubtedly, an existent, and has its universal. In other words, there is a concept of mind, and of course of all mental activities; for, according to Alexander, mind is nothing but a complex of mental activities.

Thus we see that the denial of self-consciousness or of the knowledge of self, in that sense of "of," in which it means reference, however important on principle it might be, does not work. We have of mind all those forms of knowledge which we have of physical objects. Indeed, as Alexander in other connections, *e.g.* the discovery of categories, remarks, the knowledge we acquire through observing our mind is superior to the knowledge obtained by observing external objects. That we should not call mind the object of this knowledge seems to serve no real purpose. The only truth in this contention appears to be that the relation of knower and known is essentially different in these two cases. In both cases the object is distinct from and other than the observer; though in one case it is, and in the other it is not, an independent existence. And this self-evidently. What other differences there may be depend on the nature of the two objects, *i.e.* are differences of the content and not of the form of knowledge.

From object and subject, the known and the knower, we pass now to the relation of knowledge itself, *i.e.* knowledge as "contemplation." For it is this which, according to Alexander, is knowledge proper—to knowledge as enjoyment he would, as we have seen, deny this name.

But what he would, with reservations, accept about enjoy-

ment, namely, that it is something *sui generis*—enjoyment being consciousness and consciousness a *new* "quality"—he emphatically denies of knowledge by contemplation. Such knowledge is *not sui generis*. It is nothing but *compresence*, togetherness in one universe, which is the most universal of all relations between empirical existents (cf. *B.R.* § 3; *S.-T.* II, pp. 75, 333). That contemplation is knowledge and not mere compresence is not a difference in the nature of the relation, but in the nature of the terms. *A* and *B* are two entities. Because they belong to the same universe, the relation between them is of compresence. Let *A* be a mind. Thereby the relation between *A* and *B* does not change. It remains the same, the same relation of compresence. That now *A* knows, is due to the specific nature of *A*. The change is in the term of the relation and not in the relation. Knowledge by contemplation is therefore the relation of compresence in which one of the terms is an act of knowing. That it is so would be directly apprehended by a being who could contemplate this situation (*B.R.* § 3). By us both the act of knowing and its relation of compresence are enjoyed (*S.-T.* I, p. 21).

But how does the act of knowing come to take place? Now compresence, *i.e.* the membership of the same universe, "involves, directly or indirectly, connection by way of causality" (*S.-T.* II, p. 75). The object acts upon the mind and makes it exercise an act of knowing. To every object corresponds a specific act as reaction to it. This reaction is the knowledge of the object. The object is the cause of its knowledge. Sensing is caused by the sensum (*B.R.* § 4; *S.-T.* II, p. 155). And this we know directly. "We enjoy our sensing as the effect of the sensum" (*S.-T.* II, p. 156). But "the sensum which is the cause of the sensing is not experienced by the patient as the effect which it produces in him, but is experienced in and for itself as what it is contemplated to be, and in our language, is revealed to the patient. The patient is not cognisant *of* the act, but *is* it; he is cognisant *of* the object which is the agent" (*ibid.* p. 157). In other words, the object exercises an influence on the subject and incites it to exercise an act. As the latter exercises this act, it becomes aware of the object. This,

therefore, in broad outlines, is the account Alexander gives of the nature and of the origin of knowledge, disentangled from his metaphysical theory of the nature of things.

Now taking the second point first, we may remark that though in his description and language Alexander goes perilously near to declaring knowledge a case of causality, he never means it (cf. *e.g. S.-T.* II, pp. 56–8). For that would directly involve him in subjectivism. And it is exactly on this point that he finds the usual physiological explanation of perception amiss, and is led to propound a theory of his own. "I arrived," says he, "at the notion of enjoyment in the first instance by thinking, like better men, about causality. Asking how a thing could be the cause of the mental state which apprehended it, and observing that we are unaware of the neural effect which it actually produced, I concluded that the presentation of the object was not as it were a mental picture produced by the thing in my mind, but was the thing itself or a selection from it, and that the mental process was an act of mine which I lived through. It was then I understood the position of Moore's article in 'Refutation of Idealism'" (*M.* 1921, p. 421).

No doubt it is misleading to say that the object is the cause of the knowledge of it. But what is meant is that the sensa are the causes of sensing, that the object actuates us to an act of knowing. The relation of cause and effect there is. But not between the object and its sensum, as subjectivism asserts, for the sensum is the object itself; but between the object and the act of the mind, that specific act which is *eo ipso* the percipient of the object.

Yet Alexander's account has not freed itself from the difficulties of the causal conception of knowledge. The relics of the conception are there. Indeed, the account is in part causal. For, if the object (event) is the cause of the act which apprehends it, evidently then the apprehension is posterior in time to the object (event) of which it is the apprehension. My act of knowing is an effect of the sensum which actuated it and which is therefore prior in time to it. The object is essentially a process, a piece of space-time, of pure motion.

It sends an influence to me. But before it reaches me and causes me to perceive the object, the object is no more. Yet I perceive the object. The object I perceive, is therefore a past object, however strange the assertion may look. Alexander fully accepts this conclusion. Perception is a kind of memory, says he (*A.* x, p. 15; *M.* 1912, p. 3, note). But curiously enough it is a memory of something which never has been experienced. And this puts his whole realism in jeopardy. How is it to be distinguished from representationism? And is he not, in maintaining realism, asserting something the same in principle as is asserted by Meinong and Stout to which he takes objection? (see *S.-T.* II, pp. 95–8). For, it is not that we are seeing the objects face to face. We only maintain their existence as an act of faith—of faith in a sort of memory. If it is so, the position of the old realists seems stronger and one ought to make it his own if he is to maintain realism.

But perception, on the face of it, proclaims the simultaneity of the percipience and the perceived, and Alexander, when he is not directly dealing with the question, speaks as if it were so. It is his attempt to correlate objects and acts of mind, namely, his theory of the contents of the acts of mind, which has involved him in this difficulty; and that is grounded, not in any fact of direct observation and experience, but in his metaphysics. Let perception, as a plain fact, as a "schlichte Tatsache," as it offers itself to unprejudiced observation, speak for itself, and it declares the percipience and the object to be compresent in the same moment of time, whatever the process of the causation of the act of percipience may have been.

In Alexander's theory of the origin of illusions, curiously enough, the object and the percipience do become simultaneous. The defect of veridical perception is removed by false perception. The object and the act of knowing are simultaneous also in ideation and thought. The reason is that in all these cases the initiative comes from the side of the mind. The mind has not got to wait for the activity of the object, but acts itself. It is spontaneous. If this spontaneity in

knowing could be extended to perception and thus made a universal feature of knowing, the difficulties of the causal conception of perception would come to an end.

The nature of knowledge, *i.e.* of knowledge by contemplation, which was described by Alexander as the relation of compresence, should not now be understood to mean the simultaneity of subject and object in a portion of space. There is no question of simultaneity at all. The two are never simultaneous in percipience. The object is, we have seen, always prior in time to the perception; and the priority may be not only of a moment but of hundreds of thousands of years, as astronomy tells us. Nor does compresence mean any proximity in space. The two terms therefore may be separated by any stretch of space and of time. Compresence only means membership of one universe, and as there is but one universe, *any* two entities in the world are compresent.

Now if one of these entities is a percipience, then, because it is *eo ipso* compresent with any other entity in this universe, however far in time and space it may be from it, it must be knowledge of this entity; and because it is compresent with all entities that have been, are, or will be, it must be knowledge of them all. For, as far as compresence is concerned, the distinction of past, present and future is immaterial; they all belong to one time, are in one universe. Every percipience should therefore be a veritable omniscience. Nor, as to the entities known, can a distinction of physical and mental and higher than mental, be made. They are all therefore contemplated. Again compresence is a mutual relation. A is compresent to B, and B to A. But no such mutuality can be shown of knowledge, which is a one-sided relation.

Knowledge by contemplation is not therefore compresence as such. Compresence has to be curtailed within narrower limits. The future and the present are to be excluded and the possible objects are to be made physical and limited in number; more, the relation has to be made one-sided. By compresence consequently is to be understood togetherness with a past physical object, but such a togetherness as that in which the object causes the percipience. The relation of

compresence has now become the relation of interaction, or rather of cause and effect. Knowledge is not therefore the relation of compresence, but of cause and effect within definite limits. But is knowledge the relation of cause and effect? Evidently not. Firstly, because taken in its universality, this relation too holds between all things, and would involve omniscience on the part of percipience. And secondly, if it be taken with all the necessary restrictions, all that the object can do is to cause the patient to perform an act, and because the patient is a mind it will, as such, enjoy this act. This act may be an act of contemplation. But *it* is not *that* relation of causation which brought it about. *It* is not even contemplation of the object. These are plain facts. But if a demonstration is needed, it will be found if only we look closely into the nature of the relation which knowledge is asserted to be. Causation is, according to Alexander, the passing over of a motion into another motion; the former motion is the cause, the latter the effect. Thus, in knowledge, a motion in the object passes over to the mind, thereby taking a new form. Clearly then in its new form, it is not what it was in the object. The object may be a complex of motions, as Alexander holds, and let us suppose that as such it could pass over wholly into the cerebral motions. But thereby it has changed its character. It is no more the old complex of motions (physical) it was; it is now a *new* complex of motions (cerebral). Let the new quality of consciousness be added to these motions. Then what results would be the awareness of a set of cerebral motions, and no consciousness of the object—enjoyment of a state of mind, but no knowledge by contemplation. This enjoyment may perhaps be the enjoyment of the causality of the object, as Alexander holds (*S.-T.* I, p. 21); but it is not *contemplation* of the object.

It should be noticed that in passing from a case of compresence to a case of causation, knowledge has, in fact, passed from a relation to a term of the relation. It is no more conceived as a relation, but only as *passion*, reception, sufferance, as an effect. And as such it is what the physiologists and subjectivists would have it to be. The conception has there-

fore to be modified, and instead of calling knowledge a case of causality, Alexander would term it a reaction, a reaction of the mind on receiving a stimulus from an object. From passion, it has therefore become action. Apparently this is an advance in the right direction, and one which brings us nearer to "contemplation" than to "enjoyment." Compresence (= knowledge) is then no more causation but reaction. But is knowledge by contemplation as such reaction? Reaction means the return action of an entity upon another which had acted upon it. It is the bringing about of a change in the former by the latter. In the case of knowledge it would mean that the object acted upon the mind and brought about a change in it, and then the mind acted upon the object and wrought a change in it. Is knowledge such a *changing* of the object?

Now some might answer the question in the affirmative. It can be said that the reaction of the mind consists in knowing the object. Before this the object was not known. The change wrought in it is that it has now become known. But one may rejoin that this does not signify a change *in the object.* It is only a change in the relation of the object. Knowledge does not change the *object.* But reaction is a case of causality and must change the object *itself.* This on the side of the object. But on the side of the subject, reaction is a form of being. It may be enjoyment, but is not contemplation.

Knowledge is, therefore, neither the relation of compresence nor of causation, nor of reaction. It may presuppose compresence, it may presuppose causation, it may presuppose reaction; it may be *of* compresence, it may be *of* causation, it may be *of* reaction; but it is neither compresence, nor causation, nor reaction. It is *knowledge.* It is an ultimate unique fact, which has to be taken as such, and is not reducible to any other simpler facts. And this is what is meant by calling it *sui generis.*

To describe it as simple compresence without causal implications is perhaps the best way of expressing in physical terms a relation which is not physical, provided com-

presence is taken in its simple sense of "being together in one place at one time." It then indicates some of the essential features of perception, viz. that in it the subject and the object are face to face, and they leave the nature of each other intact. But to make knowledge compresence itself is quite a different thing.

That knowledge is not compresence is also indicated by Alexander's attempt to make enjoyment and contemplation universal. What was not to be found in compresence itself is taken over from knowledge and introduced into the nature of the compresents. This curious introduction may serve the purpose of making knowledge a universal character of things and therefore not a unique phenomenon of mental life, yet it is at the same time an admission that knowledge is not mere compresence. On the contrary, it is compresence now which is receiving its explanation from knowledge and being reduced to it.

That knowledge is not compresence is also implied in another admission of Alexander's. He answers the question how compresence in knowing is apprehended, by saying that we "enjoy it" (*S.-T.* I, p. 21)[1]. Now compresence is the relation between the knower and the known—and a physical relation indeed. How can it be enjoyed? It is not an act of the mind. Only acts of the mind are enjoyed. Evidently Alexander is thinking here of knowledge as an act of the mind, *i.e.*, as *knowledge*, and not as the physical relation of compresence. If knowledge were any such relation, we should rather contemplate it.

But this admission seems to frustrate the whole purpose of introducing the relation of compresence. On the one hand, it makes knowledge a fact *sui generis*; and on the other, the mind seems to absorb a term and the relation into itself, thus putting the independence of the other term also in danger. Meanwhile the purpose of calling knowledge compresence was

[1] For, if he were to say the relation of compresence was contemplated by us, he would be faced by the difficulty that then *both* the terms of this relation too were contemplated. But the mind, according to him, cannot be contemplated. The alternative he has accepted is truer, but involves the difficulty that now with the relation both the terms of the relation also should be enjoyed.

to indicate that knowledge is not a fact *sui generis*; more, that we directly know that subject and object are two independent entities existing side by side just like two physical objects. Consequently Alexander had to add, that though compresence as knowledge is only enjoyed by us, it would be contemplated by a higher being just as the compresence of a chair and a table is contemplated by us.

But this hypothetical assertion involves that *we* do not intuit knowledge to be compresence between mind and object in the same sense as we do intuit compresence between two objects. On the other hand, the possibility of such a hypothesis shows that we are able to take the standpoint of the higher being and *contemplate* mind and object, which will make mind an object and is in flat contradiction with Alexander's position as to self-knowledge. But what is of still more interest is this. The appeal to the higher being in order to justify the characterization of knowledge indicates that the analysis of knowledge has been made from the standpoint of an outsider. It is not from inside, as we experience it to be, that knowledge has been analysed or described; but from outside, as an onlooker would imagine the process and the relation to be. This is why it is identified with physical compresence or causation or reaction. For, when looked at from inside, knowledge shows itself to be no relation of compresence. One even doubts if it is a relation at all. For one of the terms is such that it cannot exist except in relation; and more, it seems to be identical with the relation. It is enjoyment as well as contemplation. No category therefore seems to be of avail in describing knowledge. All that we can say is, that it is; or that it is a category by itself—of course, in the Hegelian and not in the Aristotelian sense, as Alexander understands the difference.

(*b*) EDWIN HOLT

After Alexander neo-realism or the realism of all sensa goes further. Not only are all the elements of all the presentations objective, as Alexander held, but also their configuration is independent of the activity of mind, holds the American neo-

realist. Alexander teaches the objectivity of percepts as well as images. Before him Mach and James taught the same. But now if illusions and fancies too are added to percepts and images, and all held as objective, the distinction of real and unreal completely disappears. Real and unreal stand in ordinary thought for the perceivable and the imaginary. But now all presentation is real, exists independently of mind and is a common object. The element which is common to all these entities is being. The American neo-realism is therefore the realism of being.

The same conclusion is reached from a higher standpoint, the standpoint of pure thought. Moore held in his *Nature of Judgment* that both true and false propositions subsist independently, and taught a realism of concepts. Russell erected the system of his logistic on this foundation. The American neo-realist made it his own. Now what can be the common element of the true and the false propositions and concepts other than being? Thus neo-realism in America becomes the realism of being from both the empirical and the logical side.

Realism is directed towards the object—it inclines to be objectism; much more so the realism of being. This turn is given to it in America by the positivism of Mach and William James. James is not a realist[1]. But he denies the subject and turns it into an aggregate of objects. Thus the American neo-realism or the realism of being becomes objectism. Its position may now be summarized thus: "*All that is object, is,*" and is independent of mind; and "*Nothing is that is not object.*"

The positive thesis involves the assertion of a world of all possible objects of thought, a world of being, of Seienden which are objective and to which the appearing or not appearing in a mind makes no difference. They are, and are for ever. True and false, real and unreal, imaginary and illusory, all fall within this world, because all have being, all are objects of thought. Nothing can conceivably take away or add being to them. They are *eo ipso* independent of the mind.

[1] See Appendix: *William James's Realism.*

The case of realism is therefore absolutely secure; it admits of no attack.

The negative thesis involves that among objects only that is which is a possible object of apprehension. Consequently only the *qualities* are, and there is no substance, nothing which is the I-know-not-what of Locke behind the qualities and supporting them. It further involves the rejection of mind as subject, as the "unity of apperception" which is never object. If there is mind, it must be object, an action, a relation or class of objects.

It is with these presuppositions that the American neo-realists come to the task of realism. Holt, Perry, Montague, Pitkin, Marvin and Spaulding join hands, and give out a program in 1910. In 1912 they publish a volume of co-operative studies, called *New Realism*.

It is through the influence of James that the theory of knowledge in general, and that of the knowledge of the external world in particular, gets complicated with the theory of mind and ontology in the neo-realistic argument. The Machian denial of the subject makes the problem of mind or consciousness identical with the problem of knowledge, and more particularly of the knowledge of the external world, as will become clearer. Holt, Perry, Montague and Pitkin set forth independent theories of mind and knowledge; Marvin and Spaulding dealing with other questions more or less connected with realism[1]. Yet they agree in fundamentals.

[1] For Perry, Montague and Pitkin see Appendix. Marvin and Spaulding put forward no special theories of their own, and deal with general questions distantly connected with realism.

Marvin writes on the *Emancipation of Metaphysics from Epistemology*—in intention an essay against epistemological idealisms like that of Kant. But the whole discussion is vitiated by a false conception of epistemology as the *psychology* of cognition or the *history* of the growth of human knowledge. Marvin does not see that for the rejection of the idealism (*i.e.* the idealistic metaphysics) of an epistemologist it is not necessary to reject epistemology as such; and that realism for which he is fighting is itself an epistemological doctrine.

Spaulding gives a *Defence of Analysis* which aims at defending the objectivity of perceptual and conceptual distinctions, and maintains that perception and thought are organs of discovery of the real features of reality. The defence is essential to realism against Bradley, Bergson and the pragmatists, who question the reality of these distinctions and hold them to be unreal and subjective. Spaulding holds that from Zeno downwards the gist of the arguments against the

All deny the subject and all make consciousness an object. According to Pitkin it is a reaction of the nervous system; according to Montague the causal relation, and according to Perry and Holt an aggregate of objects[1]. The theories of Perry, Montague and Pitkin are not fully worked out. Holt alone works out his theory in the *Concept of Consciousness* (1914), to which Perry refers as "the most able statement of the theory." He may therefore be taken as the chief representative of the American neo-realism; and more so, because both the motives of the neo-realistic thought, the logistic and the positivistic, which may well be termed logical empiricism and phenomenal empiricism, or logical atomism and phenomenal atomism, find their full expression in him. In the combination of two such heterogeneous motives consists the secret of this school. This combination is brought

validity of analysis has been to show a contradiction between the whole and the elements into which it is analysed. His defence is that every such argument is based on a defective or false analysis; and as a rule the defence is successful. But the same cannot perhaps be said of the elaborate analysis he undertakes to give of all kinds of wholes. Mainly he follows therein the lead of Russell, and his analyses, as Joseph pointed out in his lectures already referred to, are vitiated by the same defect as Russell's, namely that they assume what they pretend to deduce. But this much may at least be said for Spaulding that his analysis differs from Russell's inasmuch as it does not deduce arithmetic (number) out of logic (externality of relations) and space and time out of number, etc. It is more empirical and recognizes distinctive and not further analyzable "qualia" (cf. *e.g. N.R.* pp. 183, 190). These elaborate analyses are not necessary for the realistic position. However they show the leaning of the neo-realists towards logistic and theories which break away with traditional philosophy; and what is still more important, they indicate that the fundamental category of the neo-realistic thought is the category of mechanical whole-part.

Though Spaulding denies every distinctive energy to organisms and reduces them to chemical compounds, he declares it good realism to recognize the reality of consciousness as a directing energy (*N.R.* pp. 246–7). Montague makes consciousness identical with the universal causal energy; Pitkin emphasizes its reality as a function of the nervous system, indispensable for certain very important adjustments. Holt—and Perry is in agreement with him—differs essentially from the rest. Indications of difference on this fundamental thesis of realism are traceable even in the first program of the six, given out in 1910. It is realized by them as they developed their views (see Appendix to *N.R.*); and in the Philosophical Congress at Oxford, 1920, Montague is said to have announced the dissolution of the school.

[1] Pitkin speaks of Woodbridge as also having a similar theory with which he finds himself in sympathy. Woodbridge would seem to connect consciousness with implication but takes implication not in the restricted sense of causal implication like Montague, but in the widest sense as including besides causal also logical connections and psychological conjunctions (*N.R.* p. 441).

about by holding sensa or the existent qualities of objects to be concepts.

The American neo-realism begins, as indicated above, with what may perhaps be termed the realism of being. From the realism of being it is an easy step to what may be called the realism of concepts, to the position that concepts are the stuff of which the universe is made. For, being is the most abstract of concepts. It is not object of perception. It is object of thought, of thought in its widest universality. Terms and propositions, real and unreal, true and false, all share it. Everything is therefore composed of being—of object of thought. Nor can anything have any other elements. Because whatever "other" elements it has, they too are "objects of thought," and are therefore being, are all concepts. We cannot grasp, nor express any feature of the world, without translating it into concepts; and concepts alone take hold of its essence. Science and philosophy, even everyday speech, all move in the sphere of concept, and never get out of it. The universe is therefore through and through conceptual, its elements are concepts. The primal stuff is being.

It was a similar motive of thought which led Moore in his *Nature of Judgment* from the ascription of being to both true and false propositions to the doctrine that all that is, is composed of self-subsisting concepts. Russell had worked out these fundamental ideas into a deductive system of logistic and ascribed to logic the function of the first science, as the science of being. It was tempting therefore for Holt to take to the realism of being in that sense and to deduce consciousness out of it. The great systems of Plato and Hegel afford for many classical examples of this mode of thought. Thus the influence of a Hegelian (Royce) comes to tell upon Holt's development, and to it he ascribes his "notion of the conceptual nature of the universe" (*C.C.* Preface, p. xiii).

Now in this notion of Holt's there is a transition from being to subsistence, which can be easily overlooked. Being and the being of concepts are not identical. Being is "object" of

thought in a wider sense, and concept in a narrower sense. Being includes the being of the particular as well as the being of the universal, of percept as of concept, *i.e.*, existence as well as subsistence. Moreover it includes the being of the real as well as of the unreal, of the true as of the false. If being is subsistence, then it does *not* include existence; nor does it include the being of the false and the unreal. The false proposition *is*, but it does *not* subsist like the true one. *A*-is-*B* and *A*-is-not-*B*, both *are*; but *not* in the same sense. But if to be and to subsist are equivalent, then the false too subsists, and has objective being like other conceptual entities. It was thus that Moore was led to ascribe objectivity to false propositions, and it is how Holt maintains the objectivity of error and contradiction.

The two positions, viz. the conceptual nature of the universe and the objectivity of error, are thus cognate, and have their basis in the identification of being with subsistence. Both are fundamental theses of Holt's. The first he expounds in the *Concept of Consciousness*, and the second chiefly in the *New Realism*.

To follow Holt, true and false, real and unreal, all *is*. It has being. The modern logic, *i.e.* logistic, is the science of being. Being has two elements, terms and propositions. The former are passive and the latter active, because they generate new terms. Both are "neutral" entities, are conceptual. They are neither subjective nor objective, for, the distinction has not yet arisen, and comes later in the scale of the universe. The business of logic is to start from the fewest undefined terms and postulates (propositions), and to deduce systems of terms in relation; reality which is pre-eminently physical reality, being a system of this kind. Its ideal is to reduce the whole universe of being to such a unitary system. Such a system would be a "neutral mosaic[1]," a monism of being. Although Holt, on principle, maintains that there is at present a presumption against the possibility of such a monistic system

[1] The expression is James's (see *Radical Empiricism*, p. 86). It denotes a positivistic unity, the qualities hanging to one another and forming complexes, and not inhering or embedded in a substance or subject.

because of the presence of contradiction and error in the world of being, and that only empirical inquiry may one day succeed in discovering the unity, notwithstanding this he attempts such a mosaic. The principle of progress is to start from simple neutral entities and, by addition, to construct aggregates, wholes or complex neutral entities. This is deduction and is *eo ipso* definition. The entities of logic and mathematics come first, the secondary qualities next, then space, then time and motion, then mass, then physical objects, then organisms, then consciousness or mind, and then values. But they are all conceptual entities, and so are their constituent elements.

At this stage difficulties arise. Is matter (object) a "neutral," a conceptual entity? Are "ideas" (sensations, feelings, emotions, etc.), which are contents of mind, conceptual entities? Before deducing or defining consciousness these difficulties should be met.

What are the characteristics of neutral entities? If it can be shown that matter and ideas also possess these characteristics, then clearly they too are neutral. These characteristics are two; the logical self-identity of concepts and their property of forming fixed series. A conceptual entity repeats itself (in a number of instances) and remains what it is, in and out of relation to any other entity, be it an apprehending mind or anything else; and it has a fixed position in a series of concepts and is therefore objective and not subjective. Both these characteristics are possessed by "ideas." No one can deny an idea its self-identity: it is what it is whether in the mind or outside it, self-identical in several minds, because indiscernibles are identical (cf. *C.C.* p. 109). And evidently it has a fixed position in a series of ideas—its position is above the arbitrary will of a mind (*ibid.* chap. VI). That matter too possesses these characteristics is not contended. But in its case the argument is more direct. For, the matter with which physical science deals is nothing but formulae, equations, laws, etc.; and they are conceptual entities. Moreover, the material objects consist purely of qualities; there is no entity like substances or atoms; and

qualities are all neutral entities. Matter is an aggregate of concepts (*ibid.* p. 157 and chap. VII). The question of ideas and qualities is once more taken up, and it is contended that they are neutral entities, because they are common objects, and belong to both realms, to mind as well as to physical things (*ibid.* chap. VIII; cf. also *N.R.* pp. 370–1)[1].

Now we may take up the deduction of consciousness. It is not necessary to begin from the very beginning, *i.e.*, from the simplest entities, and to traverse the whole scale of the "neutral mosaic." It is enough if consciousness is deduced from the realm of entities which immediately precede it, viz., organisms, and it is shown to be a complication of them, and is not already assumed in the premisses.

The organism, says Holt, stands over against an environment. It responds only to specific parts of it, in fact as a rule only to its neutral elements, *e.g.*, light, gravity, direction, etc. The other parts do not exist for it. Thus by its specific response it cuts off a cross-section of the environment like a search-light. This cross-section is its world. This world is however outside the organism and independent of it. Consciousness or mind is a similar cross-section. It is the aggregate of objects in the cross-cut made by the specific response of the nervous system, which objects are neutral elements. Consciousness therefore is not the nervous system or in it; it is out there where the objects are (*C.C.* chap. IX).

To this deduction the objection may be urged that many a nervous response is unconscious. Holt has therefore to show that what is mistakenly called unconscious is in fact a lower degree of consciousness, and that the mistake arises because no distinction is made between consciousness and reflective consciousness. The latter involves memory and judgment,

[1] It may be noted here that there are two conceptions of "neutral" entity in Holt's exposition; one which he takes from James, denoting an *existent* entity which is neither physical nor mental, or rather which is both, and is a common object; the other which is his own, meaning a *conceptual* entity, which may form part of both the physical and the mental, and is a common object. The two conceptions though apparently similar are fundamentally different. Why Holt does not make a difference between them will become clearer later—he takes the existent qualities of which, according to James, things are composed to be concepts.

but not the former. All nervous response is conscious, though it is not necessarily remembered and judged. But further in order to justify his deduction he has to show that all organisms have a nervous system and their response to environment is nervous response, and consequently conscious. The tree, the animal, as well as man, all have to be credited with a nervous system and consciousness (*ibid.* chap. x).

Thus on logical grounds the deduction of consciousness is complete. It has only to be inquired further whether it provides for the features which consciousness or mind is empirically found to possess. Can the theory account for sensation and perception, for memory, imagination and thought, for volition and the unity of consciousness, and one may add, for self-consciousness or knowledge of knowledge, and for hallucination, dreams and error—characters of mind on which subjectivism relies? Can they be equally explained realistically?

Holt's reply is in a thoroughgoing affirmative. Sensation is a simpler neutral entity; perception is an aggregate of neutral entities; both are mere consciousness without memory and reflective judgment. There is no question of correspondence between them and the objects, for they are the objects themselves (*ibid.* chap. xi). Nor are any qualities apprehended by them subjective. The secondary as well as the primary qualities, both are objective. The relation of the two has often led to subjectivism. Science isolates the primary qualities to study them. It translates everything into them. Light is waves of ether, sound is waves of air, etc. So far there is nothing objectionable. But then science goes farther and denies what it has left out, viz. the secondary, qualities. It could as well deny history and philological phenomena which it has left out. Yet the problem of the relation of these two sets of qualities, the primary and the secondary, is calculated to lead thinking men to hold the subjectivity of the secondary qualities. Holt correlates the two in the following way, but does not indicate the solution. The physical stimuli are vibrations. For each such vibration there is a vibration of the recipient nerves, and a corresponding number of nervous

shocks, which are conscious. These shocks are the "atoms" of which the secondary qualities are aggregates. The secondary qualities are usually taken to be simple and qualitatively different from each other. Holt's contention is that they are phenomenally compounds of intensity, brightness, saturation, etc., and that some of them are even directly felt to be compounds of other qualities, *e.g.* orange of yellow and red. They are not qualitatively different, but only *quantitatively*. They look unique, but they are in fact Gestaltqualitäten. A triangle looks unique. But it is nothing but space and lines and organization. In it the principle of organization is space. In secondary qualities the principle of organization is time. A few taps on the skin are apprehended as distinct. Increase their frequency and they are felt as roughness; increase it further, the feeling is of smoothness; increase it still further, the feeling is of a continuous touch. Similar phenomena happen in case of sound. It is therefore the "density" of the component elements which *is* the secondary quality (*N.R.* pp. 313–50). The solution of the problem he raised, which he does not give, is to be sought in his reference to Avenarius and Mach—on whose theory he bases his conception of consciousness (see *C.C.* chap. xv); namely that the stimulation is in terms of primary qualities, but the response in terms of secondary qualities—rather the cross-section which the response cuts is in terms of secondary qualities; that the relation of physical stimuli and objects apprehended, which Holt has tried to correlate quantitatively, is "functional" (see above, Section on Avenarius).

Knowledge (consciousness) is, proceeds Holt, a cross-section of the realm of being, to which true and false, past and future, near and distant, all belong. In regard to memory and imagination the objection arises: if the past and the future event, as well as the distant object, are present in knowledge self-identically, then our knowledge (ideas) of it is in the past or future time of the event and in the distant space of the object remembered. Holt is not willing to admit this absurdity. He therefore avers that the system of knowledge (ideas) is different from the system of events and objects;

that some of the ideas are in space and time, but their space and time is different from the space and time of the objects and events. Space and time are relative and not absolute. Hence the space-time *position* of ideas is only in the system of ideas and is totally different from the space-time position of objects and events. The idea of the past event is not in the (past) time of the event, nor the idea of the distant object in the (distant) space of the object. But this seems to conflict with the fundamental position of the theory that knowledge is identical with its object. Holt therefore takes a step further, and maintains that though the system of knowledge is other than the system of events and objects, the two systems intersect, and the idea of the past event or distant object is this point of intersection (*ibid.* chap. XII). Because "nothing can represent a thing but that thing itself" (*ibid.* p. 142). The idea which "represents" or "corresponds with" the object is identical with it.

Correspondence is, contends Holt, nothing but the repetition of the self-identical idea. It is the vexed problem of One and Many, and has been solved by Royce in the conception of "self-representative" systems of which repetition is a case. But it is sometimes confused with the problem of the universal and the particular. Now what is universal and what is particular? The universal repeats itself (in a number of instances); and the particular is said to be unique. But every element in the "neutral mosaic" is conceptual and repeats itself. For the distinction of universal and particular therefore Holt has recourse to the distinction of abstract and concrete, and to that of whole and part. The universal is the whole, the particular the part. The part is concrete, because it is determined by its relations to other parts and to the whole. The greater the whole, the more concrete is the part, and the less repeatable is it. It would be absolutely unrepeatable if the whole were absolutely great. Hence the particular is essentially relative. Because of the complexity of its relations, it cannot be grasped by the mind, which has therefore to do with the abstract, the universal, and only with the connecting relations. They are, it is true, abstract and partial; yet, all

the same, they have *being*, and are *as such* independent of mind (*ibid.* chap. III). Elsewhere Holt says "the quality or event is universal when it is alone; and it is particular and unique when it is in series" of qualities and events (*ibid.* p. 227)[1].

Volitions too are, proceeds Holt, neutral entities. The characteristics which decided that ideas are such, are to be found in volitions also. They are self-identical, have their own fixed orders, and are common objects. But what are they? They are not "fixed ideas" of ends as is commonly assumed—they are not terms; they are purposes, laws generating and unifying actions, they are propositions. Purpose "is a law of the same type as is found in the neutral realm logically antecedent to either matter or mind" (*ibid.* p. 288). It is not necessary that the agent should be conscious of his purpose, as is generally thought, and purpose therefore confused with the idea of end. The true criterion of volition (purpose) is: Is the proposition (volition = purpose) necessary to *describe* what one actually does (cf. *ibid.* p. 294); and not whether it is known to him; yet "a volition is a law, a genetic formula, and is statable and discutable and open to the gaze of all who care to take cognizance of it" (*ibid.* p. 291). It is volition, the law (proposition), and not feeling (a term), which generates the action; because only propositions can generate new terms; and hence voluntarism and not hedonism is the true doctrine. The controversies of the freedom or necessity of will, and of efficient and final causes in nature are based on misconceptions as to the nature of volition and purpose. Purpose is law as addressed to actions, and law is purpose as addressed to motions. Man is both free and determined, and so is nature; there is no contradiction between freedom and necessity. And nature, because determined by law, is *eo ipso* purposive (cf. *ibid.* chap. XIV).

[1] Nothing is said of thought besides a remark in a previous chapter that "In so far as it is other than" memory, imagination and volition, it "is nothing but the passage through the conscious cross-section of our familiar neutral entities in more or less connected groups." The same is true of reflective thought and of judgment (*ibid.* p. 190). But in truth consciousness as such is, for Holt, thought, because all its content is nothing but concepts, the neutral entities. To ask what is thought would be to ask what is concept and what is its relation to percept. This is taken up above, in the problem of correspondence.

"There is but one source of unity," says Holt, "and that is law" (*ibid.* p. 298). That consciousness alone is one that is governed by one law, one supreme purpose to which all actions and purposes are subordinated. "This purpose is the 'I'." Very few have it and then only in a limited degree (*ibid.* p. 301). The purpose may perhaps be eternally enduring (*ibid.* p. 302). Continuity is not the source of this unity as some hold, because there is very little continuity. Nor is self-consciousness such a source, as is usually held. For, if self-consciousness were the source, the unity of consciousness would consist in the inclusion of a collection into another and a larger collection. But a collection as such has no internal unity (*ibid.* p. 299); and if inclusion into a collection could give unity, then it would be a unity which another mind observing my mind gives to me; and that is evidently no unity. The only unity which self-consciousness might be said to bestow, is the unity of law, of the significance (purpose) of life which it grasps in its retrospective survey; and clearly this unity is not bestowed by self-consciousness, but by the law, and is only detected by self-consciousness.

This brings us to self-consciousness, consciousness of consciousness, knowledge of knowledge, which must be there if a "concept of consciousness" is to be formed. However, it too does not favour subjectivism. For consciousness of consciousness is nothing but the inclusion of consciousness into another consciousness, the inclusion of the aggregate of objects which constitute one consciousness into a larger aggregate which forms another consciousness. This other consciousness may be the same as the former but later than it in time. This is the case of memory; the remembering consciousness includes the remembered consciousness in itself. Or it may be another consciousness or mind observing a mind; the observing mind includes the observed mind in itself, and has thus consciousness of consciousness, knowledge of knowledge.

Illusions and hallucinations, dreams and fancies and error, are the strongholds of subjectivism. They are all cases of error. Now error is either error of perception or of thought. The error of perception is again error of space, error of time,

and error of secondary qualities. An object looks nearer and smaller, according to distance, distorted, displaced and multiplied if one eyeball is pressed; it is "invariably seen at a moment later" than when it had a certain position; it looks red to the normal eye and grey to the colour-blind, feels hot to one hand and cold to the other, etc. After the object is no more, there is the after-image; or there is no object at all, yet the patient sees one. But none of these phenomena proves that the percept is subjective; for the physical world offers parallels to them, and no one would say that these are subjective to the physical world and that it suffers from illusions and hallucinations. The mirror multiplies and displaces an object, the photographic camera shortens and distorts it and receives it later than it was at a certain position, etc. All these so-called illusory phenomena are sections of objects, as is the reflection in the mirror a section. The subjectivist has a "brick-bat" notion of the physical thing; he believes it to be composed of material particles and divisible only into them. But it is a complex of neutral qualities, *e.g.* shape, mass, volume, electrical charges, etc.; and only in their organization is it ponderable. It can be resolved into them, and one or the other of them can be detached from the complex which it is. This is what happens in illusions, etc. They are where they are perceived to be, objective and not subjective only. They are not "on the object," but they are. Their space, etc., is other than the space of the object. It is the neutral realm. There the qualities which cannot be together in the physical world can interpenetrate each other, *e.g.* the red seen by one person and the green seen by the other (cf. *N.R.* p. 370). How the nervous system can respond to the neutral realm has already been anticipated. For the neutral entities are effective forces in the physical world and the response is, even in plants, nearly always to them (*C.C.* chap. XI). Dreams and fancies too are in the realm of neutral being. They are not subjective, but like all subsistent entities, objective and independent of the subject. They are "vague nuclei" of the neutral entities (*ibid.* chap. XII).

Illusion, hallucination, etc., all involve error of thought.

Now these phenomena do not assert themselves to be "real," as some hold; nor does the neo-realist assert them to be "real." But they have being and so has error being. It is part of the realm of being, and is therefore objective. Being part of the neutral realm, it must enter into the constitution of mind and matter. Now, that it does make part of mind is not disputed. But that it makes part of the physical world is opposed to the universally accepted notions of reality. It is held that reality is a self-consistent whole in which there is no error. But what is error? Error is contradiction, and only propositions and not terms are contradictory. Now the physical world is full of the conflict of laws. All these conflicts are cases of contradiction and therefore of error (*ibid.* chap. XIII, and *N.R.* pp. 360–7).

Thus the universe is composed of neutral, conceptual entities, of terms and propositions. All its component parts as well as the wholes composed are objective, having their own being and being open to the gaze of all. Real and unreal, matter and mind, sensation and perception, memory, imagination and thought, volitions and unity of consciousness, as well as illusions, hallucinations, dreams, fancies, errors and contradictions, all are such. Nothing is subjective. Subjectivism has no place and, as Avenarius showed, is, like all idealism, due to the fallacy of introjection. Realism alone is the true doctrine.

Now this whole argument rests on the identification of being with subsistence, *i.e.* with the mode of being of concepts or universals; and on the identification of concepts with the abstract elements of existence, *i.e.* with what has the mode of being of percepts or particulars. That being and subsistence are regarded as identical is shown by the fact that no difference is made between them, and the universe of being is freely spoken of as the universe of "logical" or conceptual entities. It is a self-evident position for Holt. So also is the identification of concepts with the abstract elements of the existent. It is out of concepts that the real and the unreal both are made. Matter is an aggregate of concepts, and it is an aggregate of qualities; and qualities are universals, and

indeed, of the highest order, just next to identity and difference in the "neutral mosaic." So is mind a cross-section of the "neutral" elements of which the environment is composed. Holt never inquires into the relations of being, subsistence and existence.

But as indicated above, being is not necessarily subsistence. It includes, besides subsistence, existence and what Meinong terms "Aussersein," that is, the being of the impossible and false terms and propositions. Nor is subsistence the being of the abstract elements of the particular. For, if they were the elements of the existent, concepts would be particulars and not universals; and conversely, if the elements of the existent were concepts, the existents would be universals and not particulars. No amount of particulars can make a universal, and no amount of universals a particular. The reason is that the universal and the particular, the concept and the percept, the intelligible and the sensible are two totally heterogeneous entities; the one is what the other is not. Consequently it is an impossible notion to regard reality as a system of conceptual terms in relation, and to hope to construct it out of concepts. What makes it apparently possible for Holt is the notion that the abstract elements of the real, the qualities, etc., are concepts.

This affects Holt's main contention directly. For mind or consciousness is the cross-section of the neutral realm of being, cut by the specific response of the nervous system. But this realm is composed of concepts. The mind is therefore confined to the awareness of universals. It is thought, but no perception. It is cut off from the domain of reality, the sphere of the particular and the existent; and what is more, being a cross-section, *i.e.* an aggregate of concepts, this mind can only subsist but cannot *exist*. It is a complex of concepts. Yet, this is not the only difficulty which Holt's "deduction" or "definition" of consciousness has to meet. His logistic is in alliance with positivism. It is for him, after James, a foregone conclusion that there is no subject (cf. *C.C.* p. 142), and that the mind or consciousness is only a kind of object. To the question: What kind of object the mind or consciousness is?

Holt's reply is that it is an aggregate of objects, and that this aggregate is defined by the response of the nervous system. But this he means as the *deduction* of a *new* realm from a previous realm, namely of consciousness from organism. When it is urged that not all organic response is conscious, and therefore consciousness cannot be deduced from it, Holt meets the objection with the counter-assertion that all organic response is conscious, that the plant too is conscious, though not self-conscious. This thesis may or may not be true. But the point is that if true the deduction has taken us no step forward, and it is not deduction in the sense it was intended to be, consciousness is assumed in order to deduce consciousness. The deduction must start now, not from the realm of organisms, but from the next preceding realm of unconscious objects. The difficulty would however again repeat itself.

But the controversy, whether all organic response is or is not conscious is really a relapse from the concept of consciousness, which Holt has developed. Consciousness is not *response*, but the collection or "cross-section" of *objects* defined by the response. It is identical with the objects and not with the response. Thus in reality the deduction deduces consciousness from objects and not from the nervous response. But again the same difficulty occurs. For, if mind is a collection of objects, there is no awareness in this collection. If the response at all defines a collection of objects like a searchlight, it describes a circle of *objects* and not *consciousness* of objects. Consciousness is neither one of these objects nor the totality of them. Awareness is no feature of this totality. The totality does not come into being with consciousness, nor cease to exist after awareness of it ceases. If *it* is consciousness, it will remain what it is after awareness, and was so before awareness. It makes no difference to it that it is defined, or described as a circle, by the nervous system or by some other agency. If however consciousness is to be retained and retained as identical with objects as the theory would have it, then there is no way out from the panpsychism to which James tended. Yet, that too does not remove the difficulty. For then the distinction of subject and object, from

the denial of which the theory started, will have to be made an absolutely universal fact, and introduced into the heart of every object, *i.e.* the object will have to be broken up into the duality of subject and object.

It may further be asked whether the nervous response really defines a collection of *objects*. The physiological description of the process of knowledge which Holt gives in the *New Realism* excludes thought, *i.e.* the knowledge of the universals, altogether, because universals are not existents, they are not vibrations and cannot communicate vibrations to sensory nerves—it excludes thought, as the ontological description of consciousness excluded perception. But does the nervous response define even the objects of perception? A peripheral stimulus (= number of vibrations) is communicated to the nerves; an equal number of nervous vibrations proceeds to the nervous centres, the nervous centres react and execute an equal number of movements. This last is the "nervous response." If it defines anything, it defines the *movements* executed. It may even be said to define the *direction* of the movements. In itself it is nothing but *movements* in a certain direction. The movements are certainly directed to external objects. But the *objects* are not *for the movements, i.e. for the nervous response.* They are defined by the movements only *for an onlooker.* The description, following Avenarius, tacitly assumes the onlooker and puts it into the nervous response itself, and thus makes on the positivistically minded an impression as if it had explained or deduced consciousness out of pure and simple nervous response—consciousness, which is the distinctive function of the onlooker and has been surreptitiously introduced. This is unavoidable for theories which try to explain consciousness as a physical fact, and explain knowledge as a physical relation. In truth, strictly speaking, there is no room for consciousness or mind whatsoever in Holt's theory, be it thought or be it perception. Realism, on the contrary, presupposes thought and perception and validity of thought and perception. The theory, though perhaps the most consistent one from the standpoint of American neo-realism or rather of positivism, is therefore not only "not

essential" for realism, as Holt admits (see *N.R.* p. 355, note 5), but is directly incompatible with it.

Similar is the fate of the unity of consciousness. For after the "formal" unity of apperception or the subject is denied, the unity of consciousness can consist only in the togetherness of its contents; it can only be "material" unity. And this unity, mechanical though it be, can serve the purpose if it has continuity, *i.e.* if the aggregate of the elements which compose it is more or less permanent. On the face of it, this should be Holt's account of the unity of consciousness. But as he himself points out, the unity of an aggregate is hardly a unity, and there is very little continuity in this aggregate—it would seem to change with every turn of the eye. There then remains the formal unity of apperception, the unity of self-consciousness, the unity of the "I think which accompanies all my thoughts." But this has already been rejected by James as a chimera of the philosopher's brain, and as nothing other than the "I breathe which accompanies all my thoughts." Holt too therefore rejects it and finds that the unity which self-consciousness can bestow upon my mind is nothing better than the unity which another mind observing my mind can bestow upon it, because self-consciousness is only the inclusion of my former mind into my later mind; and evidently this is no unity. It is only the unity of inclusion in a larger whole, and in principle the same as the unity of an aggregate, which is no unity. Thus the unity of an aggregate which agreed with his positivistic presuppositions is rejected by Holt. The only way that remains open for him now is to fall back upon his ontological resources, to look for the source of the unity in the unity of concepts. Hence it is the purpose, the law, which is the source of the unity; this it is which gives unity to the items of my consciousness—turns them into a systematic whole. It "is the 'I'." Now ethically this sounds agreeable. But purpose is not the actual idea of an end for Holt. It is law which is description of a uniformity; and it is of the same nature as the natural laws of motion and gravitation. It is a universal. The unity which it bestows on the instances to which it applies is the unity which the universal

bestows on the particulars. It is as good as the unity which the concept "atom" gives to an atom here and to an atom in the Milky Way. Such a unity is, if anything, less than even the unity of a mechanical whole. But if the law, the purpose, *is* the "I," is the unity of consciousness, then, firstly, this unity does not *exist*, because no universal exists; and secondly, it is a unity which is *independent* of the consciousness of which it is the unity. For, evidently, the purpose may abide even when the consciousness has passed away; and can very well be the unity of many consciousnesses[1].

Before leaving the topic of mind, it may here be noted by way of recapitulation that the concept of consciousness given by Holt is not one. There are as many concepts as there are aspects of the question from which he approaches it. Logico-ontologically mind is an aggregate of the neutral entities, the concepts; it therefore only subsists, and may be said to be identical with thought. Positivistically it is a cross-section of the environment, is a class of objects; it therefore exists and may be taken to be perception[2]. But the ethical-looking description of its unity yields a new principle of its definition.

[1] The doctrine of the nature of volition does not concern us directly. Its bearing on the unity of consciousness has already been considered. If ideation may be said to give terms, volition gives propositions which can organize and create new terms. Thus a system of terms in relation would be generated, and this would be a mind. This conception of mind is most in harmony with the logical presuppositions of Holt's thought; the positivistic presuppositions only disturb it. All the same the mind remains object-mind, an organized content, it is not subject-mind.

As to this theory of volition the following points may be noticed. Volition is purposive *activity*, and is inconceivable without an agent, the subject. Purpose is law, but in a different sense. It is the future governing the present action; and is purpose only because it is the conscious idea of the end. Moreover it is an existent, a *particular* entity, and can as such be *actualized*. Law is a universal and cannot as such be "realized." The unification which purpose works in actions is the unification which the whole works in its parts, and is fundamentally different from the unification which law works in the instances that "fall under" it. The identification of volition with purpose and of purpose with law is not voluntarism; it is logisticism or intellectualism. It substitutes for the temporal activity of will determined by purpose, the timeless "activity" of a universal "determining" the particulars. Nor does Holt's theory reconcile freedom and final causality with necessity and efficient causality; it only obliterates the difference in favour of the latter, and thus in truth denies the former.

[2] The problem of ideational knowledge will yield, as we shall see, still another concept of mind, according to which, mind is the sum of representative ideas: it is ideation.

The aggregate of objects which is mind is no more defined by the response of the nervous system. It is defined by the law under which the elements of this aggregate fall. Mind so defined would seem to be neither subsistent nor existent, but in a domain between the two. But how these three heterogeneous concepts are to be reconciled is not clear. However, in all of them, the mind is the object-mind and not the subject-mind. It is concepts, or percepts, or actions governed by law; but not the thinker, or the percipient, or the agent who is pursuing the ideal.

We find a similar variety in Holt's conception of knowledge and for similar reasons. According to the logico-ontological definition of mind as an aggregate of "neutral" entities, knowledge can only be of concepts, *i.e.* thought; according to the positivistic definition of mind, as a cross-section of objects, knowledge can only be of percepts, *i.e.* perception; in both cases it is presentative. But according to the theory of ideation, as we shall see, knowledge becomes representative, *i.e.* ideation. The first observation which offers itself in connection with knowledge is that it is an activity of the subject in relation to an object; and because the subject does not exist for Holt, neither can its activity. Consequently like the agent, the activity too is identified with the remaining factor of the situation of knowledge, namely, the object. Sensation and perception, said Holt, *are* the objects themselves; memory and imagination *are* the ideas which are part of the object; and thought *is* the concepts or the neutral entities passing in the mind which are the elements of the object. "There are no such two things as knowledge and the object of knowledge" (*C.C.* p. 148). There is no knowledge "*of*" an object as common speech implies (cf. *ibid.* p. 150); knowledge *is* the object itself. Thus knowledge is objectified, as was the subject before. It would seem that the togetherness of knowledge and object has been turned into the identity of knowledge and object, as was the togetherness of the subject and object transformed into the identity of subject and object; and for the same reason, namely, that knowledge is not, any more than the subject was, an object that can be seen or touched, etc.;

while that which can be seen or touched alone exists. Therefore if knowledge is a fact, it must be identical with the object. But as the question: Who is conscious or aware? did not arise and hence remained unanswered for the doctrine which denied the subject or rather identified it with the object, so the question: What is awareness *of* the object? is brushed aside and left without answer. But the object might have been before there was knowledge of it, or continue to be after the knowledge. Knowledge has therefore to be assumed as a fact *other than* the object, and one which is only accidental to the object. We cannot evade it, nor can we identify it with the object. What Holt is in reality aiming at, is the theory which Perry calls the "immanence" of the object in knowledge, that the object forms part of the contents of knowledge, that it bodily enters the mind which knows it. This is the neo-realistic, or rather the positivistic presentative theory of knowledge (cf. *P.T.* pp. 308, 312). On the face of it, it looks plausible in the cases of sensation and perception. Nevertheless the cross-section of *objects* which the nervous response defines and which is the object of perception is no component *part* of perception or knowledge. The component parts of knowledge, if any, are the pieces of knowledge of this and that object, and not the objects themselves; simply because the objects may remain and their knowledge pass away, or their knowledge may remain and the objects pass away. The knowledge is, if anywhere, in the organism according to the theory itself (cf. above), but the objects are over there in space.

The difficulties of the theory of "immanence" become patent when it grapples with the problems of memory and imagination. The "idea" of the object is, according to it, identical with the object. Is then the idea of the past event in the past time, or the idea of the distant object in the distant space of the object? If not, then the idea is not identical with the event or the object—it only *represents* the object; and this involves that there are two kinds of knowledge, presentative, *e.g.* sensation and perception, and representative, *e.g.* memory and imagination. Yet, Holt is unwilling to admit either of these consequences. All knowledge is for him of

one piece; it is presentative, and it is the object itself. How then is the dilemma to be met? All "ideas," says Holt, be they percepts or images, are members of the system of knowledge; they have their own space and time. But events and objects are members of a system which is in another space and time, called "real" or "physical." The two systems intersect. The "idea" is the point of intersection and is therefore identical with the event or object. Holt does not see that the point of intersection is necessarily in both systems, that it is in the space-time of both systems, and consequently it is in the real or physical space-time; and that therefore the objection remains unanswered. The reason is that the point of intersection and the identity of the idea are not conceived by him as *existential*. This comes out in his theory of representation. The "idea," according to it, represents the object; all knowledge is representative. But representation involves identity. "Nothing can represent a thing but that thing itself.... In so far as it (the photograph) truly represents the object, it is just so far identical with it.... A representation is always... *completely identical* in all those features and respects in which it *is* a representation" (*C.C.* pp. 142, 143). Now this identity is evidently *conceptual* identity, and is not the *existential* or numerical identity as the reply would make one believe; and it is in virtue of this identity that, on the one hand, Holt can deny that the idea of the past event is in the past time, and on the other, maintain that the idea is identical with the event. But if it is this identity which puts all objects "identically" in the knowledge system on the one hand, and in the real world on the other, then all knowledge is representative in the sense in which Holt denies representative knowledge. The idea and the object are *two* entities, idea is *other than* the object, and only stands for it.

The account of representative knowledge brings us to the problem of "representation" or "correspondence." Correspondence or representation involves the repetition of the instances of a universal. Holt therefore recognizes in it the problem of repetition, which is according to him a case of the "self-representative systems" by means of which Royce has

conclusively settled the vexed question of one and many. It is therefore no other than the problem of the relation of universal and particular, of concept and percept. However Holt's appeal to Royce's "self-representative systems" is significant. Royce ascribes "self-representation" to concepts or propositions, which by repetition seem to generate systems of terms like those of numbers (cf. Royce's *The World and the Individual,* vol. I, Supplementary Note). Whatever the value of Royce's contention against Bradley, the point to note is that *a universal (concept or proposition) cannot repeat itself*; because the repetition of a *universal* has no meaning. Its essence is self-identity in the strictest sense. "*A*, a concept, repeats itself," is, strictly speaking, devoid of all meaning. Because another *A*, which seems to be thereby generated, is not *another A*, if it is the concept *A* which is thus generated—and what else could it be but the concept *A* that is thus generated? However if by this process there results a multiplicity, that multiplicity is of concepts, of the universals, and not of percepts, the particulars. It is not the generation of the Many from the One by means of repetition. For what Holt means to convey by this generation is the generation of the particulars from the universal. The problem of representation or correspondence therefore, if it is the problem of "repetition," of "self-representation," of the generation of many from one, of particulars from universals, leaves us where we started from, namely, confined in the sphere of the universal; and consequently, if all knowledge is representative knowledge in the sense that it is the knowledge of what is *identical* in the idea and in the object, the theory of representation or repetition does not help us to come out of the circle of the concept. Knowledge remains cut off from the real. It is thought, the knowledge of the universal, the subsistent; and in no case perception or ideation, the knowledge of the particular, the existent. And starting from the logico-ontological universe of neutral entities and having these entities as the exclusive constituent elements of all being, knowledge, on Holt's theory, must remain confined to the universal. For the relation of the universal to the particular

is not, as he propounds, the relation of the abstract to the concrete, or of whole to part, so that one is homogeneous with the other and can be developed out of it. The two terms are totally heterogeneous and there is no way from the one to the other. Nor can knowledge be said to be confined to the universal, as by the instances of science and of speech Holt implies. For in these instances knowledge has its start in, and always has its foot on, the particular and the existent and neither begins nor remains confined to the universal and the subsistent, as, according to his theory, it must. Moreover in these instances, the interest of knowledge is exclusively the grasp of the real in its concrete totality and in its abstract elements, neither of which are concepts; only it uses concepts as means of exposition.

Although knowledge is now identified with perception, now with ideation, and now with thought, strictly speaking, on Holt's definition it is none of these, because it is *identical* with its object. It is not, in fact, knowledge at all. It is as much or as little knowledge as the cross-section of objects defined by the nervous response is consciousness or mind. Consequently there can be no question of self-knowledge or self-consciousness, or of awareness of awareness, or knowledge of knowledge[1]. Yet Holt describes it as the inclusion of one mind into the same mind at a later moment, *i.e.* as memory, or into another mind which is observing it. Now such an inclusion is neither a fact nor is it self-consciousness or knowledge of knowledge. It is not a fact that in memory my former mind (= "field of consciousness") is actually included in my later mind—the difficulties incident to knowledge by ideation or representation discussed above would recur; nor is remembering *eo ipso* self-consciousness or knowledge of knowledge. Again it is not a fact that another mind can *observe* and actually include my mind in itself—the observation of it being, so far as Holt and Perry bring any arguments to bear, only *knowing* and not observing it, and the

[1] Self-consciousness and knowledge of knowledge are not the same thing; but on Holt's theory of consciousness, the distinction cannot well be made; nor does Holt make it.

inclusion of it, being like the inclusion of any other object in knowledge, is covered by what has just been said above; nor would such an "observation" or knowledge on its part be self-consciousness or really knowledge of knowledge, but only the knowledge of the object of my consciousness. In any case, the self-consciousness or knowledge of knowledge thus described is only a larger whole than consciousness or knowledge. Its nature is the same as that of consciousness or knowledge. It is an aggregate of objects; whether it includes other similar aggregates or not, is immaterial. It is as little self-consciousness or knowledge of knowledge as it is really consciousness or knowledge.

We have seen that mind is a totality of objects, and knowledge identified with objects. Object is the ultimate category to which all else is reduced. It is real and *the* real. Here is the anchorage of positivistic neo-realism. What is real or what is object? Unfortunately Holt is a realist whom the question of reality does not interest (see *N.R.* p. 366). Yet, according to him, these are two questions. Reality is a narrower concept and refers pre-eminently only to physical reality. But object is a much wider term. Everything is object that has being, and everything has being. Object is thus any element, term or proposition of the neutral universe, and all such elements are logical, conceptual entities. The object is as such independent of apprehension, because it is an A, and A is always A, whether in a relation or out of it—it is self-identical. It is thus independent in the logico-ontological sense; but in the neo-realistic sense defined by Perry, it is independent only if it is a simple, a part, and not a whole; for a whole is necessarily dependent on its part. However this dependence has nothing to do with its dependence on mind. What neutral entities are really simple is, according to Holt, a question which only empirical inquiry will decide; and one cannot say whether even the concepts identity and difference are simple. However, on Holt's principle, there must be both ultimately simple terms and simple propositions—terms, because propositions presuppose them (*C.C.* p. 66); and propositions, because terms cannot and only propositions can generate new

terms and propositions. One of the most complicated systems of such terms in relation generated by certain propositions acting upon certain terms, is reality. Such a system cannot contain contradictory propositions. This is its distinction from the universe of mere being. It is a consistent whole. Reality consists in consistency and coherence. So does truth. Truth as correspondence is a subjectivistic theory. Object is thus concept, or a complex of concepts, and reality a system of concepts. Now the object is a *universal,* and there is no way from it to the particular; nor any room in it for process. Hence causal necessity is identified with logical necessity (*C.C.* p. 285). This, then, is the conception of object corresponding to the logico-ontological conception of mind and knowledge.

But coming down from thought to perception and ideation, the reality of percepts and ideas has to be affirmed; realism demands it. The object is therefore composed of qualities and ideas. But how is this to be reconciled with the ontological position that it, the real physical object, is composed of concepts? This is effected by affirming that the identity of indiscernibles, true really only of concepts, is true of percepts and ideas (*ibid. e.g.* p. 109); in other words, it is effected by turning the qualities and ideas into universal concepts. The quality "white" of the snow, maintains Holt, which I see to-day is *identically* the *same* quality which I saw yesterday as the white of the cloud (*ibid.* p. 106), the idea which represents a thing is so far *identical* with the thing (cf. above). Besides this easy confusion of the concept with the percept, what helps Holt in this identification is the positivistic reduction of matter to qualities. Qualities, size, mass, volume, colour, etc., are abstract elements of the object, and look like ideas ethereal and unphysical. As such abstractions they are naturally objects of thought and may easily be installed as concepts. Moreover this identification facilitates the progress of the whole system, it makes the "deduction" of reality from pure concepts plausible. It would also reconcile the conflicting notions of knowledge as perception, as ideation, and as thought; and those of mind, as the sum of percepts, the

sum of ideas, and the sum of concepts. In it also originates Holt's account of universal and particular: The universal is abstract, the particular is a complex of abstracts and is therefore concrete. But as we saw, the particular *cannot* be deduced from the universal. The abstract elements of the object, viz. qualities, from which the object seems to be deducible (= constructable) are *not* concepts. *They are abstract existents.* Nor are they *independent* beings as concepts are. The volume of a body cannot exist if the body ceases to exist, as it should if it were a mere concept; nor can its size or colour or other qualities. The independent being of qualities is an impossible conception, and is made plausible only by the belief that qualities are concepts. The same can, *mutatis mutandis*, be said of ideas; with the further addition that as we saw ideas are not parts of objects, but other than objects; nor are they common objects—the same idea cannot be *experienced* by several minds, and as said above, Holt and Perry succeed in showing only that it can be *known*, but not that it can be observed. Moreover its independent existence is still less conceivable than that of qualities of objects, because it is not only an abstract entity like them, but is one that can exist only in a mind. Nor is an empirical proof forthcoming for the independent existence of qualities and ideas.

The object, according to Holt, is constituted of qualities (and ideas). It is a whole composed of the independent self-existing parts, its volume, its mass, its size, its figure, its colour, etc. None of these qualities is ponderable. Ponderability is a new quality and exists only in the organization of the other qualities into an object. But in fact it is nothing new; it is strictly deducible from their organization (*N.R.* p. 369). It is identical with organization, as water is only oxygen, hydrogen and organization (*N.R.* p. 340). It is probably a Gestaltqualität; for Gestaltqualitäten *are* organization, as may be seen from the reduction of secondary qualities to them. Holt's theory is that the object is made of qualities, and qualities are made of elementary nervous shocks, corresponding to nervous vibrations. What is said to be new in

them is nothing new but only the Gestaltqualität. The question is not raised as to primary qualities because they are ohne weiteres Gestaltqualitäten, mechanical wholes of homogeneous parts, and have nothing *new* in them which was not already in the parts; and James's contention that even they have something new and unique about them is passed over. But as to secondary qualities, as we saw above, an attempt is made to show that they too are mere Gestaltqualitäten and have no new "quality" about them. The first point to prove is that they are compounds, and the second that they are mechanical compounds of homogeneous elements. Similarity, intensity, brightness, saturation, etc., are the features which furnish the argument for the complexity of the qualities; and the development of roughness, smoothness and continuous touch by increasing the frequency of homogeneous taps is taken to show that these qualities are only the "density" of the taps, the Gestaltqualität, and nothing more and nothing new.

But the argument for the complexity of secondary quality only proves logical complexity and not *real* complexity. The former is not the latter, nor does it necessarily indicate the latter. But this is what Holt assumes. Concepts are for him abstract existents, as we saw. But the assumption is untenable. The "aspects," similarity, intensity, etc., of a quality cannot be turned into its component "parts," as if they were self-existing psychic atoms of which the quality is composed. Phenomenally too, *i.e.* for direct apprehension, it cannot be maintained that secondary qualities are complexes. They are experienced as integral unique units, not further analyzable, whatever distinctions of intensity, etc., from different points of view it may be possible for thought to make in them. It is only for the experimenter and not for the subject that they may be complex; but the experimenter is not concerned with them as phenomenal. Nor are they Gestaltqualitäten. As Gestaltqualitäten they are said to be composed of taps and time. Time is the organizing principle which turns taps into "form-qualities." It is essential to them. But *ex hypothesi* and also in fact, time is *not* apprehended within them. The sensum

as apprehended is therefore not the Gestaltqualität; it is something else. That the succession, the form of organization is too rapid and not apprehensible, shows precisely that what is apprehended is not a Gestaltqualität; and not that it is one, as Holt supposes. The quality apprehended may be a Gestaltqualität for the experimenter who is observing its antecedents (causes), but it is not a Gestaltqualität for the subject who is apprehending the quality itself. That the Gestaltqualität consists not in the time-succession, but in the frequency ("density," accumulation) of taps, as Holt's language implies, does not improve the situation. The apprehension of the organizing form, time, is in every case eliminated, and the quality apprehended is consequently not a Gestaltqualität. Moreover the circumstance that the quality is an accumulation ("density") of taps, is again a fact for the experimenter, and not for the subject. What the latter perceives, *i.e.* what is directly perceived, is not an accumulation or "density" of multiple elements but an integral simple unit. That "red" for example *is* a sum of nervous shocks would hardly be an intelligible statement for one who is apprehending red. Red may be a necessary consequence, let us say, effect of nervous shocks, but it is simply *not* identical with them. What makes this reduction of quality to density plausible to Holt is mainly the fact that as his example he takes touch and sound, which do not seem to have clearly differentiated distinctions of *quality* and in which the distinctions are chiefly of *intensity*; and further, because he conceives phenomenal intensity like Alexander, as if it were a sum of lower intensities. Montague too agrees on this point, and declares that Holt's analysis does account for differences of intensity, though not for differences of quality (*N.R.* Appendix). Pitkin is also of the same opinion with Montague, yet somehow believes that secondary qualities are "form-qualities." This agreement of other neo-realists indicates the essential agreement of Holt's theory with the presuppositions of neo-realistic thought, although he admits that it is not necessary for realism (*N.R.* p. 355, note 5). The object of the theory is to quantify quality, to reduce quality to quantity,

and thus to make it a mechanical whole, which is the fundamental category of the school.

The first theory of the object was that it is a sum of concepts, and was due to the logico-ontological position. The second theory is that it is the sum of homogeneous psychic atoms, of nervous shocks. The connection of the two views is to be sought in the identification of the abstract elements (qualities) of the existent with concepts or logical entities. It is due to this identification that logisticism, or logical atomism, is brought in line with positivism or psychic atomism.

The above discussion was concerned with one thesis of neo-realism, viz. "All that is is object." The other thesis, viz. "All that is object, *is*" comes out in Holt's doctrine of error. Although this doctrine is not necessary for realism, and Holt offers it only as his personal interpretation (*N.R.* p. 360, note 1), it is more neo-realistic than the doctrines of his colleagues and a logical consequence of the presupposition of his thought.

Error occurs either in perception or in thought, either with terms or with propositions. Of the former sort are illusions, hallucinations, dreams and fancies; of the latter errors of judgment. Now error is, according to Holt, contradiction, and only propositions and not terms are contradictory. Hence illusion, etc., are not cases of error, and not being cases of error they must be objective. Further because these qualities are not "on the object," they must be in the neutral realm of being. But the errors of thought too *are*, and are therefore in that realm; and as reality is composed of elements of this realm, these errors too must enter into its composition, and consequently they are objective. This may be taken to be the process of Holt's thought in asserting the objectivity of both classes of error.

Holt does not stop to consider what is meant by those who say that errors of perception and errors of thought are subjective. His whole contention is that they *are*, have being. But this was never denied. The subjective and the objective, both *are*, they both have being. The point of the adversary

only is that errors are not objective. But for Holt "to be" is to be objective, and hence he finds himself unable to attach any meaning to the term subjective (cf. *N.R.* p. 366). This is a fundamental presupposition of his thought and must be considered more in detail.

"Everything is being" is an "object of thought." Therefore it is a concept, has subsistence; and everything subsistent is objective. This is the presupposition of Holt's contention that both kinds of error are objective. Now he does not admit that contradictory terms, *e.g.* round-square, have any being whatsoever. Yet he maintains that contradictory propositions, *e.g.* *A*-is-*B* and *A*-is-not-*B*, have being. Further he admits that the being of propositions involves the being of their terms (*C.C.* p. 66). Consequently the proposition *A*-is-*B* involves the being of *A*-that-is-*B*, and the proposition *A*-is-not-*B* the being of *A*-that-is-not-*B*. If both propositions *are*, they together involve the being of *A*-that-is-*B*-and-also-not-*B*; *i.e.* the being of a self-contradictory term. Thus it is clear that no distinction can be made in respect of being between contradictory terms and contradictory propositions. A self-contradictory term is contradictory propositions implicit, and contradictory propositions are a self-contradictory term explicit. Both have the same kind of being. The being they have is, in both cases, the being of the "unthinkable-impossible," which is not the being of "printer's ink," as Holt thinks. They are "objects of thought," for we must *understand* them in order to say they are "unthinkable impossibilities." They *have* being. What kind of being is it that they have? It is not the being of percepts, *i.e.* existence, nor the being of consistent concepts or propositions, *i.e.* subsistence. Meinong gives it the same of "Aussersein," which could more appropriately be called "Aussersein-und-Bestehen," "being-which-is-neither-existence-nor-subsistence," and which he later characterizes positively as "Annahmesein." This is the kind of being which both self-contradictory terms and contradictory propositions, in short all unthinkables, have. Inasmuch as all error is error of thought, is contradiction, its object has only this kind of being. And

this kind of being is not objective, because it is neither existence nor subsistence.

But this is true only of *error*, and not of its elements. The judgment which asserts *A* is *B* is an existent fact in the life-process of one who makes this judgment; the judgment *A* is *C* and not *B* which expresses the true state of things too is a fact, say, in the life-process of reality. But what the judgment *A* is *B* means is erroneous. It means that *A is B* in the life-process of reality, which is in contradiction with that life-process. In this sense it has only "Aussersein" being. But in the sense in which it has existence, it is in principle identical with errors of perception. They too have existence in the life-process of one who has them. The error in their case also consists in this that they mean or they are taken to mean what belongs to the life-process of reality. For both classes of error the contention of the adversary is that they are facts of someone's life-process only, and do not represent the life-process of reality. They are therefore subjective and not objective. "To be" even "to exist" is not necessarily to be objective. Holt does not meet the contention, because his metaphysics precludes him from realizing its meaning.

Holt meets the assertion of the subjectivity of illusions, etc., by showing parallels in the physical world[1]. This would imply that he holds illusions, etc., to be physical existents. But this is not the case. He is simply concerned in ascribing "being" to them, because he believes being as such to be objective. But "being" as said above was never denied to them, and the assumption that being as such is objective, is, as we saw, not admissible. It may be subjective being. The physical parallels could be of use to prove the objectivity of illusions, etc., only if they were meant to indicate the physical reality of illusions, etc. To prove objectivity it must be shown that the illusory object is an independent existent and a common object. This Holt does by holding it to be a "neutral" entity, that is by holding it to be a quality of which a

[1] Holt has in mind the subjectivist whom he is refuting. But such parallels cannot refute one who is questioning the validity of perception as such, because they are nothing but cases of perception. The neo-realists believe that empirical arguments can refute metaphysical positions.

physical object is made and which is analyzed out of it and is apprehended in its own right. But evidently the quality is still in the object; it is somehow reproduced and not analyzed out of it. This once more raises the problem of reproduction, of representation, of repetition. Illusion is therefore a case of representative knowledge. The representative and the represented are *identical*; because it is the concept which is taken to be apprehended. For, according to the fundamental assumption of the system, the qualities or the abstract elements of the existent which we perceive, are concepts. Illusory objects too are therefore concepts, because they are such qualities. And because concepts exist in a space of their own, the neutral universe, therefore the possible multiplicity of illusions which could fill up the whole physical space, if they were physical, does not disturb Holt. But the illusory objects are not subsistent concepts; they are existent percepts; and it has yet to be demonstrated if they are independent existents. The next point to prove was that they are common objects. In the assumption that they are "neutral" entities or concepts, the required proof is indeed already included. But it falls with the assumption. Another proof is that all "ideas" are common objects, for "idea" being equivalent to percept, image, feeling, etc., would include also illusions. But Holt's proof of this thesis consisted in showing that we can *know* the ideas of others and not that we can *observe* them and have them for our common objects. Thus both the requisites of the objectivity of illusions, their independent existence and their being common objects, remain unproved.

If not directly, the objectivity of illusions, etc., can perhaps be proved indirectly, *i.e.* by refuting the argument for their subjectivity. That argument rests upon showing a contradiction if the objectivity of illusory objects is maintained. I see a red where another sees a green; red and green cannot both be at the same time at the same place; therefore at least one of them is not there and is merely subjective. Holt denies that the two cannot be at the same place. For him it is of the nature of physical objects that two of them

cannot simultaneously occupy the same point of space, but not of qualities which are neutral entities; they can "interpenetrate" like the objects in the mirror and behind the mirror (*N.R.* p. 370). That such an interpenetration of qualities is possible in physical space would be a statement which experience does not bear out. The only alternative is that it is possible in the "neutral universe" which is the domain of conceptual being—qualities being in it because they are concepts. But even in the domain of concepts they do not seem to interpenetrate. Red and green are contradictory, rather disparate terms. To be in the same place would be to form one term together, to combine into one concept, which would be a contradictory term, and a contradictory term is an impossible entity even according to Holt. The argument that illusory objects are subjective is not therefore disproved, and thus even an indirect proof of the objectivity of illusions is wanting.

The point that contradictory sensa (illusory objects) "interpenetrate" is not argued by Holt. But that contradictory propositions are parts of the real world is argued in detail (see *C.C.* XIII, and *N.R.* pp. 360 ff.). Every instance of collision, repugnance, etc., is, according to Holt, a case of the conflict of laws, of contradictory propositions; and the world is full of such instances. What is meant is the *reality* of contradictory propositions. Moreover their reality is not only maintained as an empirical fact, but also "deduced" from the being of contradictory propositions in the neutral universe. But the case of contradictory propositions is, as shown above, on a par with that of contradictory terms. What is more, their reality conflicts with the nature of a system of terms in relation as indicated by Holt, viz. that it is consistent and no contradictory propositions can realize themselves in it—and "reality" is according to Holt such a system. Further the "conflict of laws," on which Holt relies as the empirical proof, is not a case of contradiction. No two laws are of the form *A*-is-*B* and *A*-is-not-*B*. Moreover the conflict is only apparent. Laws are only formulas of the behaviour of things and are consequently formulated always with the proviso:

"No interfering circumstances happening." Everyone conversant with the nature of these laws knows this proviso also. Understood in this, its genuine nature, a law never really conflicts with another law. Supply it with its omitted proviso, and the apparent conflict disappears. The conflict is in fact not between laws (the propositions), but between things (the terms). Yet, it is not contradiction, because the form of this conflict is not *A*-is-*B* and *A*-is-not-*B*, but *A*-is-*B* and *C*-is-not-*B*, because the subjects are not one but two.

Thus logistic leads Holt to the realism of being and positivism turns it into objectism. The whole thought may be expressed in the proposition that "All being is subsistence" is conceptual being. In this way on the one hand "Aussersein" and on the other existence become conceptual. The nerve of this thought lies in the doctrine that the abstract elements of the existent, the qualities, are subsistent concepts. It makes concepts existents, and existents concepts for Holt; and mediates between his logisticism and positivism, making the former empirical and the latter deductive. The theory is the most unqualified objectism conceivable—reducing everything to object, and though one of its motives is to steer clear of materialism (*C.C.* p. 168), yet materialism cannot wish anything better, specially if it is positivistically minded. That "all is being," and "all being is conceptual" and "all that is conceptual is object and objective," would be a succinct formulation of all its fundamental doctrines; from which its characteristic positions that "mind is a sum of objects," "knowledge is identical with object," "object is a sum of concepts," and "error is objective" directly follow. Criticism of it must question whether "all is being"—being meaning subsistence and existence. In this direction lies the refutation of the objectivity of error. It must further question whether "all being is conceptual" in the sense of being subsistence. This liberates existence from the clutches of subsistence and of being necessarily object. The existent may be the subject or the subjective—mind or knowledge, or it may be the existent object composed of existent qualities.

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Holt affirmed the reality of *all* sensa, and conceived them as concepts. In this he was inspired by Russell and logistic. But that stage of Russell's thought does not concern us. Firstly, because in its application to the concrete world, we have it in a more developed form in Holt, and shall meet with its origin in Moore; and secondly, because Russell has passed beyond it to a new stage which represents another step in the development of neo-realism. It is this stage which interests us. Russell's advance consists in this that he affirms the reality of *all* sensa and holds them to be not universals like Holt, but *particulars*. They are *physical* realities.

Clearer on the distinction of universal and particular, empiricism takes a more unadulterated and thoroughgoing form in Russell. Not only are all sensa real, but *only* sensa are real. The universal, the object of thought, seems to recede more and more into the background; it is reduced to the terms of sensa, and what cannot be so reduced is denied as prejudice. Holt turned sensa into concepts; Russell turns concepts into sensa. Thus the empirical and temporal which was not truly real in that logistically constructed scheme which still hovers before his mind (see *E.W.* pp. 166–7), becomes the exclusively real.

That *all* sensa are *physical* realities, Russell takes from Moore; and that *only* sensa are real, he takes from Mach and James. He maintains the reality of all sensa, like a subjectivist, by making them *private*. In this consist his special contribution; and from this arise also his difficulties. Like a subjectivist he is forced to this position by the conflict of sensa—by the argument from relativity, which has an overwhelming weight with him, and is, after empiricism, the motive-spring of his thought. He calls upon the Einsteinian theory of relativity for support and believes that his own position puts philosophy in harmony with the new physics. But the physical theory of relativity has little to do with the privacy of sensa and the sensible world, as Russell himself also indirectly admits (*E.W.* pp. 103–4)[1].

[1] Yet, in spite of his peculiar theory, Russell is a neo-realist. The thesis of neo-realism is that all sensa are real. Russell's theory is subordinate to it; it is

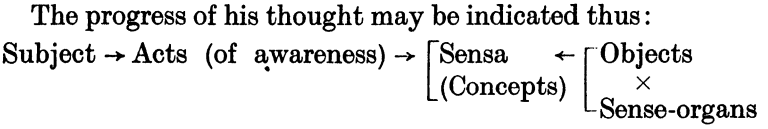
Russell conceives the objective world on the analogy of physical science, as a system of self-existing and interacting entities. To this system belong also our sense-organs, nerves and brain. Sensa are the physical *effects* of these physical causes—the effects of the combined causation of things and sense-organs; and because the sense-organs enter into their causation, sensa are necessarily *private* and temporary, though not subjective. And because immediately experienced, they are the most certain objects of our knowledge. This remains his conception of reality and knowledge all through.

At first Russell maintains the reality both of the effect and of the cause, and tries to *infer* the existence of things as causes of sensa. Later he gives up this attempt as futile, strikes off the causes, viz. things, and retains only the effects, viz. sensa, out of which he "*constructs*" "things." Yet sensa still remain effects for his thought, of which the rejected things are unrecognized causes. This contradiction is involved in his special

there for the sake of this thesis. How Russell comes to it may be described as follows: All sensa are real; nothing is more certain than our sensa (cf. *E.W.* p. 85). They are independent of the subject, and physical, because physical effects of physical causes, as Moore taught. But they conflict. They change not only with the changes in physical objects, but also with changes in my sense-organs. The latter therefore are also their part causes. This step is also felt to be in harmony with the teachings of science. With the introduction of sense-organs into their causes, sensa become private and transitory; and so the conflict of sensa is removed. But it gets removed only so far as one individual is concerned. It breaks out again between the sensa of two individuals. The sensum of one may be private, *i.e.* open only to his gaze, and temporary; but being a physical reality it is in space and time, and may conflict with the sensum of another. But if space and time too be made private, the conflict disappears. This means denial of absolute space and time, and the denial is felt to be in harmony with the spirit of the new physics and its theory of relativity. Thus Russell is a neo-realist in spite of his theory. In spite of the theory because taken by itself, the theory makes it difficult to regard him a realist. The doubt which Russell himself expresses whether realists would recognize in his theory a form of realism (*Sc.M.* p. 29) is well founded. That sensa are necessarily private and temporary is in conflict with the main thesis of realism, viz. that objects of sense are common and more or less permanent existences; and that the space and time of sensa too are private and temporary, makes the theory only in name distinguishable from subjectivism. On the other hand, when Russell in compliance with science shows a readiness to recognize the common and permanent reality of objects, he comes in conflict with the second main thesis of realism, viz. that the objects are known by direct apprehension. However the inconsistencies of his realism do not detract from his neo-realism. They only go to show the inherent untenability of the neo-realistic thesis that *all* sensa are real.

theory as to the nature of sensa, namely, that sense-organs enter into their causation.

The progress of his thought may be indicated thus:



There is the subject on one side, and the objects on the other. The objects interact with sense-organs and produce physical effects which are sensa. The subject apprehends them by an act of awareness; it also apprehends concepts.

Russell starts with this conception in which the influence of Moore preponderates. (i) At first he holds that act and sensa (also concepts) are immediately apprehended. The case of the subject is not so certain; probably it too is apprehended immediately. But the object is not apprehended immediately; it is known only mediately: its nature is absolutely unknowable, only its existence can be inferred as the cause of sensa; it is a Ding-an-sich. This is his view in the *Problems of Philosophy* (1912). (ii) Then he realizes the impossibility of such an inference. The object as such is given up. Yet conceived differently it is retained, and retained as cause of sensa. It is no unity. It is of the same nature with sensa. In fact, it is to be "constructed" out of sensa. The old unitary object is thus replaced by an aggregate of sensa which perform its function. However, the new object too is a fiction. Other fundamental concepts of science also receive a similar treatment. The subject becomes doubtful: it is known, if at all, mediately; it is an inference. This is Russell's view in *Our Knowledge of the External World* (1914). He acknowledges his indebtedness here to Whitehead[1] (*ibid.* Preface); and sees in Mach his forerunner (*ibid.* pp. 123–4)[2]. (iii) The process continues, and under the influence of Mach and James and behaviourism, Russell turns in the paper *On Propositions* (1919) and the *Analysis of Mind* (1921) to attack the subject. The

[1] See Appendix: Whitehead.

[2] The position of C. D. Broad in *Scientific Thought* (1923) is essentially identical with Russell's second position, with the difference that Broad retains his view in *Perception, Physics and Reality* (1914) and would ascribe only primary qualities to physical things.

subject was before a doubtful inference. It is seen now that the inference is not possible. The subject must therefore be given up, and in its place a "construction" out of sensa set up. With the subject must go the act—the act of awareness. That too is a "construction." The concept, as apprehension of the universal, does not exist; like the universal itself, it is probably an inference. "Construction" must take the place of inference in this case too, and the process of "constructing" concepts started in *Our Knowledge of the External World* be completed; but this is not fully worked out, though sufficient indications of it are to be found in the *Analysis of Mind*[1].

Thus the object falls first, and then the subject and the act. The case of universals is left in some doubt. Yet in the end only sensa are retained. They are the sole reality for Russell. Out of them is the whole universe, of matter as well as of mind, to be "constructed[2]." But all "constructions" are fictions; and the ultimately real is therefore only the momentary sensum which is necessarily private.

We may now proceed with the exposition and evaluation of Russell's doctrines.

(i) We start with the belief that things are as they look. But the conflict of sensa soon upsets this belief. The table cannot be round as well as oblong, light brown as well as dark brown, etc., as it looks from different positions. The sensa are only appearances; the shape, etc., of the table is an *inference*. The sensa are signs of things (*P.Ph.* pp. 15–17).

We have now two entities, appearance and reality, sensa and things. Sensa are immediately given. They are the most certain objects of our experience (*ibid.* p. 30). But things are not so. We instinctively believe however in their existence, and "all knowledge must be built on our instinctive beliefs" (*ibid.* p. 39). But can the existence of things be proved?

[1] There are in reality only two stages, the third being only a continuation of the second. But for purposes of exposition it is convenient to take the third as a stage by itself.

[2] This is not perhaps *verbally* true; for, besides sensa Russell recognizes, unlike other behaviourists, also images. But images are not, for him, essentially different from sensa.

Can it be inferred from sensa? Russell answers the question in the affirmative. Sensa are effects, of which the things and our sense-organs are causes. This is what physical science brings out. We can therefore *infer* the existence of things from the existence of sensa.

Russell does not contend that it is an absolutely certain inference. Yet he maintains that it is a valid inference, an inference which is grounded in the principle of induction.

In order to judge the validity of this inference, we must inquire more closely what he conceives to be the nature of sensa and the nature of things or physical objects.

Sensa are physical effects of physical objects and sense-organs. Because sense-organs form a part of their cause, therefore they exist only so long as they are perceived, *i.e.* they are *temporary* appearances. Again for the same reason, they are *private* to each individual. Not only the "matter," *i.e.* colour, etc., but also the "form" of sensa, viz. space and time, are *private*, so much so that each sense has its own space, and perhaps its own time. Russell does not say it, but the implication is clear that the space and time of each individual are not only private, but also *temporary*.

Objects, the physical causes of sensa, Russell is bound to conceive as different from sensa. For, firstly, the cause need not be like the effect; and secondly, according to his theory, sense-organs enter into the causation of sensa, while objects have a nature independent of any such causation. He therefore denies the material and formal qualities of sensa to objects, and all that he can affirm is a vague correspondence between the relations of sensa and the relations of objects, which looks like Herz's Zeichentheorie, and consistently pressed cannot be distinguished from the position of Meinong. We cannot say anything as to the intrinsic nature of objects. They are however in one space and one time; but we do not know the nature of their space and time. All we know is that the relations of objects correspond to the relations of sensa. If one sensum is red and the other blue, we know that their physical causes are different. If one sensum is to the right and the other to the left in private space, we know that the

relative positions of the objects also in the public space more or less correspond to right and left. We cannot know what this space is in itself; we can only know what is required to secure the correspondence between sensa and objects. That is, we can only know the sort of arrangements which result to objects from their spatial relations. We can know that objects are in a straight line, but we do not know what a physical straight line is; we can know the relations of distances in the physical space, but not the distances themselves. In other words, we can know the relations but not the nature of the terms in physical space, as the blind man can know the relations of our visual space but not their terms (*ibid.* pp. 49–50). As with space, so with time. All we can say is that the orders in private and public time correspond. This makes objects unknown and unknowable entities in an unknown and unknowable space and time. They are identical with Kant's Dinge-an-sich existing in an "intellectual space," and Russell admits this (*ibid.* p. 134, note). We do not know their intrinsic nature. All we know about them is that they are—according to our assumption—the causes of our sensa. This kind of knowledge Russell calls "knowledge by description," *i.e.* the knowledge of an entity by means of its effects, and distinguishes it from "knowledge by acquaintance," *e.g.* the knowledge of sensa, which may well be described as the knowledge of objects by means of their properties[1].

The "inductive principle," according to which the existence of objects can be inferred, is: *A* has been found associated with *B*, and never without it. The greater the number of such cases, the greater the probability that the association will be repeated (cf. *ibid.* p. 103). Russell does not apply the principle actually to the case in hand. But evidently it does not apply

[1] Russell defines "knowledge by description" to be knowledge of an entity by means of its "properties" (cf. *ibid.* pp. 82–3). But then it cannot be properly distinguished from "knowledge by acquaintance"; and more, this does not serve the purpose of the distinction, which is to mark off the knowledge of things from the knowledge of sensa. "Knowledge by description" is a very important conception in Russell's doctrine, but in the form suggested above. It crystallizes the status of the entities to which it refers and makes their rejection which occurs in the following stages a psychological necessity. It helps the transition from *inference* to "*construction.*"

to it. *A* and *B* are *both* experiences, and so is their association. But sensa and object are not *both* experienced, nor is their association, viz. the causal relation which by hypothesis connects them. Moreover, the principle justifies an inference as to the *future* association of *A* and *B*, while the case in hand is a question of the present connection of sensa and object. Russell feels the first difficulty which has always been raised against the causal argument for the existence of Dinge-an-sich as Russell's objects are. He, therefore, takes a new turn and brings forth an ingenious argument. The argument may be stated as follows:

The inductive principle asserts the existence of objects which cannot be experienced. This would be tenable if it could be shown that general propositions can assert the existence of instances which cannot be experienced. Can an example be given of such a general proposition? Russell gives this example: Suppose that the products up to 100 of every two integers are known.

> We also know that the number of integers is infinite, and that only a finite number of pairs of integers ever have been or will be thought by human beings. Hence it follows that there are pairs of integers which never have been and never will be thought by human beings, and all of them deal with integers the product of which is over 100. Hence we arrive at the proposition: "All products of two integers, which never have been and never will be thought by any human being, are over 100." Here is a general proposition the truth of which is undeniable, and yet, from the very nature of the case we can never give an instance; because any two numbers we may think of are excluded by the terms of the proposition. (*Ibid.* pp. 168–9.)

In the same way the inductive principle enables us to affirm the existence of objects which can never be experienced (*ibid.* pp. 169–70).

Here again Russell does not make the steps of the inference explicit to himself. The example given refers wholly to universals, to numbers and their relations. But the case in hand refers to particulars, to sensa and objects. It is from sensa that the existence of objects is to be inferred. The reference to the inductive principle too does not improve the situation.

For the principle does not state a relation of concepts; it is a general proposition stating a relation of particulars. If it stated a mere relation of concepts, it could not prove the existence of anything[1]. Thus the example, if it is to be of any use, must state a relation of particulars and not of universals[2].

But it is not its disparity with the inductive principle which is the chief drawback to Russell's example. Its chief drawback consists in its disparity with the case in hand. The "integers" which "never have been and never will be thought by any human being" are *integers*, are numbers. Their essential nature is *known*, only they are indefinite. But of the *objects* to which they are made comparable, the nature is completely *unknown*. A closer scrutiny would show that the example compels us to conceive objects to be sensa. For "the products over 100" correspond to sensa[3]. But sensa are known. Therefore only the "products over 100" that are known really correspond to sensa; *e.g.* 480, 520, etc. But the pairs of integers of which 480, 520, etc., are products, are in principle known; they are definitely ascertainable. They are numbers and of the same nature as their products. The objects correspond to them and must therefore be experienceable and of the same nature as sensa.

Thus neither directly nor indirectly, neither as an analogue to the inductive principle nor in its application to the relation of sensa and objects, is this ingenious example of any use.

[1] Russell seems to be led to put the inductive principle and his example on a par, because of the ambiguity of his conception of the *a priori*. At one time, an *a priori* proposition is one which can neither be proved nor disproved by experience. Such he thinks is the inductive principle. At another time, an *a priori* proposition is one which states a relation of concepts. Such are, according to him, propositions of mathematics. Both notions have independence of experience in common. But they are not identical for that reason. If the inductive principle were *a priori* in the second sense, and were to state a relation of concepts, it would run like this: the concept of B (effect) involves the concept of A (cause). It would then be true, but evidently of no use for the purpose in hand.

[2] One may perhaps contend in support of Russell that the example of numbers directly applies to particulars also, because objects must conform to the laws of mathematics. But if so it would apply only to the *number* of objects, if there be any objects. But the question is as to the *existence* of objects. However Russell would not admit that it applies even to the number of objects (see *ibid.* p. 165).

[3] The construction of the argument is this, Sensa: Objects:: Products over 100: Integers of which they are products.

There is no way to *infer* the existence of the unknown causes of sensa. The only ground of affirming their existence is our assumption that sensa are effects of transcendent causes.

(ii) Russell therefore questions how we come to assume transcendent causes of sensa, the "things-in-themselves" of philosophy and the "matter" of physics? We are passive in sensation, and therefore assume that it is caused by some external entity. This is true, but only of our sensing and not of sensa. But through the ambiguity of the word sensation, which is used equally for the act of sensing and for the object sensed, it is assumed that the object sensed, the sensum, has an external cause. This is one reason for the assumption of things in themselves, and is evidently a confusion. Another reason is the fact of the relativity of sensa. We start with the belief that things are as they appear. But we soon discover that with the change of our position the appearance of things changes. We therefore assume that the changing appearances are caused by something which itself remains unchanged (*E.W.* pp. 75–6). Russell does not work out the point, but maintains that the assumption does not realize the fundamental reconstruction of our concepts which the facts of relativity necessitate (*ibid.* p. 85). What he has in mind is perhaps this: From the relativity of sensa, one concludes that sensa are unreal, and only their cause, the thing, real. But all that we know for certain are sensa. There is nothing more real than sensa. They are all real. The thing behind them as their cause, is a gratuitous assumption.

But evidently the Ding-an-sich of philosophy, the transcendent unknowable cause of sensa in which Russell had believed, is neither a conception of common sense, nor of physical science. These believe in an external world, a world of permanent things in one space and one time, and of a nature analogous to sensa. They believe that these permanent things are the cause of the changing sensa. Are these things to be given up? Russell admits that the belief in such things is instinctive. Yet logically it is only a prejudice. In fact it is a piece of audacious metaphysical theorizing. Science has uncritically taken it from common sense. The scientists

believe that these concepts, permanent thing, one space, one time, are fundamental to science. But it is not so. There is no need to assume such hypothetical entities (*ibid.* pp. 102 ff.). We should stick to our primary reality, sensa, and all that is necessary is to interpret these fundamental concepts of science in terms of sensa, and thus harmonize philosophy and science. This can be done by logical "construction[1]."

But sensa are private and temporary. How can a public world of permanent things be constructed out of them? Not only does science assume such a world, but also Russell's special form of realism, viz. that sensa are physical effects of the combined causation of things and sense-organs and hence private and temporary. Thus his thought is involved in a contradiction. On the one hand he would go the whole way with Mach, reject things and reduce them to aggregates of phenomena; on the other, his own special theory of the nature of phenomena (sensa) compels him to retain things. Now he seems to believe with Whitehead in an objective world of more or less permanent things, and now in the exclusive reality of private and temporary sensa. Analogous to this conflict, there is a conflict between two "constructions" of the external world, which he does not distinguish. On the one hand, there is a world of things in one space and one time, which has naturally innumerable aspects or perspectives. It is a system of these perspectives (*E.W.* Lecture III). The things send out effects or "appearances" all around; they are the sums of all these appearances (*A.M.* pp. 295–6). On the other, the world is a "construction" out of the private worlds of the various senses and percipients; it denotes only the correlatability of these worlds, and in itself is only a myth; and the "things" are only the series of private and temporary

[1] Broad's account of Whitehead's *Method of Extensive Abstraction* brings out anew that the motive of the "construction" of concepts, or of defining them in terms of classes of sensa, is the need to translate the conceptual, non-empirical, non-perceptible entities, into perceptual and empirical terms. This need would seem to have originated in positivism and empiricism having pushed their march into the domains of the rational science of mathematics (cf. *Scientific Thought*, pp. 38–52).

sensa, actual and possible. It cannot be well decided whether Russell[1] sides with Whitehead or with Mill.

Taking him to have substituted the things of common-sense and science for the things-in-themselves of philosophy, the question arises: How are they to be maintained? Are they assumed on the authority of science, or is there a logical argument for them? Russell does not raise the point at all. In fact he seems to make the assumption on the authority of science. But there is no doubt that he thinks of these things as the causes of sensa. Sensa are for him essentially effects of the combined causation of things and sense-organs. But as he himself contended there is no ground for the assumption of any transcendent causes, be they the things-in-themselves of philosophy or the things of common-sense and science. Much less is there any ground to maintain that they are of the same nature as sensa; for why should the cause be like the effect, especially when it is only a part cause? Consistently, they are not the things of common-sense nor of science, but the old things-in-themselves of philosophy. Hence the "matter" of science and "Dinge-an-sich" of philosophy are equivalent concepts for Russell (see *E.W.* p. 76).

Now in passing to the "constructions" which Russell proposes to substitute for the fundamental concepts of science, it is important to mark that corresponding to the ambiguity whether only sensa are to be retained or also the world of common-sense and science, Russell does not distinguish between the view of "construction," which would agree with the assumptions of Whitehead, and the view which is in accord with his own position. According to the former an entity should be defined in terms of its aspects and effects, which are public and more or less permanent; according to the latter it is to be defined in terms of my private and temporary sensa. The first view involves neither quasi-subjectivity of percepts, nor their necessarily temporary being; while the latter does. The former proposes only a "rewording" of our

[1] In his *Analysis of Matter* (1927) Russell does not in principle seem to go beyond *Our Knowledge of the External World* and *The Analysis of Mind*; only there he appears to side expressly both with Whitehead and Mill or Mach, and tries to reconcile the two positions—the reconciliation tending to result rather in a Zeichentheorie like that of Herz.

definitions in terms of actually experienced facts (cf. *E.W.* p. 106); the latter goes much further and changes the very conception of the nature of the entities in question. What helps Russell to retain both these views would seem to be the ambiguous use of the term "perspective" in *Our Knowledge of the External World,* and of "appearance" in *The Analysis of Mind.* Perspective is both the perceived aspect of a thing and its unperceived aspect; *i.e.* it is percept as well as aspect (cf. *E.W.* p. 88). "Appearance" is both the sensum and the "effect" of a thing (cf. *A.M.* pp. 101, 102–4, 105). It is no ambiguity for Russell, because both the percepts and the aspects, as well as both the sensa and the effects of things, are on his theory physical entities and parts of the physical world. But it is exactly to his theory that the difference between them is vital. The aspects and effects are self-existing, more or less permanent and public entities, and can yield a tolerably consistent account of the objective world; while the percepts and sensa are temporary and private, and there is no way to "construct" a common world out of them.

In proceeding to construct the physical world Russell supposes that there *is* a physical world and invites us to "imagine that each mind looks out upon the world, as in Leibniz's monadology, from a point of view peculiar to itself.... Each mind sees at each moment an immensely complex three-dimensional world." Each of these worlds "might be exactly as it is even if not perceived. We may further suppose that there are an infinite number of such worlds which are in fact unperceived.... The system consisting of all views of the universe perceived and unperceived, I shall call the system of 'perspectives,'" each of these worlds being a perspective (*E.W.* pp. 87–88).

This system of perspectives he proposes to substitute for the *physical world.* These perspectives would be arranged according to similarity—similarity would signify their *nearness*; and thus the infinite number of perspectives would form the whole spatial universe. Corresponding to each perspective, there is an aspect of space; the system of these aspects would make up the "perspective space" (*ibid.* p. 89), which he would substitute for *one space.* Similarly the system of all the aspects

or appearances of a thing in different perspectives is to take the place of the *thing*. The perspectives in which the thing (a penny) looks of the same shape, say circular, will be said to be in one *straight line*. The perspectives in which the thing looks big will be said to be *nearer* to the thing than those in which it looks small. We can further arrange the perspectives in which the thing looks circular in one straight line according to their nearness to the thing, and similarly the perspectives in which the thing looks, say oblong, in another straight line. The perspective where these straight lines meet will be called the "*place*" *of the thing* (cf. *ibid.* pp. 90–1).

Now, if we drop the associations of the Leibnizian monadology with these "constructions" or "definitions," then the "perspective" would mean an aspect of the universe, a cross-section of it in which all its constituents are represented, directly or indirectly, *i.e.* by a phase of theirs or by an effect. If we had a complete system of such perspectives, we should have the whole physical world with its space and time intact. The only difference that the construction makes is that the world is defined in terms of its experienceable constituents. The "construction" is not open to the charge that it *assumes* the spatial world, because it never denied that world and is only an attempt to describe it in terms which are open to inspection and experience.

But if we retain the associations of Leibnizian monadology, that is if we interpret the constructions from the standpoint of Russell's special theory, which the terms of the constructions compel us to do, then they neither assume nor describe the physical world. The sensa as well as the space and time of each mind are private and temporary. A physical world which is a system of the worlds of several minds, is therefore no entity by itself. It is a fiction. It is nowhere and nowhen. The temporary and private worlds, spaces and times, of various minds are completely outside each other (cf. *ibid.* p. 87); they cannot build themselves into a complex which would be the spatial world. The latter evaporates completely. The "construction" does not describe it, but does away with it. The only meaning that can be given to the physical world, space and time, would be correlation—those terms denote the

fact of the correlation or correspondence of the various private worlds, spaces and times. But how are these worlds to be correlated? How are they to be arranged in a system of perspectives? Who is to coordinate them according to their similarity? Who can apprehend this similarity? Russell's minds are confined, like Leibniz's monads, each within its own circle of perceptions. They have no windows. We must assume a monad of monads that can perform this function. But how can we assume the multiplicity of such worlds which demand correlation? How can we assume that there are other minds which have similar worlds. The existence of other minds may be a most useful "working hypothesis" (*ibid.* p. 96); but the question is whether we have a right on Russell's theory to make it. They cannot be directly perceived, and a philosophy for which truth consists only in direct perception has hardly a right to assume them. Nor can they be inferred; for, as Russell admits, such an inference is justifiable only if the reality of the objects of perception is granted (cf. further Moore's *Nature and Reality of Objects of Perception*). But the reality of objects is indistinguishable from their unreality, *i.e.* from their being only imaginary or mental, if they are devoid of independent reality. And they are devoid of independent reality on Russell's theory.

Thus the "constructions" can only be solipsistic. The physical world, space, time and things, are merely the series of my actual and possible temporary and private sensa.

But Russell's concern is not to construct the world of common-sense, as the foregoing constructions might suggest. That does not interest him. It is the world of physics which he is concerned to retain. He would therefore construct the fundamental concepts of science in terms of sensa. These fundamental concepts are apparently identical with the assumptions of common-sense, namely, things, one space, one time. But in reality they are not so according to Russell. The permanent indestructible "particle" takes the place of thing in science, a continuum of points is the scientific conception of space, and a continuum of instants that of time. But none of them is a fact of perception—neither atom, nor points nor instants of which space and time are constituted. Are they then in-

ferences? But how can they be inferred from facts of perception? Yet they cannot be given up; the whole fabric of science rests upon them. They should therefore be "constructed" in terms of sensa. The constructions shall perform the function of these concepts in science, and nothing will be lost; while on the contrary, science will thereby be put in harmony with philosophy.

In order to construct the *particle*, we shall take the entity which science calls particle or thing, and interpret it in terms of its perceptible aspects. We may then define it as the sum or "series of aspects which obey the laws of physics" (*E.W.* p. 110). How a number of sensa is to be regarded as one series and therefore one thing, Russell leaves apparently for physics to determine. For him it is only a question of "rewording." Whatever physics calls a particle or thing, is one. Philosophy has only to eliminate the unnecessary assumption of permanence or substance, and describe the object in terms of sensa. But in the *Analysis of Mind* he goes further. First he excludes actual sensa; then he defines the thing of physics as the series of appearances that "undergo a connected change," *i.e.* "change simultaneously according to the same law" (p. 103).

The construction of the scientific or mathematical space and time breaks up into two parts: The construction of point and instant, and the construction of continuity. A *point* is a class of sensa which form an "enclosure series," *i.e.* in which *A* includes *B*, and *B* includes *C*, and so on (*E.W.* pp. 114–15). In order to secure the infinite divisibility of a point which is, according to Russell, one of its characteristics (*ibid.* p. 115), we have to extend the series *ad infinitum* and include all such sensa which are "naturally said to contain a point." In the case of an *instant*, we have to take, not static sensa, but simultaneous events. The class of all such events would make the instant (*ibid.* pp. 117–18). These classes of phenomena can function for points and instants; they have all the properties of points and instants necessary for science. That it is "simple and infinitely small" (*ibid.* p. 114) is not a necessary property of the point or instant of science. Now to be "at a point" or "at an instant" would mean to belong to the class of phenomena which constitute the point or instant.

The point is the constitutive element of space, and the instant of time. Therefore with the construction of the point and instant the construction of the space and time of science and mathematics would seem to have been secured. But science and mathematics also attribute *continuity* to their space and time. However this attribute does not seem necessary according to Russell; for, whether they are continuous or not is an empirical question, and Russell is inclined to answer it in the negative (*E.W.* pp. 148–9). Yet, he undertakes to show that continuity is not an impossible conception. Space and time may be continuous as the series of numbers is continuous. Continuity is an attribute of a series. If between any two members of the series always a third can be found, the series is continuous or "compact[1]." Between 0 and 1 lies $\frac{1}{2}$, between 0 and $\frac{1}{2}$ lies $\frac{1}{3}$, between 0 and $\frac{1}{3}$ lies $\frac{1}{4}$, and so on. There is no term which is next to 0, because always a smaller term can be found between it and 0. The series is infinite. Its infinity is involved in its continuity. The question of continuity turns upon that of "infinite numbers" (*ibid.* pp. 130, 155). It has been held that *infinite number* is an impossible conception. But the researches of Cantor and Frege have shown this to be a mistake. One attributes the properties of finite numbers to infinite numbers and consequently finds these numbers self-contradictory. But they are fundamentally different from finite numbers; they are "reflexive," *i.e.* are not increased by the addition of 1 (*ibid.* p. 190); and "non-inductive," *i.e.* do not have the properties which 0 has, and in consequence of 0 having it all other finite numbers have (*ibid.* pp. 195–7). However, in spite of this fundamental difference, they are numbers and come under the following definition of number which Frege has discovered and Russell himself rediscovered, namely: "The *number* of terms in a given class is the class of all classes that are similar to the given class" (*ibid.* p. 204)—"similar" being classes which have a one-one relation, *i.e.* are numerically equal (*ibid.* pp. 203–4). Thus the concepts of infinite numbers and consequently of the

[1] Russell treats the "compact" as "continuous" and holds that for philosophical purposes the mathematical distinction of compact and continuous is unimportant (cf. *ibid.* p. 132).

number continuum are not contradictory; and similarly the concepts of a continuum of points, viz. of space, and of a continuum of instants, viz. of time, are not self-contradictory.

Now all these constructions or definitions, of thing, point, instant, and number, as classes of phenomena look on the face of it paradoxical. But, rejoins Russell, their paradox consists only in this that they are unfamiliar; a little practice will remove it. The reason why this paradoxical method has been chosen is this. To start with, the world consists for Russell of substances, their properties and relations (cf. *E.W.* p. 51). Under the influence of Mach and Whitehead he eliminates the category of substance. There remain only property and relation. He decides in favour of relation—thing, point, instant and number are therefore relations. But if they are expressed in abstract terms, there is the fear of their being taken for common properties, which Russell would avoid at every cost because it has led to the denial of relation and thereby to a monistic metaphysics of substance-attribute in Spinoza, Leibniz and Bradley. Hence he would express them in concrete terms; he would substitute for the relation the terms related, *i.e.*, class (see *E.W.* pp. 124–6).

This would seem to suggest that Russell holds points, instants, number, to be "facts," to be real, to be positive elements of reality. But they can neither be observed nor inferred—hence they must be "constructed." They are only useful fictions. And so is "class" which is to take their place (cf. *ibid.* pp. 207–8).

But does the notion class help us to steer clear of property and relation or keep the distinction clear? Evidently class is inconceivable without a common property and the relation of similarity. And when class is to be substituted indiscriminately for property as well as relation (cf. *ibid.* p. 126), it cannot serve the purpose of keeping relation distinct from property.

Now knowing that class has been substituted for relation, we may translate Russell's "constructions" or definitions into ordinary terms. Instead of saying "a thing is the class of its aspects, or of the aspects which undergo a connected change," we can say "a thing is a relation of its aspects, or of the as-

pects which undergo a connected change"; instead of saying "a point is the class of sensa, one enclosing the other *ad infinitum*," we may say "a point is the relation of sensa, one enclosing the other"; instead of saying "an instant is the class of all simultaneous events," we say "an instant is the relation of all simultaneous events"; and in place of "number of a class of objects, is the class of all classes, which are similar to the given class," we say "it is the relation of all such classes (or relations?)."

Thus the paradox is removed. But the first question that arises is whether the entities defined are relations. Russell does not argue the point. But whether substance (thing) be real or unreal, it is clear that it is not a relation, but that which exists by itself, in which properties inhere, which ultimately forms a *term* of relations. Point and instant too are similarly *terms* which make the spatial and temporal relations possible; and as constituents of space and time, for which Russell believes science to hold them, they are portions of space and time—again terms and not relations. Similarly with numbers; they are *terms* and not relations. It may be admitted that thing, point, instant, number, are not properties. But neither are they, for that reason, relations. The division of fact into property and relation is not exhaustive. Thing, point, instant, number, are entities *sui generis*. They are neither properties nor relations; nor are they reducible to each other. They are not characters of objects like property and relation; they are thought-determinations, and "formal" elements of reality in the Kantian sense.

Because the "constructions" or definitions intend to express these entities in terms which are essentially different from them, viz. as relations or classes, therefore either they assume the very same entities and are circular, or they omit them and cannot function for them. The first definitions of thing, point and instant, it will be remembered, openly assumed them. Thing was the class of *its* aspects, or the class of aspects which science takes as *one thing*; and later it was the class of appearances that undergo a connected change, where appearance is conceived as *self-existing aspect* and the

unity of aspects is signified by their connected change. In case of the point the enclosure series had to be prolonged so as to contain all the sensa which are "naturally said to contain a *point*"; and the class of events defining an instant had to include all the *simultaneous* events. The same is true of the definition of number. It is defined through the conception of "similarity." But "similarity" is the *equality of the number* of terms in two classes. The circle involved is further concealed by the definition of the equality of number as a one-one relation. But a one-one relation is conceivable only if the concept of the number 1 is already there. Moreover a one-one relation between two classes signifies equality not by itself, but because of the identity of the concept 1. It signifies equality only if it is assumed that one member of one class is numerically equal to one member of the other class. But one member of the one class is numerically equal to one member of the other class because the number 1 in both cases is identical[1].

But the intention of these definitions is to omit these entities and to set up complexes of sensa which may function for them. Sensa and groups or classes of sensa are the only

[1] In defining number through the numerical equality of two classes, Frege and Russell seem to be following psychology rather than logic. At first we do not have the concepts of large numbers. Notwithstanding, we can by means of a one-one comparison determine the equality or inequality of two collections, say of two herds of sheep, as the primitive man would do even to-day. Thus the consciousness of numerical equality comes before the consciousness of numbers themselves (see Baldwin's *Dic. of Ph.* "Number"). But this is psychological priority and not logical priority. What it proves is only that the consciousness of *definite* (*large*) *numbers* comes later; and not that the *conception of number* is a result of numerical equality. Not only is the conception of number involved in the *one-to-one* comparison, but it is involved also in the conception of the numerical *equality* or *inequality* of two *groups*. These groups are compared because they are conceived as *many*, and *conceived only in respect of being many*. They are conceived as many "ones," as a multiplicity of the integer 1. Further, the conception is present that the sum of 1 + 1 + 1 + 1 + 1 + 1, etc., in one group is identical with the sum of 1 + 1 + 1 + 1 + 1 + 1, etc., in the other group. The primitive consciousness is thus working with the concept of number and with the laws of the nature of number. Only what fails in it is definite naming of various sums of 1 (of numbers). This is why it cannot proceed with groups separately and determine their equality or inequality by means of abstract numbers, but has to proceed by comparison of one to one. In fact even this procedure too is in principle one with the procedure of developed consciousness which determines the equality of two groups by first counting the one and then the other. The latter has the concepts of large numbers and works with *them*. Both determine the equality of two classes by ascertaining their numerical identity.

reality for Russell. Thing, point, instant, number are not each a sensum. Therefore they ought to be conceived as classes of sensa. This would seem to be the real reason why these entities are defined as classes[1], and not the reason which Russell gave, viz. to keep it clear that they are relations and not properties. But by conceiving them as classes, as multiplicities, the feature of unity which forms their essence is eliminated. A thing is a multiplicity of aspects without a bond of unity; a point is a multiplicity of sensa without being one; an instant is a multiplicity of events without being one; numbers are multiplicities of groups of sensa without being unities. But if the element of unity is taken away it is hard to see how the constructions which are to be substituted for these entities can perform the functions of these entities. How can a multiplicity of aspects or appearances perform the function of a thing, unless they are somehow united and go together, and further, unless they are assumed to exist even when not perceived? We know the contradiction in which Russell's thought is involved concerning the permanence of things; on the one side, he admits their permanence, and this is an admission that a complex of temporary appearances (sensa) cannot perform the function of a thing; on the other, he would deny permanence and reduce a thing to a series of actual and possible sensa. But in the conception of "possible sensa" the permanence of the thing lies hidden. Can we leave out this conception and reduce thing to actual sensa? If not, why not? Because the permanence of the thing demands it. But to explain these possibilities an actually existing entity has to be postulated, and that is the permanent thing. Russell would meet this by his theory of causality, according to which it is not necessary that the cause of an actual or possible sensum should actually exist in any sense; it may well be a past or a

[1] The reason which Broad gives for defining conceptual entities like point and line, etc., as classes or series of sensa, is this. These entities cannot be sensed. How then can they be applied, as they are, to the sensible world unless they can be translated into terms of sensa and their sensible relations? We take series of sensa which would perform their function. We cannot say that they are limits of these series, because the series has no limit. Hence we define them as the series or class of sensa (cf. *Scientific Thought*, chap. II).

future event—thus we are not compelled to postulate permanent causes of possible sensa (cf. *E.W.* pp. 83–4, 226). This would yield as consistent a sensationalistic picture of the universe as possible—a multiplicity of temporary appearances without any bond of unity whatsoever. But then we could not speak of a thing and of the "construction" of a thing. We should speak only in terms of particular sensa and their laws, if any. Russell admits this and believes that such a body of knowledge would be the first and the fundamental science, out of which physics and psychology could be derived—the former dealing with classes of "active" sensa, *i.e.* complexes of aspects which are at the "place of the thing," and the latter with classes of "passive" sensa, *i.e.* complexes of aspects which are at the place of the brain looking at the thing (*A.M.* pp. 305–6, 307). This ideal may be true or may be false; but it does not overcome the difficulty. It retains the thing of physics and would construct it out of particular sensa; and therein consists the difficulty. The class or series of sensa which is to function for the thing of physics must have unity, and it must have identity. The way for Russell is therefore to doubt the validity of physics; and he seems to do that in his article "Physics and Perception" (*M.* 1922, p. 480). But he cannot thereby get rid of the conception of thing. It is too deeply rooted in his theory. For sensa are effects of things and sense-organs. These causes are not sensa, nor can they possibly be sensa. They are things, and indeed the things-in-themselves of philosophy.

The cases of the point and instant are analogous. In order to make it fit his theory, Russell denies that a point is simple. He further denies that it is "infinitely small." The only property of a point that he accepts is its "infinite divisibility" (*E.W.* p. 115). What he seems to be aiming at is to make point a magnitude, and magnitude is easily turned into relation. A point is thus a relation and has to be defined as a class. In this transformation the point loses its own self, *i.e.* its unity, and becomes a multiplicity. Can it then perform the function of the point of science and mathematics? The point cannot in mathematics be properly regarded as "infinitely small" or

"infinitely divisible"; it is no magnitude at all, and therein consists its scientific value. It is the limit of a line and not a constituent portion of it. If it were the latter, it would not be its limit and would lose its function. Thus no magnitude, be it a simple sensum or a class of sensa, or even the abstract entity line, can function for it. If the class of sensa forming the enclosure series, or even the relation of enclosure for which the class is substituted, constitute a point, one does not know where to begin if he wishes to draw a line from this point.

In the case of a number again, the "construction" of it as a class of classes would seem to retain only the element of multiplicity, and to omit unity. The definition of it as presupposing the definition of equality, and the definition of equality as one-one relation, implies this. Number, rather a number, is made to consist of one, one, one, one, etc., without the synthesis of these elements which makes it a definite *one* number.

That space and time are conceived as consisting of points and instants, and that their continuity is conceived to be of the same nature as the continuity of number, again eliminates the element of unity. Indeed the case of continuity exemplifies the essential nature of the empirical thought best of all, because it is here aiming exactly at constructing unity. Yet it conceives it on the lines of an entity, namely the "number-continuum," which is not continuous, but essentially discrete. To bring out this point, it is not necessary to consider the possibility or impossibility of the concept "infinite number" which Russell introduces. It is only necessary to consider the nature of a "compact series." Such a series he treats as continuous, and such the number series is. To start with, the very conception of a series involves the conception of *discrete* units which are arranged in it. A continuum is not a *series*. To call the number-complex a series, is to admit that its units are discrete and that the complex is not a continuum. Indeed it is conceived as a series of points on a line. But now let us take the number series by itself. What constitutes its compactness or continuity? According to Russell, the series of rational numbers is a compact series, because between any

two a third can be found. But rationals are not enough. For, as Dedekind showed, such a series does not possess the continuity of a line, because no rational unit can represent its incommeasurable lengths. Consequently irrationals must be added (see his *Stetigkeit und irrationale Zahlen*)[1]. Now the series of all numbers, rational and irrational, is therefore continuous. But is it really continuous? Are there no distances[2] between its units? The very fact that between any two numbers an intermediate number can be found, as between any two points on a line an intermediate point can be found, proves that there is *necessarily* always a distance between two numbers. That the process of finding intermediate numbers can be pursued without end, only shows that the distance can never be abolished—it *always* remains, just as the distance between points. Thus numbers are a series whose members are necessarily separated. Such a series is not continuous, but discrete[3]. Two entities form a continuous series if there is nothing between them—if one is next to the other; otherwise the series is discrete. The number series, on the contrary, is said to be continuous precisely because there is always a number between any two numbers—because there is no number next to another[4]. Further the negative, the fractional and the irrational numbers are included because the series of natural numbers is not continuous but discrete. But the negatives, etc., are no numbers at all. They are creations of mathematical operations (cf. Dedekind's *Stetigkeit und irrationale Zahlen*, p. 6), and symbols of the same. 0 is no number

[1] Speaking of irrationals, Russell says in his *Principles of Mathematics* (vol. I, § 264, p. 278), "It is only by means of them that numbers become continuous in the sense now usual among mathematicians; and," he adds,... "no other sense of continuity is required for space and time."

[2] The word "distance" is not used in any technical sense.

[3] To put it more concretely, the natural numbers 1, 2, 3, etc., are separated by a distance of 1, and could not therefore be regarded as continuous; and hence fractions and irrationals had to be added. Irrationals are endless decimal fractions. We may therefore say that the series consists of natural numbers and all decimal fractions. Now as the natural numbers are separated by 1, the fractions of the series are necessarily separated by a fraction of 1, *i.e.* by ·1, or ·01, or ·001, etc.

[4] Wildon Carr also finds this contradiction in the concept of number-continuum (see *A.* Supplementary volume IV, July, 1924).

—it is want of number; − 1 is again no number, but denotes a process, the process of subtraction which is to be performed. Similarly, the irrationals are not numbers but symbols of processes. In the form of number, they are endless fractions; but fractions themselves are no numbers. 1 is a number, but not $\frac{1}{2}$; the unit 1 is an indivisible entity; it cannot be divided into two. The process which $\frac{1}{2}$ signifies is not applicable to the abstract 1. It acquires meaning when the abstract 1 gives place to the concrete 1, *i.e.* when a concrete materially divisible object is substituted for the number 1. Thus there remain only natural numbers 1, 2, 3, etc. This series is not continuous, because each is separated from the next by a distance of 1, which can in no way be filled up. And this remains true even if fractions and irrationals are included. Between the nearest two numbers—we may take any two we like—there is a distance;—there is, as it were, an empty space between them. We may go on making this distance smaller and smaller by taking intermediate units, just as by taking a point between any two points on a line; it never disappears. This is involved in the nature of the entity we are dealing with, viz. number. It is essentially discrete, like its analogue, the point or instant. It would appear that the series it forms must be discrete, because its constituents, viz. the numbers, are concepts. Concepts are static cross-sections of being, as Bergson would say, and the flow of being in which its continuity consists always escapes them. But in fact it would be a misnomer to call them discrete; concepts are rather distinct, and because distinct they cannot form a continuum. Continuity and discreteness are, in the language of Kant, categories; and as Kant taught, they are by themselves, empty concepts; they obtain meaning for us only in relation to space and time—the forms of sense. We grasp continuity and discreteness primarily as the properties of the spatial and the temporal—space and time offering us the only types of continuity we know. When we leave the world of phenomena and rise to the world of pure concept, they lose their meaning. Thus properly speaking, a series of concepts is neither discrete nor continuous; if anything, it is discrete, because its constituents are distinct from each other.

The continua of space and time are conceived by Russell as the "compact series" of points and instants. Space is continuous because between any two points other points can be found. But as in the case of numbers, so in the case of points. They are discrete units and cannot form a continuum, much less space. Space is a magnitude and cannot be constructed out of magnitudeless units such as points are.

Thus all the "constructions," thing, point, instant, number, continuity, fail; because the element of unity is sacrificed, and only that of multiplicity retained[1]. This is involved in the very nature of empiricism which is grounded in sense to the exclusion of thought.

(iii) The process of reducing objects of thought to terms of sensa, takes a further step. Now it turns from the object to the subject, and completes itself. The subject too is reduced to sensa. Thus the ground is cleared for a materialistic metaphysic of the whole of being (cf. *A.M.* p. 303). Indeed it is the yearning for such a metaphysics which compels Russell to this step (cf. *Pr.* pp. 11–13).

This step does not contain anything fundamentally new for our purpose. In its main outlines it has been considered in Holt; Russell himself admits it to be identical with the doctrines of William James and the American new realists, and acknowledges his debt to them and to the cognate doctrine of behaviourism (cf. *A.M.* Preface and Lecture I). We may therefore confine ourselves to the discussion of some points which have a special bearing on Russell's special theory.

With the denial of mind, his special theory takes a more physical turn. The sensa are physical effects of physical causes. Part of the causes are sense-organs, nerves and brain, which are part of the medium (*A.M.* p. 104). Sensa are therefore temporary and private. But they are now located in the brain. This avoids conceiving perception as action from a distance, and puts psychology, physiology and physics in harmony (*Ph.P.* pp. 482–83). They are now more of physical *effects* than sensa. The perceived world is thus veritably

[1] Poincaré thinks the same of the above discussed continuum (see Russell's *Principles o 'Mathematics*, § 326, p. 347).

located in a part of itself, as Bergson protested. But this is a necessary result of the denial of the subject.

Thus sensa become modifications of the brain. They are no more *sensa*. For consciousness of sensum is denied, because that is possible only if the subject is affirmed (*A.M.* p. 141–2). Sensation by itself is not, maintains Russell, awareness or knowledge. It becomes knowledge when its image is present. Knowledge or consciousness is the complex of sensum and image (*ibid.* pp. 289 ff.). Mind is a complex of sensa and images. But images are not intrinsically different from sensa; they are caused by sensa and are therefore material (*ibid.* p. 109). The unity of mind consists in this that the series of sensa and images which compose it fall in one private time (*ibid.* p. 129).

Now evidently sensa, or the world perceived through sense, is not in the brain, but on the contrary, brain is in this world. What conceals the flagrant contradiction of these clear facts from Russell's view, is that he uses, as mentioned above, the term "appearance" to denote both sensum and physical effect. He does not make a difference between the two, because on his theory sensum too is a physical effect. Being a physical effect, its natural place is in the brain. Thus it becomes identified, through his special theory, with the modification of the brain produced by stimuli.

Being in the brain, the sensum remains private. And time being a relation or property of sensa, remains private too. Time as private is taken to be the principle of the unity of mind. This offers an Anschluss, a junction, with the scientific theory of relativity. But whatever be the case with the scientific theory, *this* time does not offer the principle of unity which is required. This time is not only private but it is also *temporary* like the sensa of which it is a relation or property. It breaks up into ephemeral units, and itself needs a principle of unity. Again empiricism cannot restore the unity which it has eliminated;—it cannot restore it because unity cannot be constructed out of a multiplicity. And without this unity no knowledge is possible. A sensation plus its image is not knowledge—taking the account of knowledge or awareness

to be true that makes it a combination of sensation and image, in which Russell is following James. The sensum may exist before one mind, and the image of it in another mind. Both must be in *one* mind and grasped by it as a unit, if knowledge is to be there. And when Russell adds belief to provide for this, he is in fact assuming the subject which he had rejected, as Dorward suggests (*M.* 1922, Crit. Note on Russell's *A.M.*)[1].

Thus his special theory of the sensa and space-time, again and again bars his way to a construction of the objective and the subjective world. What are the facts at the basis of this theory? Russell does not discuss them at length. As to sensa being physical effects of physical causes, he indicates it as a possible hypothesis over against idealism and the ordinary types of realism in his lecture on *Scientific Method in Philosophy* (1914, pp. 26–9). He accepts the hypothesis, because on the one hand, it harmonizes with realism, and on the other, takes full account of the conflict of sensa on which subjectivism is based. Further, it is in complete harmony with the causal view of sensa which science takes. Thus sensa are made private. Space and time become private, because, as Russell indicates in *Our Knowledge of the External World*, their privacy is the view which is favoured by the scientific theory of relativity. The only argument he gives for this view is stated in the *Problems of Philosophy* (pp. 45–6), viz. that it is a fact of experience that the spaces of sight and touch are at first different, and it takes time before the child has coordinated them. Other authors too, expounding the scientific theory of relativity, *e.g.* Schlick (see his *Space and Time in Contemporary Physics*, English Translation), make use of this argument. But in both cases, of sensa as well as of space-time, what is worth while is to consider the logical argument and leave aside the psychological influences which might have weighed with Russell.

Now as to space, the facts advanced only prove that the *movements* of the different sense-organs, of sight and touch,

[1] For a trenchant criticism of Russell's "*Theory of Meaning*," which is intimately connected with the problem of concepts, see H. H. Joachim in the symposium "The Meaning of Meaning" (*M.* 1920).

take time before they are coordinated—the coordination is acquired through experience. They do not prove that the "*spaces*" of the two senses are different. In the case of time no argument is offered, and time is conceived to be private simply on the analogy of space. Another reason seems to be that space and time are regarded as properties or relations of phenomena as by Whitehead or Leibniz, and thus their privacy is seen to be grounded in the privacy of sensa. But the relativity of space and time to phenomena as little makes the former private as the phenomena themselves. Moreover the privacy of sensa is no ground for the privacy of space and time. On the contrary, Russell's theory involves the publicity of space and time. For sensa are not essentially private; they are only accidentally private. They are physical phenomena which by an unavoidable chance only I can apprehend. All the same they are portions of the physical world and are in the physical space. If they are not in it, no sense can be ascribed to their physicality. The privacy of space is properly intelligible only if sensa are taken to be "ideas," affections of mind, mental. Russell would therefore appear not strictly to distinguish his special theory from subjectivism.

His special theory as to the nature of sensa as physical effects of physical causes and sense-organs, relies on the conflict of sensa. It is an attempt to retain the unqualified reality of sensa and at the same time to explain their variety. But as in its reasons, so also in its consequences, it is too much like subjectivism. It cuts us off once for all from the knowledge of the objective world as representationism does. It is this necessary consequence which makes Russell doubt the validity of physics in "Physics and Perception," and to regard psychology as the fundamental science in the *Analysis of Mind*. But in the attempt to make sensa real and the only reality, his theory is further involved in the assumption of Dinge-an-sich as the ultimately real. For whatever is perceived is sensum, is effect, the causes remain ever unexperienced and nothing can be said as to their nature but that they are causes; and this too because of our *assumption*;—an assumption which, as we saw, does not admit of any justification. The causal notion has

therefore to be banished altogether if perception is to give us knowledge of objects and modern realism is to be maintained. Russell's theory is, in this respect, identical in principle with the realism of Descartes and Locke; only it adds one more cause for the sensum, viz. sense-organs. Sense has to be allowed to be revelatory, and sense-organs instrumental and not constitutive. The conflict of sensa on which Russell's theory is based, is to be met by curtailing the unqualified reality of sensa and not by maintaining it.

Thus we see that empiricism, as developed in Holt and Russell, over-emphasizes the importance of sense and the reality of sensa. It is lost in multiplicity and cannot find a way to the unity of the object—it denies the object. Rationalism in Cook Wilson and his school over-emphasized the importance of thought and could affirm only the reality of the object; it sacrificed the multiplicity of the appearances to the unity of the real. Realism, therefore, has if it is to maintain itself, to find a way to reconcile the reality of appearances with the reality of thing, the truth of sense with the truth of thought. The synthesis of these two conflicting motives seems to be working itself out in Moore with an earnestness and travail worthy of the discovery of a philosophical truth of such importance. To Moore we must now turn. G. Dawes Hicks[1], J. Laird[2], and others are also following in the same direction, which may well be termed critical realism after the analogy of Kant.

§ III

G. E. MOORE

The modern era of realism in England began, as we know, in Moore; and it is in Moore that it seems to be running its full course and finding its completion. This is what makes

[1] See Dawes Hicks' papers in the *Proceedings of the Aristotelian Society*, specially "The Basis of Critical Realism" (May, 1917); though in the Symposium on Moore's "Are the Materials of Sense Affections of Mind" (June, 1917) he seems to make *all* sensa mental.

[2] For Laird, see his *Study in Realism* (1920), specially chaps. I, II, and V.

Moore so interesting a figure amongst the realists. In the following pages we shall try to trace the development of the problem in his mind, so far as it is possible from the scanty and apparently disconnected papers, bearing directly or indirectly on the question.

What adds to our interest in Moore is that he keeps the problem free from all complication with other philosophical problems and specially from metaphysics. He does not build a theory of knowledge, or of the mind, or of the universe as a whole like the neo-realists. He sticks to his problem in its purity. It is as if his only problem. More, he struggles with it long and with all his strength. It is his life problem. He has not done with it as it were with one stroke. He tries now this alternative, now that; but none satisfies him. He wavers. He confesses his inability. He is puzzled. He makes another attempt. He spends all the power of his very keen logic in making the problem clear. His logic is sometimes too keen. His critics do not understand him. They are not following the history of his thought. He withdraws. Yet he continues his struggle. At last he feels that he has found a satisfactory solution, and though it is the fruit of a long and conscientious struggle he does not become dogmatic.

A detailed study of Moore's development is moreover important for the understanding of other realists. During his struggle he takes or suggests position after position which others make their own. There is hardly any position of fundamental importance which cannot be traced to him. Besides the common thesis of modern realism, viz. the directness of perception and the independence of its object, in him originate the neo-realistic thesis of the objectivity of all sensa; Alexander's distinction of enjoyment and contemplation, as he himself admits, as well as his conception of knowledge as spatial compresence; Holt's realism of being, or the construction of reality out of concepts, and the objectivity of falsehood; and Russell's position that sensa are physical effects of physical causes. He even seems, through his doctrine of the diaphaneity of consciousness, to have given impetus to the evaporation of the subject in Holt

and Russell via James (see James' "Does Consciousness exist?").

Moore himself seems to divide his development into two periods, the first ending and the second beginning with "The Refutation of Idealism," as is indicated by his omission of all his papers previous to the "Refutation" in his *Philosophical Studies*. But he is inclined to omit even the "Refutation." The reason seems to be that it is only after the "Refutation" that he develops something like a method of his own. However he omits some much later papers as well. Such are papers which have little to do with realism, or go beyond it, or are subordinate to papers of other writers. His development according to him therefore falls into two periods, the first in which he is involved in the problems and modes of thought which he inherited from previous philosophy; the second in which he finds his own problem and his own method.

But if we restrict our view only to the papers of the second period as he would perhaps have us do, we cannot get a proper idea of his development and struggle. One must therefore take into consideration his previous papers, if not for themselves, at least as leading to the second period.

Moore has studied Kant deeply and finds himself in sympathy with Kant's thought (cf. *F.* p. 179). Kant, according to the common interpretation, though interested in objectivity, remains stuck in subjectivity. Moore, as a true Kantian, has his eye always on objectivity. For Kant, reality is of two kinds, Ding-an-sich and Erscheinung, noumenon and phenomenon, reality and appearance, the world of pure reason and the world of experience. If this distinction is taken as "constitutive," *i.e.* as expressing the fundamental difference of true and false being, the position may be termed the realism of Ding-an-sich—Ding-an-sich being the object of reason in the narrower sense of reason, namely as the faculty cognizant of the ultimate reals. Such a realism taken as a positive theory, is ontology. It is metaphysics in the sense in which Kant refuses to admit its possibility as a science. Nor does it exclude idealism. In fact, it is idealism, in the sense of phenomenalism.

But reason, as such, is not, according to Kant, restricted to the Ding-an-sich. It is the faculty conversant with all reality, with all that is thinkable; and is fully objective. In this significance we may call it thought, the faculty of universals, the science of which is, roughly speaking, logic. It was in this sense that Kant admitted the possibility of metaphysics as a science and tried to construct it. The world of reason in the restricted sense was the world of "Ideas," in Kantian language; the world of reason in the wider sense, is the world of ideas or concepts. The objectivity of the former would be a realism of Dinge-an-sich (or Ideas); that of the latter a realism of concepts (or ideas)—though in fact it is realism only of *a priori* concepts.

But the world of sense, though appearance, is not held by Kant as subjective, in the sense in which this word is usually understood. It is not Schein (illusion); it is Erscheinung. It is independent of the percipient; it is objective. Whatever difficulties the critics of Kant may find in grasping the distinction he is here making, yet there is no doubt about it that he refuses to be a subjective idealist and ascribes objectivity to the world of sense. This may be called the realism of percepts.

Moore's thought seems to traverse, consciously or unconsciously, these three moments in Kant's thought. Always seeking the objective, it first turns to the realism of Ideas (Dinge-an-sich); then to the realism of concepts; and at last to the realism of percepts. In its passage from one to another stage, whatever modification may be necessary, it does not seem to give up the essential element, viz. objectivity, already won. The direction of the progress again is that of Kant, for whom Ding-an-sich falls outside knowledge and is only a limiting concept, while concepts (categories) though true of all reality, are meaningless except in their application to the world of sense.

Accordingly we have three stages in Moore's development. In the first he is an idealist and a metaphysician—only Ding-an-sich is real, all else is appearance. In the second, he is a logicist, if one may put it so. In it he does not confine him-

self to Kant, but as we shall see, goes beyond him. But he is no more an idealist and a metaphysician. It is in this period, in fact, that he starts his protest against idealism and specially against the idealistic metaphysics in vogue, and turns to and in a way anticipates his later realism. But he is moving in the sphere of thought and concept, the sphere of the universal. It is in the third period that he turns to the world of sense and asserts its reality explicitly and for itself.

I. The first period shows Moore roaming in the world of Dinge-an-sich, of noumena, of "Ideas"—they alone are "really real." The world of sense, of time and space, is nothing but appearance. Time is not fully real; it is appearance. Bradley's argument on this point is fully conclusive. Its continuance as well as its succession, both are unreal. Past and future are *not*, and present is only the limiting point between past and future. So also is the world of understanding, of science, of law and causality unreal[1]. These worlds are not really real. The relation of the former, viz. the world of Dinge-an-sich, to these latter is the logical relation of ground-consequence and not of cause-effect. The former is the realm of pure freedom, the latter only of complete determination;—self-determination being only determination originating in the nature given by the corresponding Ding-an-sich and no privilege of man but universal.

It will be readily noticed that Moore is here going beyond Kant. Yet he believes that he is making Kant consistent. However this tends to show that he is, so far, getting rid of the "Intelligible" of Kant and directing his gaze on the purely empirical.

After rejecting time and the temporal, Moore feels a sort of doubt. For "this thoroughgoing rejection of almost all the content with which our world is filled, seriously impairs the filling of our conception of reality" (*M.* 1897, p. 240). It is further interesting to note that he desires a mode of apprehension of the intelligible, which should be a sort of *perception*

[1] Cf. his contention against Bosanquet and his wholehearted siding with Hodgson in his criticism of the former (*M.* 1897, pp. 239–40).

which has the immediacy of the present, without the distinction of past and future—a sort of Kantian "intuitive understanding"; and further, though he has declared all temporal distinctions to be unreal, yet he holds that the *present is more real* than the past or future, "because it has that coordinate element of immediacy which they lack," and that the past is more real than the future, "because its content is more fully constituent of the present" (*ibid.*). Thus even at this stage, where he is involved in unqualified idealism and metaphysics, his sympathy for the reality of the empirical comes to the fore, and the only way in which reality can reveal itself seems to him to be a sort of perception in which the immediacy of the present is retained.

The same tendency to realism comes to expression where he commends Kant for denying all internality and therefore self-subsistence to appearances, to objects of sense, in the "Critique of Pure Reason"; yet forthwith approves of his restoring it to them in the "Critique of Judgment" by taking note of their quality, a nature of their own, because of which they are what they are, and in virtue of which they are concrete terms in relation (*F.* p. 191).

Moreover, in spite of accepting what is termed Kant's subjectivism with reference to the world of sense Moore distinguishes two meanings of reason in Kant: 1. Reason = objectivity, truth theoretical and practical, which he holds to be the primary meaning of the term in Kant; 2. Reason = the psychical activity of thought which contemplates truth. "There are no two words," says Moore, "which express a difference more profound than that between these two significations of the term reason" (cf. *ibid.* p. 200). He laments that Kant should have used the term indiscriminately and given rise to confusion. This indicates the inherent objectivism of Moore's thought, which remains its distinctive mark, and foreshadows the distinction of object and act in perception, which is to play such a decisive rôle in the development of realism.

II[1]. With the paper on the "Nature of Judgment" (*M.* April, 1899) starts the second period. It shows a reversion from Ding-an-sich to the world of the universal, from the intelligible in the Kantian to the intelligible in the ordinary sense, from reason in the narrower to reason in the wider sense. The restriction which Kant puts on the objectivity of reason is taken away. It is not conceived as the faculty of the *a priori* universals, but of universals as such. It is thought, the faculty of concepts, in the widest sense, and includes "form" as well as "matter" of thought. It is thought as thus conceived, whose objectivity is maintained—and this again perhaps under the influence of another distinction in the meaning of reason which Moore traces in Kant, viz. reason as subjective and reason as objective (cf. above). Metaphysics in the sense in which Kant rejected it and with which Moore showed an inclination in the first period to busy himself, is now angrily thrown aside as "the boasted reduction of all differences to the harmony of the 'Absolute Spirit' which marks the Hegelian development" of Kant. Bradley's argument does not any more appear conclusive. He comes in now mainly for criticism. It is in contradistinction to his doctrine that a new theory of judgment and truth is developed[2].

The point of interest in this paper is this: *it asserts an all round objectivism*; objectivism both of thought and perception, or rather both of concepts and of percepts; for thought is found to outflank perception and absorb it, as Hegel maintained in his logic. It refuses "to regard the relations in which" concepts stand, "as in some obscure sense, the work of mind" (*N.J.* p. 183). No doubt it is primarily the objectivism of concepts that is aimed at; it is realism in the mediaeval sense and not yet in the modern sense of the word. But making perception a form of thought does, by impli-

[1] On Moore's doctrines of this period, viz. the self-existence of concepts, the construction of reality out of concepts, the objectivity of falsehood, the extreme externality of relations, Russell builds in his logistic (see his *Principles of Mathematics*, Preface, p. viii). From Russell these doctrines are taken over by the American neo-realists. Holt's realism of being is a working out of these doctrines.

[2] Viz. to Bradley's doctrine as contained in his *Principles of Logic*, chap. I.

cation, include the latter in the former; and to maintain the former is therefore also to maintain the latter. This is the first though indirect expression of modern realism in Moore.

A judgment or proposition is a complex of concepts (*ibid.* p. 180). Only concepts enter into it as subject and predicate (*ibid.* p. 181). It is true or false. The problem now is: What is a concept, and what is the truth or falsehood of a proposition?

A concept is not a psychological idea. In fact it is not an existent or part of an existent at all (*ibid.*). It is "universal meaning," and as such the object of thought (*ibid.* p. 179). But this only means that "concepts may come into relation with a thinker; and in order that they *may* do anything, they must already *be* something. It is indifferent to their nature whether anybody thinks of them or not. They are incapable of change" (*ibid.*)[1].

Naturally they have all sorts of relations to each other, and thereby form complexes which are propositions. Hence all that is said of the objectivity of concepts is true of propositions.

The truth or falsehood of a proposition consists in the relation of the concepts forming it. It is absolutely objective. The true and the false propositions are equally objective and independent of a thinker. Their truth or falsehood is a quality of them which is directly apprehended, like colour or two

[1] It may be admitted that the concepts ought to *be* something before they can do anything, *i.e.* enter into relation with a thinker. But the question is whether they as such really do enter into any relation. Not concept by itself, but concept as an element in a judgment or proposition does something and enters into relation with a thinker, because it is judgment or proposition which is the unit of thought. The kind of being claimed for concepts is the characteristic of judgments and not of concepts. If attributed to concepts it can be attributed to them only because they are elements in judgment, or because they are themselves condensed judgments. Clearly Moore is inverting the real order of things when he takes concepts as primary and judgment as secondary and ascribes to the former an original kind of being. But starting from the side of judgments we see that the peculiar kind of being which we ascribe to them is the being of truth, or to go with Moore a step further, the being of truth or falsehood, which being is an object of thought and non-temporal, as distinct from the being of the object of sense which is temporal. But concepts as such are neither true nor false, and consequently have not got the being of truth (or falsehood). Nor do they exist like objects of sense, for they are universals and not particulars. What kind of being then have they?

(*ibid.* p. 181). The opposite view that it depends on its relation to reality is false; because firstly, *a priori* propositions, *e.g.* $2 \times 2 = 4$, are true whether there be things in the world or not; and secondly, the view itself is a proposition, which claims to be true and evidently does not comply with the criterion it lays down.

But then it may be urged, what are we to say of *a posteriori* propositions? By their truth we do seem to mean their correspondence to reality. No, says Moore. Here too the propositions are complexes of concepts and their truth or falsehood is an unanalyzable ultimate quality of the relation of these concepts which we directly apprehend. Their peculiarity consists in this that in them all the concept of existence, or rather the concept of definite temporal existence, is involved. That is all. Otherwise they are as necessary and eternal and independent as *a priori* propositions[1].

This brings us to the interesting point that *a posteriori* propositions too are composed of concepts. Here too the subject is a concept[2]. And thereby Moore is led to hold: (1) That all reality intelligible as well as empirical is composed of concepts (*ibid.* p. 181); and hence, (2) Perception is apprehension of an (existential) proposition, *i.e.* it is thought (*ibid.* p. 183).

This of course has the important implication that empirical propositions and the revelations of perception are as objective and independent of a percipient as *a priori* propositions and the revelations of thought. But in the flush of his discovery in which he finds the solution of a great many problems of philosophy (cf. *ibid.* pp. 182–3), he does not see that he is contradicting himself. A concept is neither an existent nor

[1] Moore's position in the "Nature of Judgment" is clearly not Kantian and reminds one of Meinong's "Gegenstandstheorie" and his "Sein, Bestehen und Aussersein." His difference from Meinong consists in taking concept instead of judgment as what subsists (besteht); and by making existence (Sein) a concept in resolving existents into complexes of concepts.

[2] Moore comes to recognize later in "Some Judgments of Perception" that in empirical propositions it is not the concept but the percept, not the universal, but the individual that is the subject of judgment, though he does not go so far as to declare with Hegel that the subject is always the individual, that the schema of all judgment is "The Individual is the Universal."

part of an existent (cf. *ibid.* p. 181); how then can it be a component ingredient of reality? How can the combination of universals yield anything but a universal? Thisness + roseness + redness + existingness cannot make this individual concrete red rose. In taking existence to be a concept and thereby going beyond Kant, he forgets that there remains then no objection to the ontological argument for the existence of God, the stronghold of metaphysics and rationalism which he would vehemently reject[1].

But this breaking up of the intelligible and the empirical reality into concepts and propositions (including both true and false) and setting these free of all thinking and perceiving, explains the tendency Moore exhibits towards pluralism. Monistic thought had found the point of unity in the subject. This bond is now loosened. The world of thought has now become a reality out there which has to be explored as it were empirically (cf. *ibid.* p. 189). On the other hand the objectivity of false propositions increases the mass of content to such an enormous and confusing extent as would make all unity impossible. And in the world of thought is further included the world of sense, of contingence, of empirical variety, of irrationality, which made even a Hegel despair of its unification (rationality) and declare it mad[2].

[1] Sein or existence is no doubt a universal, simply because it is predicable; or perhaps it is the only predicate, all other predicates being only modifications of it. And consequently existence is a concept. But there is a very important sense in which it is not a concept; because concepts ordinarily stand for an attribute and Sein is no attribute, as Kant maintained. Moore sees this later (cf. *C.R.* pp. 212–3). But here he confuses the two senses, and that is why he could speak of things as composed of the concept Sein together with other concepts.

[2] At the end Moore tries to reduce the distinction of *a priori* and *a posteriori* propositions in Kant, in conformity with his own doctrine, to a distinction among the concepts; the propositions which contain the concept existence are *a posteriori*, and the propositions which do not, are *a priori*. How far Kant would accept this is extremely doubtful. But Moore goes further and takes Kant to imply in his transcendental deduction a doctrine of truth which is other than his own and comes very near to the common doctrine he is rejecting. He takes Kant to hold that the truth of *a priori* propositions depends on the truth of the *a posteriori*, that the *a priori* are true because the *a posteriori* are true. But this is a mistaken view of the transcendental deduction. The object of the deduction is to show not "How are *a priori* propositions true?" what constitutes their truth, but "How are they true of the empirical?" The question is not of the *a priori* and its truth *as such*, but of the *a priori in its application to the existent.*

The logicism which reduced all reality inclusive of temporal existence to concepts and their combinations must naturally give up temporal causation and find the principle of progress or explanation in the logical relation of concepts, *i.e.* in ground-consequence. This was already indicated in the "Nature of Judgment" (cf. p. 183), and is fully explicated in the paper on "Necessity" (*M.* July, 1900). It is interesting to note that Moore is thus led by way of necessity to a new doctrine of truth; for necessity is nothing but truth from another side.

Moore was probably moved to reflect upon the nature of necessity by Russell whose book *Foundations of Geometry* he reviewed in *Mind*, July, 1899, and who in considering *a priori* propositions gave a subjective account of necessity (cf. *M.* 1899, pp. 399–400). According to Moore, as we know, all relations of concepts and hence all propositions are necessary. Necessity is an objective quality of propositions which we directly apprehend. The subjective necessity of being unable to think otherwise, if it is to be taken into this account, can only be an indication to us of, and not identical with, objective necessity. This on Moore's principle would have been sufficient. But he wants to consider not necessity in general, as the topic he takes up should imply, but only the necessity of *a priori* propositions. This again indicates that he has Russell in view. Now his solution is that the necessity of *a priori* propositions consists in their *a priority*; and their *a priority* consists in their being implied in a number of other propositions. It is again evident here that he is trying to follow in the footsteps of Kant. Necessity therefore means the logical relation of implication, the relation, in other words, of ground and consequence. The truth of propositions con-

When Kant refers to the "possibility of experience," he does not say 'Experience makes the *a priori* possible,' but that 'the *a priori* makes experience possible.' The truth of the *a priori* is independent of all experience and is the business not of the transcendental but of "the metaphysical deduction." Kant, in fact, goes further. According to him the *a priori* concepts (categories) and principles are true absolutely. Not only the empirical but all that is thinkable and therefore also the intelligible reality, the Dinge-an-sich, must conform to them. It is a different question whether we can actually and with advantage make use of them with reference to noumena. But the point is that he does not restrict them to phenomena until they are schematized. How could he hold the empirical to guarantee their truth, as Moore imputes to him?

sists no more in their atomic isolation, but in their relatedness.

With the resolution of necessity into ground-consequence it would seem that the structure of logicism is completed. Things are concepts (*N.J.*), and their process, ground and consequence. Reality is a world of pure thought.

But one may turn round and ask: In what does the necessity of ground-consequence itself consist? Moore's reply is that it is necessary because it is implied in so many propositions (*N.* pp. 302–3). In other words because it is the *ground* of so many propositions. This is to explain the necessity of ground-consequence by ground-consequence itself. Ground-consequence has therefore to be taken not as hypothetically necessary—the necessity to which Moore has reduced that of all *a priori* propositions and thereby of all propositions, but as apodeictically necessary—necessary in itself. And when once this is accepted, there is nothing in the way of accepting the apodeictic necessity of other *a priori* propositions, amongst them the principle of temporal causality[1].

Moreover if this is the nature of necessity, what is to become of *a posteriori propositions*? They too are necessary, and necessary objectively and not subjectively—simply because they are true. Truth and necessity are not *two* attributes of a proposition. They are one and the same thing seen from two sides. When its objectivity is to be emphasized, the proposition is called true; and when reference is intended to the subject, it is called necessary. This is why Kant keeps necessity as a modal determination of propositions. Necessity cannot therefore be identified with a logical relation to the exclusion of empirical existence and temporal process[2].

The fact that Moore leaves empirical propositions out of account and interests himself only in the *a priori* and reduces necessity to a logical relation, accounts for his logicism, for his exclusive interest at this stage in the intelligible world of

[1] Cf. Joseph's *Logic*, pp. 192–6, on the nature of apodeictic necessity.

[2] Moore is conscious of this elimination of process and temporal (causal) necessity, and tries to brush it aside (*N.* p. 303). It is only many years later that he recognizes that besides logical there are other kinds of necessity (*I.V.* pp. 269, 271–2).

pure thought. But by making necessity the logical relation of implication, he has, in fact, changed his view of truth. Truth or necessity is no more an ultimate unanalyzable quality of a proposition by itself. It belongs to it *in virtue of its relation* to other propositions. The *a priori* proposition is necessary, is true, not because it consists of *a priori* concepts, but because it is implied by so many empirical propositions. It is not objective in its own right, has no apodeictic, absolute necessity, but has only a hypothetical necessity. It depends for its truth on other propositions. This was an objection which Moore strenuously, though wrongly, urged against Kant in the "Nature of Judgment."

Thus *a priori* propositions are robbed of their isolation and independence. They are no more atomic, but "organic." The pluralistic notion of truth maintained in the "Nature of Judgment" is passing into the antagonistic one of coherence. For, it is only a step further in the same direction to say that implication is a two-sided relation; the consequence implies the ground as much as the ground the consequence. The necessity and truth of the former is as dependent on the latter, as that of the latter on the former. None is necessary by itself. They are true only in relation. Truth is an organic whole in which the parts imply each other, and of course, imply the whole and are implied by it. Truth is thus a harmonious unity. It was on account of their so conceiving truth that Moore was angry with Hegelians in the "Nature of Judgment"[1].

But Moore will not have anything of this sort. He combats this doctrine under the name of identity-in-difference in his paper on "Identity" (*A.* February, 1901).

Moore maintains that the identity-in-difference of two things is true only in the sense of conceptual identity. But the idealist insinuates numerical identity as a necessary consequence of the conceptual, and thus succeeds in making the world a unity, a concrete universal, an individual, etc. This

[1] This probably indicates Moore's dissatisfaction with the atomic and chaotic notion of truth and reality to which in "The Nature of Judgment" he tended, and a desire to find relation and order in his world. The principle of ground-consequence can now serve the purpose of a fundamental unity which can restore order in the chaos of self-subsisting propositions.

is nothing but the well-known Leibnizian doctrine of the identity of indiscernibles. But that is false. Conceptual identity is different from numerical identity. The former does not involve the latter.

On the contrary, *of nothing* can it be denied that it is a subject (individual) numerically different from everything else (*I.* p. 123). For that which is conceptually different is also numerically different (*ibid.* p. 126).

Hence a universal (concept) is never numerically identical with any other universal (concept) or any particular whatsoever, and no particular is numerically identical with any other particular or any universal whatsoever.

The world would thus seem to be not a concrete self-identical unity in difference, as the idealists would have it, but a jumble of isolated universals and particulars somehow externally conjoined.

While idealism had made numerical of conceptual identity, Moore seems to be making material (existential) of conceptual difference through the instrumentality of numerical difference (cf. *ibid.* p. 127). Both are making a metaphysic out of logic —the former monistic, the latter pluralistic.

The interest of this paper therefore lies firstly, in the protest it makes against monism, thereby opening the flood of pluralism in realistic thought. Add to it the thesis of the externality of relations as maintained in other papers, and the world-picture of realism becomes complete. Idealism had tried to unify the world through its doctrines of identity-in-difference, internality of relations and subjectivity of percepts (and concepts). Realism dissolves it through the doctrine of numerical difference, externality of relations and objectivity of percepts (and concepts). The former was a centripetal movement, the latter centrifugal; the former attempted to put everything inside, the latter everything outside everything else.

But pluralism, which hardly deserves the name of metaphysics and is only the negative criticism of monism raised to the dignity of a metaphysics, is not the doctrine of Moore. He is too good a Kantian to run into metaphysics. What is meant above is only this. His positions have too pronounced

a pluralistic tendency, and in the hands of metaphysicians can easily be turned into a pluralistic metaphysics.

But, if true, by far the more important and interesting point of this paper is, that Moore seems to have broken through the circle of pure thought, of universals and of logicism, in which he had involved himself. Through the distinction he finds himself compelled to make, as against idealism, between numerical and conceptual identity, he comes to the recognition of the particular as essentially different from the universal (cf. *ibid.* pp. 105–6 ff.)—the particular, the problem of whose existence, its nature and the knowledge of it will more and more occupy his attention, and will become in fact *the* problem of realism. From the world of pure thought he is passing now to the world of sense, of perception[1].

III. The former stages of his thought, as we know, Moore would now throw overboard. How much of them he would still retain is not certain. But this much is certain, that he retains the objectivism which forms the nerve of his thought.

In opposition to the first stage, he maintains now the reality of temporal being and process (cf. *J.'s P.* p. 131). Indeed the real has now no other meaning for him, than being a fact, an existent (cf. *C.R.*) In opposition to the second, he returns now to the position of Kant and clearly sees that reality or existence is no concept (cf. *C.R.* pp. 212–13), from which the implication is clear, that concepts are not the stuff which constitutes existents. Further, logical necessity is not the only kind of necessity; there is also an empirical as well as a causal necessity (*I. V.* pp. 269, 271–2). Again, the truth of judgments now seems to consist in their correspondence to reality, and consequently the judgment is a psychical act (*J.'s P.* pp. 137–8).

[1] This comes out more clearly in his paper on "Mr McTaggart's Studies in Hegelian Cosmology" (*A.* 1901–2), specially in reference to the questions of immortality and self-identity (pp. 210–11). The sense of the reality of time and the temporal is increasing (pp. 178–9, 212). The paper on "Experience and Empiricism" (*A.* Feb. 1903) shows an advance in the same direction. The respect for experience and the empirical is taking hold of his mind. All speak "respectfully of experience" nowadays. "This change is due to Kant, and its full significance is rarely recognised" (p. 80). And "the objects of experience all fall within the class of true propositions about *existing* things" (p. 84).

But this does not mean the sacrifice of the objectivity of concepts and judgments. Theoretical as well as moral and aesthetical truth is objective in the most unrestricted sense (cf. *J.'s P.*; *I.V.*; *M.Ph.*). He admits that there is such a thing as intrinsic relation (cf. *R.*), yet he retains his objection to the idealistic doctrine of the intrinsicality of all relations and its subjectivizing tendency. Indeed on this account he fights every doctrine which militates against his objectivism—objective idealism, subjective idealism, pragmatism, relativism.

The work of this period may conveniently be divided into two parts: critical or negative and constructive. In the first he meets and controverts all the doctrines which seem to him to go against his position; in the second, he struggles with the problem of the realism of sensa or percepts and seeks its solution. The two are naturally no historical periods, but only two aspects of the one concrete movement of thought. But it is worth while to keep them apart, and to begin with the former, as in fact Moore himself does, opening this period with the "Refutation"[1].

A. (*a*) Alexander discovered the centre of idealism and its spiritualism in the doctrine of self-consciousness. This he controverted and thereto had to depress the mind and to exalt the object. His metaphysics consequently became anti-spiritualistic, atheistic. But originally the reason why he attacked the doctrine was his insight that it endangered the independence of the object.

Moore does not dig so deep, yet he considers idealism more objectively. He takes its two most fundamental positions, and examines them, because they seem to make for subjectivism. The positions concerned are: 1, that reality is an organic unity; 2, that it is spirit, or spiritual—exactly the

[1] In fact this period is clearly indicated in his papers "Mr McTaggart's Studies in Hegelian Cosmology," and "Experience and Empiricism." In the former Moore comes to the conclusion that McTaggart's book "has the merit of being an excellent *reductio ad absurdum* of all attempts to construct what McTaggart would call 'Idealism,' *i.e.* any philosophy which maintains that the universe is wholly spiritual and perfectly good" (p. 188); and points out that idealism rests on the traditional confusion of object and act in perception (pp. 185–7), the distinction which he makes also in the latter paper (cf. *e.g.* p. 82). And these are the two positions which form the negative and constructive parts of the "Refutation."

positions which Mackenzie as the representative of idealism, criticizing Moore's "Refutation," tells him are fundamental and not those which Moore refutes! (see *M.* 1906).

It will be readily seen that these positions are what Kant termed "Ideas" of pure reason, the "Ideas" of the unity of knowledge (of its object, the universe), and of God, mistakenly turned from "regulative" into "constitutive" principles—a mistake which is the distinctive mark of metaphysics in the sense in which Kant rejected it. This fact explains the fervour and impatience with which Moore applies himself to their criticism, and like the master, examines the arguments which are advanced to support them. Again it is the Kantism of his thought which saves him from falling into an antagonistic metaphysics like Alexander, and lets him "devoutly hope" that though idealism as knowledge is untenable, yet reality is probably spiritual (*R.I.* p. 3).

Now Moore finds that the position that "reality is an organic unity" is based on the doctrine of the intrinsicality of relations; and the position that reality is spirit or spiritual, on "esse is percipi." His work therefore consists in examining these two positions. The first he only touches upon in the "Refutation" (p. 15), and takes up more earnestly in "The Conception of Intrinsic Value" and "External and Internal Relations." It is the second on which he concentrates in the "Refutation." Both these doctrines tend to deny the objectivity of sensa or percepts.

Now what does the intrinsicality of relations mean, and is it true? It means the identification of the two terms in relation, the identification of the subject and the object. It means that nothing can be affirmed of the part by itself without identifying it with the whole. It means that the synthetic judgment "esse is percipi" is an analytic judgment. It means that though "esse" and "percipi" are two distinct terms, yet they are not distinct—a form of fallacy by which something is affirmed and *also* denied, which Hegel raised into a principle, and to "which philosophers, along with the rest of mankind are addicted" (*R.I.* pp. 15–16). The doctrine is therefore false and self-contradictory.

Manifestly the description as well as the criticism of the doctrine is too cursory and unconvincing. It is doubtful if Moore has hit the mark at all. The idealist does not mean or believe that "esse is percipi" is an analytic proposition, nor identify the part with the whole. However Moore seems to be on the right track in attacking the doctrine. The doctrine does imply, as Moore says in "The Conception of Intrinsic Value," that the object would not be what it is outside its relation to the subject, that it is what it is only in this relation. The relation is intrinsic to its nature (*I.V.* pp. 270 ff.). Consequently Moore discusses the question fully in two papers, viz. "The Conception of Intrinsic Value" and "External and Internal Relations." In the first he maintains that, if all relations were intrinsic, there would be no difference between "subjective" and "intrinsic" values; and in the second, that consequently all the determinations of a thing are *not* internal, as the doctrine in question asserts.

Right and wrong, good and evil, beautiful and ugly, are intrinsic values. That is, they depend on the intrinsic nature of the entity of which they are predicated. They are true of it *unconditionally*—in every universe they would be true of it, and of everything *exactly like* it. In the language of Kant, the judgments which predicate these determinations, are universal and necessary[1]. Hence they are not subjective, true in relation to me and not to you, in some circumstances and not in others.

But the idealistic philosophers deny this distinction of unconditional and conditional (= subjective), when they say "All relations are intrinsic" and "No relation is extrinsic." According to them a patch of colour seen by me can never be really like a patch of colour seen by you; and no patch surrounded by a red ring can be like one not so surrounded. If that is so it must be evident *a priori*. But it is simply *not* evident *a priori*. Of the beautiful indeed it is evident *a priori*. If *A* is beautiful and *B* is not, you know *a priori* that *B* is not

[1] Again, like Kant, Moore holds that these predicates do not express the nature of the subject, are not its constitutive elements; *i.e.* the judgments containing them are synthetic.

exactly like *A*. Hence it is clear that there are many relations which are external and not intrinsic; and clearly Moore means by the examples given above that the relation of object to subject in perception is such an external relation.

The paper on "External and Internal Relations" carries the fight further. It does not deny internal relations. There are such relations, Moore admits (cf. *e.g. C.R.* p. 207); but he does not explain their nature, because the question has in part been anticipated in "The Conception of Intrinsic Value," and because they do not form the bone of contention. The paper satisfies itself with disputing the position of the adversary by showing that not all relations are internal, some relations are external—do not enter into the nature of the thing and can be removed without causing any intrinsic difference to it. It does not make any difference to a thing which is a part in a mechanical and spatial whole, whether it is in the whole or outside it. It remains what it is, the same numerically as well as qualitatively—Moore might have added, also with respect to its intrinsic value. And such external relations are numerous, and among them he includes spatial relations as well as the relation of subject and object in perception[1].

Moore goes further, and corrects the description of the doctrine, tracing the mistake to its foundation. It is not relation that is meant when it is said that every relation is intrinsic, enters into the nature of the terms and modifies them. For, *F* may have the *same* relation of fatherhood to *A*, *B* and *C*, and therefore after he once has got this relation to, say *A*, he will not be modified if he afterwards become also the father of *B* and *C*. But the doctrine does not mean this. It is not the relation but the *relational property*, which it is meant modifies the terms. *F*'s being father of *A* is a relational property of *F*, his being father of *B* is another relational property of his, etc. What is meant is that these properties modify *F* (*R.* pp. 291–2). The correction makes the doctrine in question easier to grasp; though it is doubtful if the idealist

[1] At one time Moore went even so far as to hold that this relation too is a spatial one (see *O.P.* pp. 70–1).

would accept it. For substituting "property" for "relation" is against the spirit of his doctrine; it tends to keep the terms atomic.

However, to follow Moore further, what is meant by the dogma is that if X has a relational property, and Y has not got it, Y cannot be exactly like X. They are intrinsically different. That is, they are (1) *qualitatively* as well as (2) *numerically* different. X with the property is essentially different from X without it. The latter is qualitatively *distinct* and numerically *other* than the former; and if it had the property, it would neither be *distinct* from nor *other* than the former;—which is nothing but the Leibnizian dogma of the Identity of Indiscernibles.

Thus the dogma of internal relations consists in the joint assertion of two indefensible propositions: (1) the proposition that in the case of no relational property is it true of any term which has got that property that it might not have had it; (2) the identity of indiscernibles (*ibid.* pp. 307–8).

So the doctrine on which the first position of idealism, viz. that reality is an organic unity, rested and which made the independence of the object impossible, is found to be untenable. We may now turn to the second fundamental position of idealism which Moore attacks, viz. that reality is spirit or spiritual.

Moore in fact directs his attention to this position first, as militating against the independent reality of objects. He opens the third stage of his thought with it, and devotes the whole of the "Refutation" to it. But for reasons which will presently appear it was deemed convenient to take it last.

That reality is spiritual, is a position which Moore himself devoutly hopes is true. It does not necessarily involve the conclusion that the object is dependent on the subject. The same may as well be said of the unity of reality, as Cook Wilson pointed out (see *M.* 1919, p. 306), though not of the intrinsicality of all relations. But what takes away the force of Moore's attack is the fact that he is attacking objective idealism, and all the while criticizing not its argument but the argument of subjective idealism. This explains why the

adherents of the former do not seem to have taken much notice of his attack; and when any of them, *e.g.* Mackenzie, did take notice of it (*M.* 1906), he could say: You have destroyed subjective idealism but not objective; while the subjective idealists, *e.g.* Strong (*M.* 1905), could, on the contrary, say: You have destroyed objective idealism but not subjective.

But it must be admitted that the mistake of Moore is pardonable, inasmuch as objective idealism in England has, in spite of Hegel, so entangled itself with Berkeleyanism that it is hard for any outsider to distinguish the bases of the two. Mackenzie admits this in the case of Green and Bradley. But it can easily be shown to be true of other prominent idealists. E. Caird, having an eye specially on Bosanquet, had to give a warning against this confusion, even before Moore wrote his "Refutation" (see *British Academy*, vol. I, May, 1903); though he himself, whom Mackenzie would spare, builds his idealistic argument on subjectivistic premisses, namely on the relativity of sensa to the organs of sense (*e.g.* in his *Hegel*), which is why Pringle Pattison (Seth) charges him with subjectivism in his *Idea of God*. Mackenzie himself when coming to sensa, *e.g.* colour, shows the same tendency. The same may be said of Taylor, whose article in the *International Journal of Ethics* (Oct. 1902) seems to have given occasion to Moore's "Refutation"; and J. A. Smith's philosophical, *i.e.* ultimately true, answer to the question: "Are Materials of Sense Affections of the Mind?" is that they are creations of the mind and cannot exist without it (*A.* June, 1917). Right or wrong, this is the impression all the idealistic writers of note give, and Moore cannot be very much blamed if he got this impression. Moreover his criticism actually has bearing on the objective idealism of, at least, some idealists, *e.g.* Green and Ward.

Moore *assumes* without proving—and he admits this—that the position of idealism, that "reality is spiritual," has for its necessary premiss "esse is percipi," taking percipi as including both kinds of cognitive experience, sense and thought. Now since Berkeley, in fact, since the dawn of the doctrine that sensa are subjective, this is the argument of all sub-

jectivists. But there are also objective idealists who subscribe to it and build their idealism on it. For Ward sensa, the objects of sense, for Green the relations of sensa, the objects of thought, are entities whose esse is percipi, though like the subjectivists they do not confine percipience to the finite subject but assume an infinite subject; and this is true of all idealists, who, like Green, reconstruct the argument of Hegel by abbreviating it, and base it on Kant's unity of apperception, understanding this as the constitutive ground of nature and reality. However it would have been much better if Moore had seen clearly that this is the premiss of subjective and not essentially of objective idealism and had consciously criticized subjective idealism, which is the real enemy, and not confused it with objective idealism as such. We may therefore take his argument in the "Refutation" to be directed not against objective idealism, but only against some objective idealists. As against subjective idealism he takes up the same argument again at a later period.

Moore's contention on the point in the "Refutation" may be summarized as follows: Idealism asserts *Reality is spiritual* on the ground that "esse is percipi." This proposition as the premiss must be a synthetic proposition *a priori*. But it is not evident that it is one. However *the idealist*, whether he knows this or not, *treats it as and believes it to be an analytic proposition*, to deny which is self-contradictory. But this is false. It is not an analytic proposition. *Object and awareness are two distinct things*. The idealist falls into this error because it is very difficult to distinguish these two elements of experience and to keep them apart, the reason being that *awareness is very hard to fix upon*; it is not perceptible and slips out of our fingers. That in the traditional description of sensation the sensum "blue" is called the "content" of sensation shows it. For "content" is conceived as a property and sensation as a thing, as an image, in which it inheres and without which it cannot exist. The analysis loses sight precisely of awareness, of the consciousness of this complex. Hence Moore's conclusion is that "esse is percipi" is false and self-contradictory. Blue is as little dependent on the

consciousness of it as a mental fact on the consciousness of *it*. Matter is as real as spirit.

Now serious exception can be taken to Moore's argument. No idealism, objective as little as subjective, treats "esse is percipi" as an analytic proposition. They all treat it as synthetic yet certain, though on different grounds. They treat it as self-evident, because from the premisses they start from it is a necessary conclusion. Moore should have investigated these premisses in detail and met them. Simply taking the conclusion by itself and trying to dispose of it offhand by applying to it the Kantian schema of analytic and synthetic, *a priori* and *a posteriori*, and charging idealists with the monstrosity of treating a synthetic proposition as analytic, will not do. The spectre of idealism cannot be laid so easily. The reason why the subjective idealist holds "esse is percipi" to be self-evident, is, as in the case of Berkeley, that he conceives subject and object on the analogy of two physical things in interaction, and of idea or sensation as the modification of the subject due to the causality of the object. Moore indeed considers this conception in connection with the "content" theory (see *R.I.* pp. 23–4) and meets it; but he does not see in it the originative ground of "esse is percipi." But the reasons why some objective idealists hold this proposition are more of a logical than of a metaphysical character. They say it is a universal experience that the presence of a subject is a necessary condition of there being an object as we know it. Take away the experience; the subject is removed, and we have no way to assert that the object is still there as we know it. We simply cannot get out of the circle of experience and see the object and verify that it is still there in its known qualities. Consequently we must, of sheer logic, admit that the presence of a subject is, as far as we know, a necessary condition of there being an object. This admitted, the conclusion is clear that if we affirm, as we do, that the objects exist even when no finite or human subject is present, we must assume an infinite or super-human subject to be there. Moore touches upon this argument but in a desultory way. He does not see the point of it. He would admit its

premisses and yet deny its conclusion, and say: Well, if, as you admit, the object exists independently of the finite subject, you admit that it can exist independent of a percipient and your assumption of an infinite subject is unnecessary (*R.I.* pp. 26–8). He could say this only because he had not made the argument of the idealist clear to himself. Here the idealist takes a standpoint behind which we cannot go. It is a question now of ultimate convictions as to the nature of knowledge whether it is constitutive of the object or only revelatory of it. Moreover, as remarked above, this idealism does *not* conflict with realism. Realism is the doctrine that the object is independent of the finite subject, and not of all subjects finite or infinite whatsoever. To go so far as that is again running into metaphysics for which we have no warrant[1].

[1] The paper on "Kant's Idealism" (*A.* May, 1904) undertakes definitely the refutation of the Transcendental Idealism of Kant. Kant's idealism is identical with Berkeley's "so far as it asserts that matter is composed of mental elements" (p. 140), namely, so far as it holds "that spatial and temporal properties, that sounds and colours, and that causality exist only in the mind of him who is aware of them" (p. 138), and "is certainly false" (p. 140); and has been refuted along with it in the "Refutation."

But transcendental idealism distinctively "consists not in maintaining the 'ideality' or merely mental existence of particular objects," but "in maintaining the ideality of the forms in which these objects are arranged" (p. 128), namely, the ideality of Space, Time, and the Categories.

Kant asks: How are synthetic *a priori* propositions possible? His answer is: They are possible because space, time and the categories are ideal. Now, asks Moore, is this answer satisfactory or true? and replies that it is neither. There are "two absolutely conclusive objections" to the argument of transcendental idealism. (1) "The only evidence which Kant offers to prove the validity of a universal proposition is—merely another universal proposition," viz. "mind *always* acts in a certain way upon, arranges in a certain manner *everything* which is presented to it." Here is therefore a synthetic *a priori* proposition which Kant has not proved; and one may add, a proposition on which the validity of all other synthetic *a priori* propositions is based. "If you ask him (Kant): How can you know that mind will *always* act in that manner? he has no answer to give" (p. 133). This is simply an *assumption*. Moreover (2) the conclusion that follows from this assumption is: "Everything presented will always have the formal predicates which mind gives it." But this "is not the conclusion which Kant set out to prove." For, "it does not entitle us to assert that *any* 2 groups of 2 make 4; but only that any 2 groups of 2 make 4 *at the time when they are presented*" (p. 134).

Moore does not believe that any one has ever definitely maintained that mind actually *gives* properties to things, *e.g.* it *makes* one thing the cause of another, or makes $2 + 2 = 4$. What *is* plausible to maintain is that the nature of our mind causes us to *think* that one thing is the cause of another, etc. This, he thinks, is

(*b*) We may therefore take the argument of the "Refutation" to be in intention the refutation of subjective idealism so far as the central proposition "esse is percipi" is concerned. In fact Moore himself takes it as such at a later date, namely in the "Status of Sense-Data" (July, 1914), and realizes that it is not the only nor the really important argument of the subjectivist. Indeed, he realizes much earlier in "The Nature and Reality of Objects of Perception" (January (?), 1906), that the real argument of subjectivism is the argument from the relativity of sensa and consequently it occupies him throughout as we shall see later.

Is the "esse" of sensible objects "percipi"? What does this proposition mean? It may mean either (1) that the meaning of the word "esse" is "percipi"; but as such it is no argument. Or it may mean (2) as an analytic proposition, that "percipi" is a part of the concept "esse." In this case, to deny the proposition would be self-contradictory. This is what the idealists and Berkeley (cf. also *S.S.* p. 180) certainly mean. But this is clearly false. It is not self-contradictory that a patch of colour exists without being perceived, though false it may be. But the proposition may be meant (3) as one synthetic *a priori*. But this too it is not.

Yet Moore should have seen when dealing with the "content" theory, why sensa are conceived to be "contents" of sensation. It is here that the reason lies for holding "esse is percipi" to be a necessary synthetic proposition. Consciousness or awareness is conceived as a substance and a sensum as a quality of this substance, a modification caused by ob-

part of Kant's meaning and strictly follows from his doctrine that we cannot know *at all* what properties belong to "Things-in-Themselves." On this basis Moore asks if the validity of synthetic *a priori* propositions can be inferred even from this premiss, viz. "that the mind is so constituted as to *make us think* that the objects presented to it have certain properties." Evidently the answer is: No (pp. 135–6).

Having shown the failure of transcendental idealism to prove its thesis, Moore asks: Is its thesis true? There is no empirical evidence, answers Moore, that the mind causes events to have effects or me to think that they have effects. "I can find no evidence, that when I apprehend that 2 and 2 are 4, that apprehension is any more due to the activity of my mind than when I perceive the colour of that tablecloth. I can apprehend that 2 and 2 are 4 as passively as I can apprehend anything" (p. 137).

jects. The whole fact of sensation is thought of as an image of which the content is its colour, red, blue, etc. But this conception cuts us off for ever from the object. More, it omits one of the two factors of the complex situation it intended to describe. There is the substance consciousness, and a modification of it, an image and its content; but where is the knowledge of this modification or content? Awareness is awareness *of* something. It is distinct from that something, whatever that something be, whether modification of a substance or content of an image. The real mistake of the subjectivist is that he tries to conceive knowledge, awareness, in terms of other relations. Knowledge is an ultimate unanalyzable fact and has to be taken as such. Philosophers have, says Moore, never clearly grasped this distinction which is of overwhelming importance and so have confused or identified subject and object, perception and percept, sensation and sensum. Every case of experience has two factors, (1) the act of experiencing and (2) the object experienced; awareness and something of which it is awareness[1]. Both exist and are distinct from each other. The object is as little an "inseparable aspect of its experience," as experience is *of its* experience. Matter is as real as spirit and both are independent of the experience of them. Philosophers have never been clear over this distinction, as is shown by the fact that for both these factors the same word sensation is used. So also in the case of thinking, the word thought. Moreover, the factor awareness is as it were diaphanous. When we look for it, we see nothing but the other factor. This is why there are such people as materialists. In fact, no philosopher, sensationalist or idealist, has ever properly grasped it[2].

[1] In making this distinction of fundamental importance for realism, Moore has his feet again on Kantian ground. The awareness is the transcendental ego of Kant, the "erkenntnistheoretische Subjekt," as Rickert develops it in his *Gegenstand der Erkenntnis*.

[2] It may be noted here (1) that Moore is not right in implying that the distinction of act and object of awareness has been overlooked by philosophers. Even Berkeley notices it, cf. his *Principles*, § 49; (2) that Moore is overdoing his point when he implies that mental facts too are independent of awareness like physical facts, and are not modifications of consciousness. He thereby exposes himself to the attack of Strong (cf. *M.* 1905). They may be independent of an

The argument of subjectivism, from "esse is percipi," therefore falls to the ground. "Esse" is simply not "percipi," but different and independent of it. What other arguments are there then in favour of subjectivism?

There are some empirical facts which are said to be in favour of subjectivism—in favour of the contention that sensible objects or sensa are modifications of mind and do not exist except when perceived. "All serious objections" to realism are but of one type. They all rest upon the assumption that if a certain thing exists at one time at a place, other things cannot exist at that time at the same place. *E.g.* the same water cannot really be both hot and cold, which appeared hot to the one hand and cold to the other of Berkeley (? Locke). But this does not prove that it is *neither*. We may admit that where sensa conflict in this way, *some* of them are unreal, but not *all*. In fact some of them may even exist at the same time in the same place, as the colours of blood seen by the naked eye and under the microscope. "At all events, I think, it is plain that we have no reason to assert, in any case whatsoever, that a perceived colour does *not* really exist in the place where it is perceived as being, unless we assume that that very place is occupied by something else." "The more I look at the objects around me, the more I am unable to resist the conviction that what I see does exist, as truly and as really, as my perception of it. The conviction is overwhelming" (*O.P.* pp. 92–6).

There is another important argument considered in the "Status of Sense-Data" (pp. 180–4) which is used by Russell, and seems "most weighty" to Moore, namely, the relativity of sensa to the conditions of our nervous system. But the argument is fallacious. It does not distinguish between the conditions of perceiving and the object perceived. "What there *is* evidence for is that *our experience* of sensibles always depends on the conditions of our nervous system," and not "that the existence of the *sensible experienced* always also so

experience of them but they are not independent of experience as such. They are modifications of consciousness and *cannot* exist without it. But Moore subsequently corrects himself (see *O.P.* pp. 91–2).

depends." But what lies at the bottom of this argument is the assumption which has been dealt with above. Where the normal eye sees red, the colour-blind sees grey; it is then assumed that both red and grey are seen in the *same* place at the same time and contended that they cannot so *exist*. But as indicated above, Moore is not prepared to deny that both of them may so exist; though he protests against the assumption that they are in the same place.

It should have been noticed that the two last mentioned arguments are but one argument, viz. that from the relativity of sensa. With it Moore has to struggle in his constructive efforts, and we may pass over it at present and follow him in his fight against subjectivism. Having dealt with the arguments for it, Moore attempts to reduce it *ad absurdum*. The premisses of the subjectivist being untenable, the conclusion which he draws from them is untrue. "Esse" is not "percipi," objects are not modifications of the mind nor inseparable aspects of our experience; they are not contents of sensation. What follows from the premisses if *true* is that we can neither know ourselves nor anyone else. Not ourselves, because according to him all objects are on the same footing; they are contents of awareness. We are therefore when our own object, content of our awareness, modification of the substance consciousness. But we are *not* aware *of* this modification. Not others, because they too are only inseparable aspects of our experience. They may exist by themselves, but we can never know it (*R.I.* pp. 28–9).

(*c*) It is not only the idealists, objective and subjective, against whom Moore's objectivism has to struggle. It is not only the reality of the objects of sense and of their sensible nature, which it has to defend. He is equally interested in maintaining the objectivity of their thought-determinations. In a word, his interest lies in the objectivity of all theoretical truth. But modern scientific thought, dissatisfied with its categories as descriptive of reality, turned in Mach and Avenarius to the view that the categories in question do not describe reality but are only a convenient method of economizing thought without further validity. They are useful fictions.

They are only working hypotheses without objective truth. These doctrines gave rise, in the hands of William James, to a philosophical theory of truth in general, called pragmatism. This theory makes all truth fictitious, of our making, an entity of which the distinctive mark is that it is useful, it works. It is not theoretical, but only a practical affair. It is wholly subjective. Moore must therefore examine pragmatism. He does it in his paper "William James' Pragmatism" (*A.* January (?), 1908).

Truth is not considered here as such, nor as an intrinsic value. But what Moore says of it, clearly indicates his objectivism and shows its community of nature with the beautiful and the good. For an idea which is true is immutably, eternally, unconditionally true—true in all universes, not true now and false then (*J.'s P.* pp. 135–8)[1]. Its truth is not of our making, our creation; nor does it consist in its utility to us. It is independent of us in its being as well as in its nature. It is reality and not we, that makes an idea true or false; for it is in its agreement with reality that its truth consists (*ibid.* pp. 127, 141).

William James implies that (1) *utility* (to us) is the *only distinctive* quality of true ideas. In other words, their truth means their utility. Hence, all true ideas are useful, and all useful ideas are true, and an idea is true so long as it is useful, and useful so long as it it true. When an idea ceases to be useful, as often happens, it ceases to be true. (2) Consequently truth is *mutable.*

But it is easy to point out ideas which are true but not always useful, or useful but not always true. To dwell on my faults is not always beneficial, and belief in some forms of religion though useful, is not always true. Even false ideas may at times be useful. Utility is not therefore the distinctive mark of truth, far less its whole nature. As to the mutability of truth, Moore points out that it may mean (i) *the mutability of facts, i.e.* the reality of change, of temporal process in the world. In this sense James's position is true, and Bradley and

[1] It is not said whether its truth is or is not a part of its nature. But evidently not.

others who deny the reality of time are in the wrong. Again, it may mean (ii) the *mutability of words* which express an idea, *e.g.* I say now "I am in this room." The sentence if uttered yesterday would have been false, and if uttered to-morrow would probably be so. The reason is that the tense of the sentence implies the reference of the fact expressed to the time of uttering the sentence. If mutability of truth means the mutability of the words in which it is expressed, then James is again in the right. And it must be admitted that in this sense truth does change, and to say so is a very natural mode of expression. But what James really means, is (iii) the *mutability of the ideas* themselves, which the words express; and in this sense, the doctrine is false. The *idea*, expressed in the sentence, "I am in this room," the fact which the sentence states, the truth which it expresses, does not change. It is eternal. The idea may recur again and again, and will always be true. Any sentence which expresses this idea will be true, whenever uttered. This *idea* cannot be true now and false to-morrow or yesterday. And this position is as self-evident as any can be[1].

James further asserts that (3) *we make our ideas true*. Of course it may be said that we make our ideas or beliefs; also that because we make them, we make it possible for them to be true. But *we* do not *make* them *true*. It is reality, events, which make them true. We do not make reality; and it is in their agreement with reality that the truth of our ideas or judgments consists[2]. We make them true, *only* in cases where we can and do change reality, and not in others.

(*d*) But the theoretical determinations do not exhaust the predicates of reality. There are, according to Kant, two more

[1] What Moore calls an idea which is true, is rather a judgment, not as a form of words, nor simply as a complex of the elements of reality, but as a mental representation of such a complex. Its truth depends on the reality of the complex it represents. If the complex is once real the judgment which represents it is always true (cf. *ibid.* pp. 137–8). The position taken by Moore brings out the objectivity of truth undoubtedly. But it also indicates a change in Moore's view as to the nature of judgment. It is no more an objective being living over there, as in the "Nature of Judgment," but a mental act.

[2] Thus the old notion of truth rejected in the "Nature of Judgment" is here restored.

kinds of predicate, which are universal and necessary, viz. the moral and the aesthetical. Are then right and wrong, good and evil, beautiful and ugly, etc., objective? Are things and events right and wrong, beautiful and ugly? There are theories which make them relative to us, subjective. Moore has therefore to controvert these theories.

Partly the question has been anticipated in dealing with objective idealism and its doctrine that all relations are intrinsic. For, that doctrine, if true, would make not only objects, but all the determinations of objects, relative to the subject. Moore shows only a dim feeling of this in his paper on "The Conception of Intrinsic Value," pp. 270 ff. In considering the objectivity of moral and aesthetical predicates, he has in view, not the objective idealists, but the utilitarians and relativists in ethics and aesthetics, who hold theories like Westermarck's in his "Origin and Development of Moral Ideas" (cf. *M.Ph.* p. 332).

To this question he devotes two papers, "The Conception of Intrinsic Value" and "The Nature of Moral Philosophy." The argument of the former we already know (cf. above). Moral and aesthetic predicates are intrinsic values. They depend exclusively on the intrinsic nature of a thing, and are therefore true of it and of things exactly like it, unconditionally, in all universes. They are not true now and false then, true for me and false for you; and this self-evidently. We know this *a priori*. However they do not form a part of the nature of a thing. The description of its nature would be complete without mentioning its ethical and aesthetical predicates.

The subjectivist in morals asserts that all that is meant by calling an action good is that we have a certain sort of feeling towards it. The judgment is a description really of our feeling and does not give a determination of the entity about which it pretends to give this. But the only argument in favour of this view is, says Moore, that so many philosophers have held it (*M.Ph.* p. 331). The subjectivist forgets that if it were so, if, when calling an action wrong, I am describing my own feeling only, then ethics would be a department of psychology

and there would be no question of a conflict of opinion upon moral questions. For, an action may excite a feeling of indignation in you, and a feeling of approval in me. If you therefore call it bad, and I good, we shall both be right; because we are only describing our personal feelings. Again, there cannot be a question of higher and lower morals, as Westermarck assumes there can be. A principle which is called higher may excite a certain feeling in me, and that which is termed lower the same feeling in another. How can the one be called higher and the other lower, if their goodness means nothing but the feeling they excite? Again the good as end cannot mean solely a reference to my desire. The good does not mean that which *I desire*, to specify which is a description of my psychology. For, besides the objections urged above, the doctrine conflicts with the everyday experience of mankind. We often desire things which we do not believe to be good.

Thus Moore examines subjectivism in all its forms. It is false in all its forms. It can prove none of its theses. Neither sensa nor percepts nor concepts nor judgments, in a word, none of the theoretical determinations of things, are subjective. Nor are their moral and aesthetical determinations so. Truth in all its forms, theoretical as well as moral and aesthetical, is objective, is independent of the subject. Realism is thus assured against its enemies. They are disarmed. Its defence is completed. We may now follow Moore in his struggle to construct realism and to bring the conflicting elements into the harmony of a properly worked out doctrine.

B. In the language of Bergson, Moore's intuition is that perception does not make but reveals reality, that physical things exist independently of us; that what we directly apprehend by the senses, viz. the sensum, is real; and that the nature of the former is the same as that of the latter, *i.e.* that the physical things themselves are large and small, solid and fluid, red and blue, bitter and sweet, etc. In other words, that they have both primary and secondary qualities—the latter, not in the Lockean sense, but as we experience them to

be[1]. His problem is to defend these positions because there are obvious difficulties in them. Moreover Moore comes to his task, as we know, with a background of Kantian thought. The thing and the sensum are, for him, to start with, separate entities. They are somehow causally connected. But as he believes in their resemblance, his thought on the point is more akin to Locke's than to Kant's, and just because he believes in such a resemblance he cannot remain where Kant could or where Locke did, but must go further and find a way to maintain it. What he has to struggle against and to overcome is the separation of sensa and things, the view that they are related as cause and effect.

The development of his thought consequently falls into the following stages: (i) Sensa and things are both conceived real and yet held apart from each other, their relation being conceived as that of cause and effect. From the "Refutation" (1903) to the "Status of Sensa" (1914) Moore remains in this stage. The view he holds is nearer to Locke's than to any other. (ii) Sensa are no more kept separate from things and the causal view is given up. The relation is now conceived as of part and whole. What is directly apprehended is the thing itself—the natural man's view. This stage first shows itself in papers from 1916 on, and is not yet completed. In stage (i), (*a*) the "Refutation" (1903), and "The Nature and Reality of Objects of Perception" (1905) vindicate the reality of *sensa*, showing that, in the Kantian language, they are not Schein but Erscheinungen, physical effects of physical things existing independently of us; (*b*) "The Nature and Reality of Objects of Perception" (1905) and "Hume's Philosophy" (1909) are arguments for the reality of *things*. (*c*) "The Status of Sense-Data" (1914) maintains the unqualified reality of *both*, and explicitly realizes the difficulty of relating

[1] Not only are material things and their qualities as revealed to sense real, but Moore would make them necessary constituents of ultimate reality. In his *Principia Ethica* (1903) published in the same year with the "Refutation," Moore conceives the ultimately good or the Ideal to be a state of Aesthetic Enjoyment and the Appreciation of such enjoyment; and in both cases the existence of corporeal beauty, of physical things and their qualities is a necessary factor. The material objects therefore must exist even in Heaven (cf. *op. cit.* especially § 123, also § 132).

them in the causal way. In stage (ii) the causal relation between sensa and things is definitely given up. Now arises the conflict between two convictions, the objectivity of the sensum and the reality of objects. Which of the two is ultimately real, sensa or objects? To which of them is *full* reality to be ascribed? The "new realist" choses the former. Moore, after some hesitation, chooses the latter, and curtails sensa of their full reality. (*a*) His solution of the relation of sensa to objects is worked out in "Materials of Sense" (1917) implicitly, and in "Some Judgments of Perception" (1918) explicitly. Sensa are parts of things. The difficulty which the conflict of sensa offers, is met by holding that they only *look* different, but are not really different. (*b*) Later Moore seems to be coming to the common-sense view that sensa do not only look different but *are* different; hence some of them are mere appearance, and only some of them are real and are true appearance of things. In other words, the distinction of appearance and reality does not refer to the difference of sensa, but to sensa themselves as related to things—to sensa inasmuch as they are or are not true revelations of things.

Thus it is only in the second stage that Moore comes unambiguously to hold that perception is direct apprehension of physical things; and only at the end to something like a solution of the difficulty raised by the conflict of sensa or the argument from their relativity.

(i) After this brief analysis of Moore's thought we may proceed to consider it in detail. We know in general the conviction with which he starts and the direction in which he is moving. But to work it out as a philosophical doctrine is beset with difficulties. Subjectivism is no arbitrary hypothesis. It is, rightly understood, the product of these difficulties. Only it is a submission to them and not an overcoming of them. Realism consists in overcoming them. Moore squarely and conscientiously grapples with these difficulties. Sometimes he feels puzzled, sometimes lost. But he continues the struggle. It is in this struggle of thought that the interest of the following description consists.

It is worth while to take note here of the difficulty or

difficulties in question. They all consist, in one form or other, in the fact known as the relativity of sensa, as Moore himself recognizes (*O.P.* p. 92). The same object appears to me circular and bright red, to you elliptical and dark red, and to a colour-blind person grey. Which is it, circular or elliptical, bright or dark red or grey? Each of these sensa is a dictate of direct sense-apprehension. Can sense-apprehension be trusted? does it reveal reality? is there an object over there? is it circular *and* elliptical, bright *and* dark, red *and* grey? Subjectivism, puzzled by the facts, answered these questions in the negative. Old realism half-heartedly affirms the reality of the object, but denies the directness of sense-apprehension and the qualities of the object it apprehends, and thereby evades the difficulties in the way subjectivism had done. But modern realism, the realism for which Moore stands, is unwilling to answer any of these questions in the negative. It means to maintain the directness of sense-apprehension, the reality of the object, and the objectivity of its qualities as revealed through sense. It has therefore to *face* the difficulty the conflict of sensa raises. It is convinced that the object has one definite shape and one definite colour. But how is it then that its sensa are so conflicting? How is this conflict to be removed?

Moore begins with a confident assertion of the realism of sensa or percepts in the "Refutation." Having destroyed "esse is percipi,"—according to him the essential premiss of the subjectivistic argument—he feels there is no further difficulty in maintaining this realism. His analysis of sensation into awareness of an object and an object, has once for all put us outside the closed circle of ideas in which the subjectivist found himself and in vain sought a way out. As soon as we apprehend, we are already outside this circle. In fact, we never were in it. The two factors of every cognition, viz. consciousness and object, are essentially distinct from one another. There is no contradiction in saying that "blue" may exist when not perceived because it is neither a part of consciousness nor an inseparable aspect of it. "Blue" is as real as the consciousness of it. For both we have the same evidence.

It exists independently of a knowledge of it, just in the same way as a mental fact exists even when we do not attend to it and make it an object of observation. Material things are as real and independent of our experience as mental facts. Berkeley and Kant are both wrong when they assert in their own respective ways that objects of sense are ideas in our mind or Vorstellungen with a certain concatenation. *No* object whatsoever, sensum or thing, matter or spirit, is a part of the apprehension of *it*. It is independent of it (*R.I.* pp. 26–30).

It will thus be readily noticed that Moore is not yet conscious of the real difficulty in his way. Having shown that "esse is percipi" is untenable and therefore the doctrine that sensa are inseparable aspects of our experience has no warrant, and having made the distinction of awareness and object in sensation, he thinks that he has vindicated the independent existence of sensa, as well as of things and matter. The unity of sensa and physical object is not yet broken, and the argument from relativity does not make itself felt.

The second paper also, "The Nature and Reality of Objects of Perception," written about the end of 1905, does not show an adequate appreciation of the difficulty, though it mentions it for the first time. The paper, in fact, does not undertake to show the reality and nature of the objects of perception, as its title indicates, but proceeds further in the triumphant march of realism against subjectivism, and undertakes to demonstrate that this realism alone is competent to solve the difficulties which beset subjectivism and which Moore pointed out at the end of the "Refutation" as a *reductio ad absurdum* of subjectivism.

So far Moore had been taking *sensum*, viz. that which is directly apprehended in sensation, *e.g.* colour, sound, size, form, and *thing or the physical object*, *e.g.* a chair, a table, and *matter* as physical science conceives it, *e.g.* atoms, aether, etc., all in a lump. In this paper he takes them separately. The relation of sensa and thing still does not seem to trouble him. He seems to conceive things as of the same nature with sensa (cf. *O.P.* p. 58). But the question of the relation of sensa to

matter is distinctly raised as a problem demanding solution[1]. Moore does not work out the solution of this problem. But had he done so, as will become evident presently, he could not have avoided the conclusion that the nature of matter must be conceived to be the same as that of the immediate objects of perception, that there is no essential disparity between what is apprehended in ordinary experience and the matter of physical science. That he does not, even in any later paper, attempt the question of the nature of matter and waives it, if one can say so, in favour of that of the nature of thing which he conceives as resembling sensa, and its relation to sensa, probably shows that he has silently accepted this conclusion.

In view of the distinction of sensa and things Moore made by this paper and his sustained contention for the independent reality of sensa, his inclination to maintain that all sensa are real, combined with other suggestive hints, *e.g.* the identity of nature between sensa and things and between sensa and matter, the emphasis on the distinction of awareness and object pressed to the furthest limit and made into spatial "neben-einander," are factors of fundamental importance, and make this paper on the constructive side, as the "Refutation" was on the negative side, "grundlegend" for new realism.

The paper raises the question what *reason* we have for maintaining the reality (1) of other minds, and (2) of matter. It answers the first question by showing that the reality of sensa must be *assumed*, if the reality of other minds is to be *legitimately* inferred; and says in general that the answer to the second question is also in principle the same. There must be something in *my experience itself*—experience taken in the strict sense of the word, *i.e.* what I directly and immediately am aware of when I look at an object, *e.g.* its figure, its size, its movement, its spatial relations, its colour, its sound, etc., to justify the belief in other minds. I hear certain sounds

[1] It may be remarked here that the distinction of things and matter does not play a rôle in Moore's thought. He seems to take the two together, or rather as one. It is things, and not matter with which he seems to concern himself. Compare "Some Judgments of Perception" (1918), where he definitely identifies things and matter (pp. 221–3).

(words) proceeding from some movements I observe in another body like mine. This justifies me in believing that another mind like mine is connected with that body. The ground of this conclusion is that I know from my experience that in me certain sounds and movements are preceded by certain thoughts and feelings; and that there is a causal relation between my thoughts and feelings on the one side, and my movements and sounds on the other. From this experience I rightly form the generalization, the major premiss, that all similar sounds, etc., are preceded by similar thoughts, etc. Consequently when I see similar movements, etc., in another body, I conclude the existence of similar thoughts, etc., connected with it.

Now this conclusion is valid only if I assume that the sounds and movements I perceive are *real*, that is, exist independently of the process of perception—are real in the same sense as the perception of them is real; *i.e.* they are real and not imaginary as subjectivism would make them. For, if all I perceive is only *my* perception, only *my* ideas, an inseparable aspect of *my* consciousness, as even Reid holds, then the generalization on which the conclusion is based is not valid. The position then becomes this: What I call movements, etc., of my body, are all parts of the stream of *my* consciousness, are all mental entities belonging to the life of *my* mind. In the case of the movements which I call "of my body," experience shows me a connection with another element of my mental life, viz. my thought, etc. But in the case of the movements which I call "of other bodies," it does *not* show any such connection in my mental life. In fact the generalization "similar movements, etc., are preceded by similar thoughts, etc.," no more holds. Only *some* of my perceptions are so preceded by thoughts, and others not. Even if the generalization were true I could conclude from it only to the existence of *my* thoughts, etc. But as soon as I hold that perception and its object are two things, and both are real, the position changes. In fact I directly know that they are two absolutely different and distinct entities. They are related to each other spatially as two objects in space standing side by side and apart from

each other. I am directly aware that my perception—*perception* and not the organs of sense, is at a different point of space from the object. Sometimes it is near to it, and I know this; and sometimes away from it. It can therefore be identified with its object as little as two objects existing side by side in space (cf. *O.P.* pp. 70–1). The subjectivist is wrong in identifying them[1]. Now I observe a content of sense called my body, which is real. I observe that its movements are preceded by thoughts, and I observe that there exists a relation of causality between these two kinds of reality, a "content of sense" and a "stream of consciousness." When I see a similar sensum and hold that it is real, I can rightly conclude to a similar stream of consciousness, which is real. So we find that the hypothesis, that sensa, the contents of sense, the immediate objects of perception, are real, alone justifies us in believing in the existence of other minds.

The subjectivistic argument as given by Reid for the existence of other minds is this. Sensa are all only modifications of my mind. Notwithstanding, we are justified in the belief that other minds and matter exist. The existence of other minds and matter is our *hypothesis* to explain changes in my mind. And it is a verifiable hypothesis, because by means of it, we can even *predict* the changes and verify the hypothesis.

But, contends Moore, Reid assumes the existence of the very things the existence of which was to be *proved solely on the ground of immediate experience*[2]. That with his hypothesis

[1] In this passage one can trace the living germ of the conception of knowledge, held by Alexander, viz. as the relation of compresence. One may ask in passing if it is necessary to separate the mind and the object spatially in order to make them distinct; and if it is not sufficient that we directly *know* that they are distinct. In fact if they are *spatially* separated and consequently both of spatial nature, the question arises: How can the mind know the object?

[2] Evidently Moore's position is much stronger and more natural. He goes from the experienced to the unexperienced; Reid the reverse, because subjectivism closes this way to him. But it may be remarked in passing that the position of the subjectivist is not so helpless as one is apt to think. There is a way to break through the closed circle of my experience. In fact, it is not necessary to start direct with the hypothesis of the existence of other minds, etc. The hypothesis can be grounded in experience itself. For, besides the reality of sensa on which Moore bases his case, there is another *experienced* feature of sensa, viz. their *involuntariness*, which compels us to seek for an explanation. The subjectivist finds that though the phenomena are in him, are *his* experience, they are there in

we can predict change and verify the hypothesis is no special advantage. We can do this equally well with the hypothesis of the reality of sensa, which is much more natural. Moore could perhaps further say that the affirmation of the consequent does not necessitate the affirmation of the antecedent, and therefore the hypothesis is strictly unverifiable. But it would have been going too far. He is not seeking here for a *logical* proof of the existence of other minds, but only for one which makes it "highly probable," and consequently he cannot demand more from the adversary than he is himself prepared to give.

Having shown that the independent reality of sensa is the only legitimate ground for maintaining the reality of other minds and of matter, and with a warning by the way that he has not been contending for their existence even when not perceived, which is a question by itself and can be settled only by observation (?), and having suggested that some sensa, *e.g.* colours, do, and others, *e.g.* feelings, do not exist, when not perceived (*O.P.* p. 91); Moore raises the important question: Why is it that the reality of sensa has been doubted. He admits that there are real difficulties in the way, and applies himself, rather hurriedly, to them.

"All serious objections to the reality of sensa are," thinks Moore, "of one type. They all rest upon the assumption that, if a certain kind of thing exists at a certain time in a certain place, certain other kinds of things cannot exist at the same time in the same place. They are all, that is to say, of the same type, as Berkeley's argument: That, though the same body of water may *appear* to be simultaneously both hot and cold (if one of the hands we plunge into it is warm and the other cold), yet the heat and cold cannot both *really* be in the same body at the same time" (p. 92).

In other words, it is the conflict of sensa, the argument from their relativity, which is the real objection to their objectivity.

spite of him. Being events, they must have a cause, which clearly is not himself. No one can avoid this conclusion. The nature of this cause or causes he must naturally determine on the analogy of his own nature. He has therefore proceeded just as Moore has, on the basis of his own observation. But whether he can also conclude the existence of *matter* on the same lines is another question. The special strength of Moore's contention would seem to lie rather here.

"Now," contends Moore, "though it is repugnant to common-sense if we assume that *both*, the heat and the cold, are in the same place, it does not follow that *neither* exists there. That is to say, this type of argument, even if we grant its initial assumption, will only entitle us to conclude that *some* sensible qualities which we perceive as being at a certain place at a certain time do not exist in that place at that time."

But we are not bound to grant its initial assumption. There are cases in which "we may be justified in denying that two things which (it is asserted) cannot occupy the same place really cannot." For example, the colour of blood seen with the naked eye is uniformly red, its colour under a microscope of a certain power is small red spots at different positions in a yellowish field; and under a microscope of a higher power, we may perceive yet a third different arrangement of colours.

> Is there any fatal objection to supposing that all three appearances... do really occupy the same spatial area? I cannot see that there is. We are familiar with the idea that a given spatial area may contain parts which are invisible to us. And hence I think it is quite conceivable that parts of a given area may be *really* occupied by one colour, while the whole is *really* occupied by another. And this, I think, is what we actually *do* believe in many cases (p. 95).

We certainly believe that the *area is the same* in such cases, otherwise there would be no sense in the objection[1]. Hence *some* sensa are in any case real. For the only reason we can give for the unreality of a sensum is that *either* I assume that another sensum exists in its place, *or* that a material object such as physical science supposes, exists in its place—because, as the argument of the paper shows us, sensa are conceived as physical effects of physical things. And this assumption I can make only on the ground of *observation*, *i.e.* again only on the ground of the *reality* of a sensum. In other words, the objection can be raised only by realism and on the ground of realism; it is not available to subjectivism. Sensa *must* be

[1] If we admit that all the three appearances are objective and in the same area, we cannot do so without allotting *different* parts of the area to the different appearances, the visible colour to the visible parts and the invisible to the invisible ones. Howsoever it be, the interest of the passage lies in its neo-realistic tendency.

taken to be real. Moore winds up the discussion thus: "The more I look at objects round me, the more I am unable to resist the conviction that what I see does exist, as truly and as really, as my perception of it. The conviction is overwhelming."

In the "Nature and Reality of Objects of Perception" Moore did not discuss the existence of physical objects. He passed over this point, saying that the argument for the existence of other minds holds also for the existence of physical objects. The argument had for its minor premiss the assumption that sensa are real, for its major the assertion of causal relation between phenomena, and for its conclusion the existence of other minds and external objects. Now Hume denies all the three propositions. Therefore Moore must consider the position of Hume. He does this in a paper entitled "Hume's Philosophy" (Nov. 1909).

Hume's exception to the minor premiss is nothing new. It is the old "esse is percipi" of Berkeley and subjectivists, and Moore has already dealt with it. He therefore does not discuss it at length. However, faced by the scepticism of Hume, he makes some attempts to prove his premisses, but in the end finds himself compelled to admit that the question of proof and disproof cannot be raised in this connection; that it is in fact a question of ultimate assumptions (*H.Ph.* pp. 158–9). Consequently Moore takes the other course, viz. his old method of examining the arguments of his adversary. What grounds has Hume for denying the existence of external objects and of causal law?

The criticism Moore brings to bear on Hume's argument against the objectivity of causal law is meagre and unconvincing. It only amounts to saying that though from the observed repeated conjunction of phenomena in the past it does not logically *follow* that they will *always* be so conjoined, and though subjective expectation is no *guarantee* for their objective succession; yet the principle of causality *may* still be true. Now the doubt which Hume raises as to the validity of causality *cannot* be met by the assertion of the mere *possibility* of its validity. But Moore's consolation is that if we

can *somehow* raise a doubt against the argument of the adversary, we can comfortably go on believing what we feel ourselves inclined to believe—and he feels himself inclined to believe in the objectivity of causality. Moreover, the question of causality is of a much wider range, and does not affect realism only. It is not therefore the concern of realism to settle it. The chief interest of realism is rather to maintain the reality of objects. What then has Moore to urge against Hume's contention that we cannot know external objects?

Hume considers two arguments, one the vulgar, the other the philosophical. The vulgar theory says that what we perceive are external objects themselves, *i.e.* they continue to exist at times when we do not perceive them. Moore neither describes this theory nor Hume's criticism of it, and simply passes it over with the single remark that "even here,... his arguments are inconclusive." It is Hume's criticism of the philosophical theory, viz. the causal theory of perception, that interests him. Evidently he is at this stage of his thought inclined to hold, as there is reason to believe he was when he wrote the "Nature and Reality of Objects of Perception," that our knowledge of external things is a causal inference. But this puts the external object once for all beyond our knowledge. Moore is therefore inclined to believe that there is a form of knowledge by which we know "matters of fact" which is yet not direct observation (*H.Ph.* pp. 165–7). He is probably thinking of a sort of intuition such as the Scottish school assumed or something similar to the thought of Stout, which no philosopher has yet properly worked out (*ibid.* p. 167). He comes to see later, as we shall find, that this position does not very well harmonize with the realism he is yearning for, though he does not yet give up the hope that there may be a kind of immediate knowledge of physical objects which is not sense-apprehension (*S.S.* p. 196).

The criticism Moore brings to bear on Hume, though not cogent, is yet important inasmuch as it shows what Moore holds as to the nature of external objects. *They resemble sensa.* For he urges that according to Hume the philosophical theory affirms the existence of external objects on the ground of

causal relation. Now, says Hume, the causal relation is an inference from observation. What we observe are only states of our own mind. The observed causal relation only holds between these states. We have never observed an external object nor a relation between it and a state of our mind. How can we infer its existence from any of our states? Moore meets him by saying that we can do so if we suppose that it is *like* a sensum (cf. *H.Ph.* pp. 161–3). Evidently Moore's position is not defensible. The object is *ex hypothesi* essentially unlike the sensum inasmuch as it *cannot* possibly be observed and is not mind-dependent, while the sensum is essentially both. Nor can a connection between it and a sensum be *ever* observed. It may be that Moore felt this and for this reason thinks of a new kind of knowledge which should make it possible to assert the existence of the unperceived and unperceivable object as a matter of fact.

In the meanwhile he takes refuge from Hume's argument by urging that

> It would always at least be as easy to deny the argument as to deny that we know external facts....There is no reason why we should not, in this respect, make our philosophical opinions agree with what we necessarily believe at other times. There is no reason why I should not confidently assert that I do really *know* some external facts, although I cannot prove the assertion except by simply assuming it. I am, in fact, as certain of this as of anything, and as reasonably certain of it (p. 163)[1].

[1] In the same year with "Hume's Philosophy" appeared a paper "The Subject-matter of Psychology" (*A.* Dec., 1909), which Moore has omitted in the *Studies*. Its sole interest for us lies in this that it seems to be a protest against the flood of the realism to which he had himself opened the gates. Alexander and Nunn preached the objectivity of *all* sensa without distinction; they even made *feeling* independent of the mind; and Alexander added *images and ideas* to the list. Moore seems to have recoiled from such views as extravagant, though he does not mention any names. He therefore undertakes an inquiry into the nature of what is mental. He admits that none of these data, sensa, images, etc., is mental in the sense in which an act of consciousness or the quality of such an act is mental; nor mine as the acts are mine. Yet, he contends, it may be mental in another sense, namely, if it exists only so long as it is perceived, is consequently somehow attached to mind and dependent on it; and this is true not only of feelings and images, but of *all* presentations. They may all be mental and not independent existences. "It is a very difficult question," says he, "and there is argument on both sides." The recoil of Moore against Alexander's views whom he does not mention, does not seem to be confined only to the reality of presen-

The last paper of this stage in which Moore holds the reality of sensa side by side with the reality of things and conceives the two to be causally connected, is the "Status of Sense-Data" (July, 1914), contributed to a Symposium in which Stout joined. Under the term "sense-data" are understood what in Ward's language are meant by presentations—sensa, after-sensations or after-images, hallucinations and illusions, dreams and images. They are immediate objects of apprehension and not modifications of the act of apprehending. Whether they exist independently of apprehension and how they are related to physical objects, are the two questions which demand consideration.

As to the first question, Moore's answer, unlike Alexander's, is that only sensa exist independently of perception. Henceforth the argument confines itself to sensa. Under sensa are understood not only those which are *actually* apprehended, but all that *could* have been apprehended *by anyone in any position*, the physical conditions remaining the same. Therefore there is an enormous number of them at any time connected with an object. Moore is "not prepared to admit that it is impossible that they should be *in the same place.*" But he protests against the assumption that they *are* in the same place. He would even put them outside "physical" space[1], to avoid conflict with objects, and to maintain their objective reality (cf. *S.S.* p. 195). The only positive reason he gives for their objectivity is what he calls in Hume's language "a

tations, images, feelings and even sensa; he contradicts him even in his fundamental positions as to the nature of mind. (1) Against Alexander's view that acts of consciousness are the essence of mind, Moore thinks that the acts may exist without the mind (*ibid.* pp. 41–2); (2) Against Alexander's doctrine of self-consciousness, that the mind can never be an *object* to itself, Moore goes so far as to suggest that it is conceivable that the act of consciousness can be made an object of observation even by other minds (*ibid.* p. 44); and (3) Against Alexander's position that the acts are internally differentiated corresponding to their objects, Moore totally denies any such differentiation (*ibid.* pp. 55–7).

But what concerns us, namely his doubt as to the validity of sensa, need not be taken seriously, firstly because he withdraws this paper, and secondly because he withdraws this view in the next paper.

[1] Note the affinity of the conception with Holt's. But Holt's sensa are concepts, neutral entities, and could be placed in non-physical space, a "neutral realm." The case is different with Moore's sensa. They are physical entities, and must be placed in physical space.

strong propensity to believe" that they are objective. But, as we know, this propensity has at its back the conception of their relation to physical objects. They are conceived as physical effects of physical causes, and such effects can be naturally numerous and at the same point.

This brings us to the second question. How are sensa related to things? Formerly, it was a foregone conclusion that they are causally related. But Moore finds himself now "extremely puzzled" over the question. However he lays down two principles "as certain" to begin with: (1) That the sensum is probably *never* identical with the object; (2) That our knowledge of the object is *based* on the sensum, *i.e.* without sensa there would be no knowledge of the object (*ibid.* pp. 187–8). The first principle is evidently due to his prepossession that the sensum is an effect of the object and therefore other than it, though he only mentions as his reason the conflict of sensa with the nature of the object, which loses its force if we take his distinction of "private" and "physical" space seriously (*ibid.* p. 187)[1]. This principle is probably also the reason why he omits Alexander's theory of the relation which, more than any other theory considered here by Moore, satisfies the requirements of realistic thought. This principle seems to be the only way in which Moore can maintain the reality of the object, which it is his chief concern to do. The second principle indicates Moore's yearning for immediate apprehension of the object, though he denies the possibility of it in deference to the first principle and the reality of the object.

Under the guidance of these principles Moore undertakes to examine four theories of the relation between sensum and object. They are of two kinds. The basis of division though not mentioned is again the relation of cause and effect. Of the first kind is the theory which does *not* take sensa and object to be causally related[2]; of the second are the theories which

[1] In making this distinction Moore is evidently thinking of Russell's special theory.

[2] This may be questioned, for it is what Moore terms the Mill-Russell theory —and Russell's theory, we have seen, conceives sensa to be effects of things. But it is not this aspect of Russell's theory which Moore has in view. It is the thing or object as a "construction" out of sensa which he is considering.

take them to be so related. Moore's prepossession in favour of causal relation is so great that though one of these theories (the American) hardly admits of being so interpreted, yet he interprets it so in this connection. It is remarkable that three out of these four deny the independent reality of sensa, but Moore hardly takes any notice of this. He is concerned exclusively with the reality and nature of the object. This indicates the latent tendency of his thought, which will become patent in the next stage, that the reality of sensa has after all a secondary importance where the reality and nature of the object are at stake.

The only theory of the first kind is what he later calls the Mill-Russell theory. It holds that the object is the "permanent possibility" of sensa. On it we cannot properly say either that an object, *e.g.* a coin, *exists*, or that it has a definite *nature, e.g.* is circular, except in an "outrageously Pickwickian sense." Moreover it is hardly possible to formulate this theory without including objects in our descriptions, objects which it denies[1].

The theories of the second kind hold that the object is the "source" of sensa, *i.e.* it is their cause in a special sense. (*a*) One of them, namely, that held by the new realists of America, maintains that this "source" is the sensa themselves, the object is nothing but the collection of sensa. But then to call the coin circular is Pickwickian; it is elliptical as well. That is, the theory conflicts with the *nature* of the object. (*b*) Another holds, with Berkeley and Leibniz, that this source is of "spiritual" nature and causes sensa in us. The same objection applies to it as to the preceding one. For it is then arbitrary to say that the coin is circular. (*c*) The only theory that remains which maintains both the *reality* and the *nature* of the physical object is "one which is roughly identical with Locke's view": namely, that there is a coin, and it is circular, and it is the cause of the sensa. This theory maintains that the objects have only primary qualities and not the secondary.

[1] Stout, in his paper in the symposium, totally denies that it is possible. So also Joseph in his *Lectures on the Revolt against Idealism.* See above the Section on Russell for a discussion of the point.

But with Locke, Moore does not think it necessary to give up the objectivity of sensa. The reason is that they are for him physical effects of physical causes and not, as for Locke, modifications of the mind caused by the object. However, the cause and effect remain separated. They cannot exist *in the same place* (*ibid.* p. 195), not even in the same space. Sensa ought not to be taken to be "anywhere" in the "physical" space; perhaps because it is full and there is no room for them in it. But where they exist is not pointed out. Perhaps they exist in our "private" spaces (cf. *ibid.* p. 187); but then the position becomes identical with Russell's theory, and we are perilously on the brink of subjectivism (see Section on Russell). The only point further to be mentioned about sensa is that they *resemble* objects; but only some of them do so, and that too only in respect of their shape.

In spite of all these concessions Moore finds himself in a serious difficulty. For the theory conflicts with the second principle which he had laid down, though he does not expressly say so. "How can I ever come to know that these sensibles have a 'source' at all?" and that this source has a nature in any respect resembling them? With the separation of sensa and their source, which is a necessary consequence of conceiving the relation between them as causal, we are cut off from it once for all. There is no way to break through the circle of immediate experience. Moore is at a loss. His only hope is the old one, viz. that there may still be a way of immediately apprehending physical objects which is yet not perception. Stout whole-heartedly accepted the first principle which Moore had laid down, and then offered thought as the desired mode of immediate apprehension. It is this principle which is at the bottom of Moore's difficulties. To escape them he must give it up, together with the conception of the relation of sensa and objects as causal, on which it is based. This he does, as we shall see later in the second stage.

(ii) Moore thus far maintained the unmitigated reality of sensa side by side with the reality of physical objects. He related the two factors as cause and effect. But thus they remain unrelated. One falls totally outside the other and does

not lead to it—does not either explain its nature or its existence. In fact the very existence of objects itself is in danger. There is no way to get to it. And it is the last thing which Moore is prepared to give up. Nor does any other mode of knowledge than perception seem to show itself by means of which we could get to the immediate apprehension of objects. Moore is too good a Kantian to accept Stout's suggestion that thought is such a mode. But then, what is at the basis of these difficulties? It is the fact that objects are put totally outside perception. But why have they been so put? Because the immediate objects of perception, viz. sensa, conflict and consequently cannot be *identical* with the nature of objects, and yet sensa are *all* real. It is therefore the unmitigated reality of sensa which is at the bottom of Moore's difficulties. He had contended for it and maintained it over against subjectivism, but if it conflicts with the reality of objects and endangers realism, it must be *modified*. The reality of sensa must be curtailed and yet maintained. It is this that Moore now does. The process of doing this is a hard and incessant struggle. In its first part, the modification is implicit; what is aimed at is the direct apprehension of objects, and this naturally takes the form of the problem of the relation of object to sensa. Having found a way to this, Moore seems to think his work has been completed and closes his volume (viz. his *Philosophical Studies*). But the solution thus reached demands a further step, viz. the explicit modification of the unqualified reality of sensa—the recognition, in other words, of the distinction of appearance and reality in them. We have no paper which expressly deals with this question, but only Moore's *obiter dicta*, which may be taken as hints indicative of the direction in which his thought is moving.

Criticizing Edgell's paper on the "Implications of Recognition" (*A.* March, 1916) Moore shows clearly that he no more holds the independent reality of sensa. However he tenaciously maintains the independent reality of physical objects (pp. 222, 228). Yet sensa, though they are *other* than objects (p. 212), "represent" the latter more or less "accu-

rately" (p. 222). But they are no more physical (pp. 205, 223), and therefore are not, as Russell erroneously holds, constitutive of objects (pp. 219, 222). Our past experience (pp. 208–9) as well as our attention changes them *qualitatively*, and they apparently do not exist apart from perception (p. 222). Evidently this was a passing stage. But it indicates an essential element of Moore's thought, viz. his conviction of the higher reality of objects and his readiness to sacrifice sensa for their sake. But the sacrifice is too great. It is the sacrifice of his whole work since he opened the campaign against subjectivism. He cannot therefore rest in this position. He must find a way to save as much of the reality of sensa as possible—as much at least, as is clearly reconcilable with the reality of objects. This is what he seems to do in the next paper.

"Are the Materials of Sense Affections of the Mind?" (*A.* June, 1917)[1] shows a return from the subjectivism of the "Implications of Recognition" to the realism of the "Status of Sense-Data." Sensa *are* real; but not indiscriminately as before. *Reality is claimed only for those sensa which are "localized and referred to an object."* It is only such sensa, though Moore does not say so, which we naturally *identify* with an object. That this is what Moore meant becomes clearer in the next paper. His argument for their reality is similar to that of the "Refutation" and the "Status of Sense-Data." But he brings it out now in contrast with the act of attention with which sensa were held to change in the "Implications of Recognition." Firstly, says Moore, it is conceivable that such sensa, unlike acts of attention, exist when they are not apprehended; and secondly, I know by *experience* that sometimes I know that they cease to exist when they cease to be presented, *e.g.* a flash of lightning, and sometimes I do not know this, *e.g.* a patch of colour. But of

[1] Both this paper and the "Implications of Recognition" are omitted in the *Philosophical Studies*. For the latter the explanation would be that it discusses Edgell's paper and cannot be understood without it, though its subjectivism might be an additional reason. But for the former this does not hold. The reason in this case seems to be his deference to other contributors to the discussion who complained rather strongly that Moore had failed to express himself intelligibly.

the acts of attention I know always that they cease to exist with my apprehension.

In his struggle to reconcile the conflict between the reality of sensa and the reality of objects, it is of great importance for Moore to get clear about the question of reality itself[1]. What is real? What does reality mean? He attacks the problem in the "Conception of Reality" (*A.* Dec., 1917), though he does not, as one would expect, do so directly, taking Bradley's paradox that "Time is real" and "Time is unreal" for his thesis. Nor does he seem to do justice to Bradley. But what his discussion of the paradox brings out is decisive for his own thought. The only meaning of real which Moore now understands is *to be a thing or to belong to a thing*, and unreal is = imaginary (*C.R.* pp. 211–13). Though he calls these only "the most important and the commonest sense" of these terms, yet he does not give any other sense, and accuses Bradley of applying the term real to both real and imaginary. This conception of reality again indicates his conviction that primary things are real. If sensa therefore are to be real, they must belong to things. This may be taken to indicate for him the way to reconcile the reality of sensa with that of things which he undertakes in the next paper, "Some Judgments of Perception" (*A.* Nov., 1918).

Some[2] very simple judgments of perception are taken, namely those which are true, and which we know to be true, *e.g.* I see a surface and say, this is an inkstand, or this is a door, or this is a finger. We are constantly making such judgments with perfect certainty. Our waking life is full of

[1] It may be remembered that Moore raised and discussed this question in "The Nature and Reality of Objects of Perception." But there he considered it in view of subjectivism, and was interested solely in maintaining the reality of sensa. It was sufficient for his purpose to show that they are other than the act of apprehension and no inseparable aspect of it. He did not think it necessary for his argument even to maintain their existence when not apprehended (cf. *O.P.* pp. 91–2). But the position is now different. The conception of reality is to be investigated in the interest of realism. The reality of sensa has assumed greater proportions and independence in the "Status of Sense-Data." It is felt to conflict with the reality of objects. The question of reality has a different significance now, and has to be considered for itself.

[2] This would seem to connect Moore's position in this paper with his position in "Are the Materials of Sense Affections of the Mind?"

them. The problem raised is, what are we judging when we judge that *e.g.* "This" is an inkstand? In other words, what is the relation between the subject and the predicate of this judgment?

The subject of the judgment is "This," the immediate object of perception, the sensum. The sensum is the ultimate subject of judgment. The predicate "the inkstand" is a material object[1], which is not a modification of consciousness or something that exists only so long as it is perceived. The question consequently is, what is the relation between the sensum and the object?

It is evident that in most cases we do not mean that the sensum is *identical* with the object, that the subject is the *whole* of the predicate. What do we mean then in such cases by predicating the object of the sensum? The answer which naturally suggests itself is that we mean that the subject is a part of the predicate, that the material object is a whole of which the sensum is a part, that "this is an inkstand" is a loose way of expressing my judgment that the immediate object of my perception is a part of the surface of an inkstand. The words part and whole are used in their most ordinary meaning, viz. as the trunk of a tree is a part and the tree is the whole. The sensum is consequently not identical with the whole of a material object, but only with a part of it.

What objections can be urged against this interpretation? Moore sets aside all the subjectivistic arguments as unsound. The only objection which has great force with him now is the argument from the relativity of sensa. Namely, on the one hand, we are certain that the surface of the inkstand has sustained no change; and on the other, that the sensum from near and from a distance, to the naked eye and through blue spectacles, etc., is *perceptibly* different. If the sensum is identical with a part of the surface of an inkstand, then *both* the varying sensa are also identical with each other. And this is absurd.

[1] Here Moore definitely abandons his earlier distinction between things of ordinary experience and the matter of physical science, and takes the former as equivalent to the latter (cf. *J.P.* pp. 221–3).

This objection, says Moore, is according to all philosophers fatal to the above view, and used to be so with him also. But now he thinks there is a way out of it. It is not true that we perceive or judge various sensa in question to *be* different. What we apprehend is only that they *seem* different[1]. Hence there is no contradiction if we say they *are* identical. They are not *really* different, they only *seem* to be different. That the sensum is a part of the thing, and that the conflicting sensa are not really different, is Moore's solution of the problem of the relation between sensa and objects. Things are real; the reality of sensa consists in this, that they belong to things as their parts. The two are no more conceived as separate nor their relation as cause and effect. The "cause-effect" as well as the "thing-and-its-manifestation" theory[2] of their relation is set aside as simply something which we do *not* mean in the judgments of perception.

In order to overcome the difficulty which the conflict of sensa offers, Moore advances a novel and curious-looking doctrine that the difference of sensa is only appearance and not real. He is not himself sure that it will convince; yet he hopes it is true. Yet surely it is not *sensa* which seem different and *are* identical; it is the *object* which *seems* different and *is* identical. The doctrine which Moore offers arises in this way: On the one hand he keeps the sensa and the object apart—an unconscious residue of the cause-effect theory of their relation which he had so long held. On the other, he is consciously trying to give up that theory and to unite sensa with the object. He therefore wishes *first* to harmonize sensa among themselves, and *then* to unite them with the object. Thus the only way left for him is to deny the difference of sensa as a *fact* and to make it mere *seeming*. But this will not do; the sensa *are* different. The theory of course satisfies the immediate and very important purpose of uniting sensa to things; but it does not satisfy the *motive* to this union. *On*

[1] Moore in making the apprehension of "seeming" an ultimate, unique psychological relation seems to make not only the *differences* of sensa but also *sensa* themselves mere appearance (cf. *J.P.* pp. 245–6). But evidently he does not mean it.

[2] The former as held by Stout and others, and the latter probably as attributed by Franz, who follows Riehl, to Kant (see *Kantstudien*, No. 45, 1919).

Moore's theory, we can affirm without contradiction that sensa are parts of objects, but we cannot say what the objects are. The motive of the theory is to satisfy the second principle laid down in the "Status of Sense-Data," viz. that our knowledge of objects is *based upon sensa*. But the theory only enables us to deny the differences of sensa and to affirm their identity among themselves and consequently with the object. We can only say that a sensum which *looks* larger than the other *is not larger*, is of identical size with it. But we cannot say what particular size the two sensa really have, which is consequently the size of the object. The theory leaves us quite ignorant of the size and other qualities of the object, while it was designed to make the knowledge of the object through sensa possible. It gives us only the *bare identity* of sensa with the object and nothing more. Something has undoubtedly been won, but it is not much. The unconscious separation of sensa from the object has to be given up, and the distinction of appearance and reality is to be introduced as referring not to the *differences and identity* of sensa, but into *sensa* themselves *as revealing the nature of the object*. It is the object that *is* identical with itself and only *looks* different. It may with truth be urged in favour of Moore's theory that this is what it means. For Moore *identifies* sensa with (a part of) the object. When therefore he says "*sensa* only look different but are not different," he is saying that (the part of) the *object* looks different, but is not different. This is, it must be admitted, his theory *in intention*. But it is not this yet in expression. A further step has to be taken to make the implicit explicit. The question suggested above, viz.: How far do sensa reveal the nature of the object? has to be raised and answered, before Moore can come to the explicit recognition of what is implicit in his theory, and complete his realism and bring it into harmony with the natural view of man. Sensa are the looks, the appearances of the object to us. Some of them are therefore appearance and others real. Moore has therefore to go further. He seems to do so in subsequent papers, which do not directly bear on the question, and his expressions consequently can be taken only as *obiter dicta*.

Criticizing Scott's paper on "The Concrete Universal" (*A.* April, 1920), Moore raises the question whether one sensum of an object contains other sensa of it in itself. His answer is: In no case. The circular *appearance* of a hoop does not contain its other circular or elliptical appearances seen from other distances (*ibid.* pp. 134, 135); nor is it identical with its circular appearance of the same size seen at another moment (p. 136); but a thing, *e.g.* a circular *area*, does contain many other circular and elliptical *areas* in it. In this distinction it is clear that the reference of sensum to the percipient has come to the fore. However it be, it brings out the fact that the *differences* of sensa are no more mere appearances for Moore. If the differences were mere appearances, the sensa could not only contain other differing sensa but be identical with them. The paper so far indicates an advance on the doctrine in "Some Judgments of Perception." It is now realized that the various appearances of the object, in the sense in which they are its sensa, are *really* different; they do not only *look* different as was held before, and consequently the distinction of appearance and reality cannot be thrust into perception itself as an ultimate fact, but has to be referred to its immediate objects, viz. to sensa. It has to be introduced *into sensa themselves in reference to the thing*, of which they are appearances. It has to be held that either some of them are *mere* appearance, or at least they do not all reveal the thing adequately. Hence it is that though Moore, like Alexander, shows an inclination to allow them all to be appearances of the thing and contained in it—because this is consonant with the reality of sensa, he feels "surprised that one could be certain about it" (p. 137). His surprise is due to the fact that with the introduction of the distinction of appearance and reality into sensa themselves, the conflict of sensa has again come into existence, and they cannot *all* be held real.

In the next paper on "The Character of the Cognitive Act[1]" (*A.* April, 1921) there is a remark which at first seems

[1] This paper is a criticism of Laird's paper. Laird holds Moore's old distinction between act and object of perception and differs from Moore in holding

to have no meaning unless understood in the sense that some sensa are mere appearance and not real (see *ibid.* p. 136). But it can also be interpreted in the sense of the "Some Judgments of Perception"; and may consequently be passed over.

In a paper entitled "Are Characteristics of Particular Things Universal or Particular" (*A.* July, 1923), which takes Stout's position in his "Herz Lecture" (*Pro. Br. Ac.* x) as its thesis, Moore says that a concrete thing may or may not "*really*" have the colour "which it *presents to me.*" If such modes of expression can be taken seriously, they have but one meaning, viz. that some presentations, appearances, sensa of objects are true and others not, some are real and others mere appearance; that the distinction of appearance and reality refers to sensa as indicatory of the nature of the object.

These are probably indications of a further stage in Moore's thought, and of the direction in which it seems to be moving.

that each act has a peculiar "content." Moore maintains that the act of cognition *is* different from the sensum; and that each act of cognition *is* different from every other. But not in the way Laird holds, which he *wholly* repudiates (*ibid.* p. 139). Cognizing is an event which consists in holding of a relation between a sense-datum and a universal (character). Hence it is distinct from the datum (pp. 135, 136, 137, 138, 139). Both the datum and the universal are its objects and constitutive of it. Consequently, each cognizing is qualitatively different from every other (pp. 139–40).

Now it should be marked that *this doctrine, true or false, has no bearing whatsoever on realism.* It looks like making cognition something which comprehends both the sensum and the universal in the relation which it is, and sounds very much like some species of objective idealism. But it is nothing of the sort. Cognizing is an event, a temporary fact, of holding or affirming a relation between the two elements. It is not said that the sensum exists only in this relation, or only so long as this relation is affirmed. On the contrary, it is implied that it exists without this relation (p. 135). The doctrine is therefore not a denial of realism, but if anything a denial of mind, reducing mind to an act, a temporary event, without ascribing consciousness to it (cf. p. 139). Moore even goes so far with William James as to imply that "the present thought is the only thinker" and that there is no "I."

Moore is clearly under the influence of Russell's *Analysis of Mind*, published in January, 1921, and seems to have changed his view of mind considerably, as Laird gathers from this paper (cf. *M.* 1923, pp. 87–8). But he omitted this paper from his *Philosophical Studies* which he published a year later. This may be due to a subsequent change of view on the point, or to the fact that this paper forms part of a symposium and could not be separated from it; or it may mean that Moore does not hold the change in his view of mind to affect his realistic position.

He has, in any case, to modify the doctrine of appearance and reality offered in "Some Judgments of Perception" and to bring it nearer to the doctrine man instinctively holds. There is an advantage in his doctrine which the ordinary doctrine does not possess. He can hold the unmitigated reality of all sensa side by side with the reality of objects; because all sensa *are* identical and therefore do not conflict with each other and the object. They can *all* be real; their difference is only apparent. But, as indicated above, the price one has to pay for allowing such reality to sensa is great; it is, in fact, the knowledge of the object itself that is endangered. One has to decide if it is not too great. The unqualified reality of all sensa conflicts with the *reality* of the object because it makes the *knowledge* of the object impossible. One has got to decide definitely in favour of one or the other. The choice consequently lies not, as Moore so often implies, between Russell and realism (see *S.S.* pp. 190–1, and *J.P.* pp. 250–1), but between the new realism of the Americans and the original realism of man. The latter instinctively takes object as *the* real, and subordinates the reality of sensa to it. What he perceives he takes to be real as the first dictum of his consciousness. The claims of the object and the sensum are as yet undifferentiated. He changes his position and finds that the sensum (referred to the same point) has changed. Now the two have got differentiated. His intuitive judgment is that the object remains, *its* appearance has changed—*it looks* different. All the essential positions of realism are contained in this judgment—the full reality of the object, the defective reality of sensa, the distinction of appearance and reality in them, and their reality only as in the object. It is true that for the reflective mind the difficulty of the decision is great. For the evidence for the existence of the object and of sensa is the same, viz. sense-apprehension. But the way out is not quite blocked. The same evidence shows that the sensum is a momentary existence and the object a permanent one; and, moreover, the existence of the object can explain the existence and variations of the sensum. It is on these grounds that man takes his decision instinctively. The reflective mind

has to take the same decision reflectively and to accept the solution[1].

[1] "A Defence of Common Sense" (1925), in the "Second Series" of *Contemporary British Philosophy*, gives Moore's latest views. It is an advance on "Some Judgments of Perception" in so far as it clearly brings out the primary reality of objects and the secondary reality of sensa for Moore's thought. Further it indicates Moore's dissatisfaction with the solution he had offered regarding the conflict of sensa in "Some Judgments of Perception."

CONCLUSION

The Introduction attempted to put the case of realism abstractly. That external objects exist independently of us, and we see and touch *them*; that they have form, size, volume, etc., as well as colours, smell, taste, etc.; that we apprehend them and their qualities directly by means of our senses; that in all perception we have reality before us; that what we *clearly and distinctly* perceive is real; that senses are avenues of knowledge like thought; that the error of sense like the error of thought is to be corrected by the apprehension of *normal* faculties; that perception is not passion but *action*; that it is not the object that comes to the subject and affects it, but it is the subject that as it were goes out to the object and holds it; that perception is not after object or event, but the subject is *co-present* with its object;—are the clearest dictates of the unsophisticated human consciousness—and only if they are valid is community in knowledge and life possible. A critical survey of the origin and development of realism as made in the preceding pages seems to show that this is the view which is progressively coming to consciousness in the history of philosophy. Indeed philosophy has to take such deep-rooted convictions of man as facts. It has to formulate them in the language of thought, to analyze them and to reconstruct them, and to justify them and to find a place for them in the system of reality. It goes astray when it questions their validity.

Realism is no metaphysics. It is a theory of knowledge applied to the problem of the external world. The only metaphysics to which it is opposed is subjective idealism. However, all theory of knowledge assumes a certain amount of metaphysics. It assumes that reality is such as can be grasped by our faculties of knowledge. This is in truth the fundamental postulate of all inquiry. It is admitted on all hands for thought. But man believes it to hold also for sense. Indeed, apprehension by sense is the only avenue to and the

highest standard of the knowledge of the particular to his mind; so much so that he extends the language of sense to indicate his apprehension and certainty even of universal truths.

The chief difficulty in the way of realism is raised by the causal notion of perception or the physiological explanation of sensa, originating as it does in their relativity. However, not only this difficulty, but in fact all anti-realistic views, arise out of conscious or unconscious metaphysical doctrines, and are essentially reducible to the conception of reality as substance-mode, and the consequent inability to grasp the self-transcendence of the subject in knowledge. When thought overcomes this category, and in reality becomes realistic, as in Hegel, it is the religious motives that confuse its gaze and make it subjectivistic.

Chapter I indicated the origin of realism, Chapter II its beginnings and Chapter III traced its concrete development as it has taken place in the history of philosophy. The first era of modern philosophy, Descartes, Locke, Reid and Hamilton, is governed by the category of substance-mode, and remains representationistic. It does not go beyond maintaining the independence of the object. The second era overcomes the category of substance-mode, and lays the whole emphasis on the self-transcendence of the subject and the directness of perception. However, its first attempts too do not succeed. Schuppe, Mach and Avenarius fail to make the object independent; and Meinong, Stout, and the "Critical-realists" fail to combine the independence of the object with the directness of perception. Like Reid they remained representationists, because they kept object and sensum separate. All these attempts were realistic but not realism. We came to realism in the third chapter—to doctrines which combine the directness of perception with the reality of objects. The main theses of realism were thereby secured, but they were yet to be harmonized. The development, properly speaking, of realism consists in the process of attaining to inner harmony. The conflict was between the claims of objects and the claims of sensa, between reality and appearances,

between the moment of unity and the moment of multiplicity, between the element of thought and the element of sense. The problem to be solved was the relation of object to sensum. Cook Wilson, Prichard and Joseph took the side of the object and tended to deny all reality to the sensum—thereby they bordered on representationism and Joseph ended by asserting the mere existence of an x. Alexander, Holt and Russell sided with the sensum and tended to eliminate the unity of the object;—Russell ended by ascribing reality to merely passing and private sensa, a position indistinguishable from subjective idealism for the theory of knowledge. The former group came to say that the real does not appear; the latter that only appearance is real. But the real must appear if it is to be known and perceived, and appearance must be the appearance of a real if it is to give knowledge of reality. Both sides had to be combined; the reality both of object and sensum had to be reconciled. The desired synthesis we saw working itself out, slowly and with great travail, in Moore. Realism, as it began with Moore in England, seems also to end in him. However, as indicated, it has not yet worked its course out even in Moore.

But it can be asserted with some confidence that realism will work itself out; that this deep-rooted conviction of man will find its way to complete philosophic justification—and the Introduction aspires to contribute to it. The interest which is being exhibited for it in all schools of philosophy is a guarantee for that. The age is full of realism and the realistic spirit. American thought, inspired by William James, is deserting subjectivism and becoming neo-realistic or critical-realistic. Idealism in England is calling upon Hegel to prove that it has always been realistic. Empiricism has left the camp of Mill and Spencer, and in Whitehead and Russell is fighting on the side of realism. In Scotland, the land of realism, Laurie, deep in Hegelian thought, has carried out the task set to philosophy by Reid and preaches a really natural realism[1]. In Germany Kant, who was long regarded as the great stronghold of subjectivism, is now being understood as a realist.

[1] See Appendix: Laurie.

Rickert, the chief Kantian, who is carrying Kant's principles further, confesses to realism; and Vaihinger with whom Norman Smith agrees, and Kühnemann interpret the teachings of the "Critique of Pure Reason" realistically. From other sides too, leading thinkers like Bergson in France and Husserl in Germany are speaking the language of realism.

And the age has the authority of all the greatest thinkers of all times on its side. Plato and Aristotle were realists, so were Spinoza[1] and Hegel, and so also was Kant—the five greatest of European philosophers according to H. H. Joachim. It has also the still greater authority of the fundamental facts of human mind on its side. All forms of distinctively human consciousness—the scientific consciousness as well as the artistic consciousness, the ethical consciousness as well as the religious consciousness—assume the truth of realism. The task of the philosophic consciousness now is to acknowledge this deep-rooted conviction of man unreservedly as a fundamental fact and to grasp it.

The progress of realistic thought of which the above is an outline, shows a sort of dialectic movement. In instinctive realism which characterizes pre-modern philosophy, the unity of subject and object was unbroken. It was unconscious and "in itself." Reflection entered. The unity was broken up in the first era of realism—the object went "out of itself"—it had nothing to do with the subject—it was no more *object*. But reflection healed the wound it had inflicted. The object "comes to itself" in the new era—it is again *object*. The unity is restored, but now it is a higher unity—the unity not of instinct but of thought. This movement is of the same nature as that of Hegel's Idea. The analogy may be pressed further. The "coming to itself" of realism is only an implicit harmony of subject and object—of directness of perception and independence of things. In becoming explicit, at first one moment posits itself and negates the other. Then the other moment posits itself and negates the first. The synthesis overcomes the two and maintains them. But the synthesis is not yet harmony, it is not complete. The rights

[1] Spinoza in spite of his representationism.

of the two moments are not yet adjusted. At first the object would assert itself and claim exclusive reality for itself; and then the subject would assert itself and claim exclusive reality for itself—its percepts. A higher synthesis overcomes both the opposed theses and maintains them. Only now has reflection absorbed into itself what instinct had possessed, and the circle is completed. The Hegelian dialectic may be true or may be false as a description of reality, *i.e.* as metaphysics; but it is an apt description of the movement of human thought and is a valuable schema for following the development of ideas;—only one need not expect history to come out of the domain of contingency and follow the necessities of logical connections. The arrangement of this book is primarily logical and only secondarily though also mainly chronological. Probably, it will be found helpful for following the development of realistic thought and make it easier to grasp the truth of realism.

APPENDIX

CASE, HOBHOUSE, HUSSERL, BERGSON, PRICE AND McGILVARY, WILLIAM JAMES, PERRY, MONTAGUE, PITKIN, WHITEHEAD, LAURIE

T. CASE

Case (*Physical Realism*, 1888) continues the Scottish School, as he himself admits (*ibid.* p. 27), with the difference that he takes his stand on science rather than on common sense. The theory which he propounds may be regarded as the working out of the position of Hamilton and Mansel, and is open to the same difficulties. When he distinguishes his realism from that of the Scottish School, he has only Reid in view, without recognizing the identity of his position with Hamilton's and Mansel's (see *ibid.* chap. II). The peculiarity of Case lies in his overwhelming belief in the absolute truth of the theories of mechanical physics, so much so that he puts it on an equal or even higher footing than the dictates of direct experience (see *ibid.* chap. III). He bids philosophy to accept the truth of physical science implicitly and build its structure on that foundation (see *ibid.* chap. I).

Physical science has, says Case, conclusively demonstrated the reality of the imperceptible world of substances (corpuscles, atoms, etc.) in space and time, which not only have imperceptible qualities but act causally. This insensible physical world is the real, while the sensible is only appearance and an effect of it (*ibid.*).

He would therefore start from this insensible world as a given, incontestable fact, and try to find out the conditions out of which the knowledge of it can be developed. In other words, his problem is: What should be the nature of sensa in order to lead to the conclusion that there is such a world?

"I cannot believe," he says, "that this whole fabric of physical objects of science can have been *inferred* without sufficient data of sense. I therefore proceed to inquire what data of sense are required to infer a physical object of science. This is a question of

logic. Now the rules of logic teach me that whatever is inferred is inferred from similar data....Now...physical objects are scientifically inferred from sensible data. It follows that *the sensible objects, which are these data, must also be physical.* The similar can be inferred only from the similar, therefore the physical can be inferred only from the physical."

"This conclusion, however, places me in a dilemma. Science shows me that the object of sense is internal, logic that it is physical...."

"If, then, natural science requires me that the object of sense must be within my nervous system in order to be sensible, and logic, that it must be physical in order to infer physical objects of science in the external world, how can the sensible object be at once physical and internal? I answer, *it is the nervous system itself sensibly affected*[1]. The hot felt is the tactile nerves heated, the white seen is the optic nerves so coloured." (*Ibid.* pp. 23–4.)

"Men in general begin by inferring that physical (internal) objects of sense are produced by physical (external) causes exactly similar." *They are inferred though they are generally said to be perceived.* "Thus from the hot within we infer a fire without." But later science corrects this inference and shows that the external objects resemble the internal only in primary qualities.

Thus according to Case, perception is not direct; it is a causal inference. The objects are real and have only primary qualities. But they are never presented to us. What is presented, namely sensa, are modifications of our nervous system, caused by the objects and representing them to us. This is representationism and identical with the position of Hamilton and Mansel.

Leaving aside the question of the truth of the atomic hypothesis, which is no longer a revealed truth even to the scientists (see Stallo's *Concepts of Modern Physics* and Mach's books), and of the function of science (see Thomson's *Introduction to Science*), as well as his view of the problem of the relation of philosophy to science, which would not bear scrutiny, what is remarkable in Case's argument is that he draws his conclusions from his presuppositions and does not stop to consider these for themselves. That perceiving is inferring, that

[1] Italics are mine.

this inferring is from similar to similar, that the similar from which the inference is made is a sensum which is a nervous system affected by external causes, are positions of very doubtful validity. That perception is not inference is one of the clearest facts of our consciousness; much less is perception an inference from sensa to a transcendental reality. Even if it were an inference, on Case's position it is a causal inference and there is no reason why the cause should be similar to its effect. And if somehow the effect which is directly sensed were similar to its cause, this effect cannot be identified with the modifications of the nervous system. The evidence both of science and of direct consciousness is against Case. According to science, the effects produced in the nervous system are motions of particles and no colour and sound; moreover they are not perceptible. Therefore, what is sensed, viz. the sensum, whatever it may be, is not the nervous system modified by external causes. Further, if it were the nervous system, then colour and sound which are sensed in it would become attributes of physical reality, and this is against science. When we turn to direct consciousness the case becomes still worse. The immense dimensions of the world of space and time which we directly apprehend, and of which the nervous system is evidently a small part, have to be put, on the theory of Case, in this small part; for the directly apprehended world *is* the nervous system modified by external causes. The criticism of Bergson that the physiological explanation of sensation makes the part contain the whole, applies nowhere better.

L. T. HOBHOUSE

Hobhouse is a disciple of Case and Fowler (see *The Theory of Knowledge*, 1895, Preface), and acknowledges his special debt to Case for his chapter on "External Reality" (*ibid.* p. 517). But he seems to have given up the realism of Case and to have come to a position similar to Cook Wilson's.

Like Case, Hobhouse is inspired by science, and protests against the idealism of Green and Bradley that undervalues it. The business of philosophy is to acknowledge the results

of science and to make a synthesis in harmony with them (*ibid.* Preface).

According to Hobhouse, immediate *apprehension* (= knowledge of the immediately present) is an original act of mind, and the starting-point and touchstone of knowledge. What we directly apprehend *is*, is fact. Besides mental states, we apprehend colours, sounds, etc., in space, and in time, distances, volumes, positions, relations between them, unity, multiplicity, etc. There would be no reflective knowledge of these qualities and relations unless we apprehended them directly (*ibid.* p. 59). Apprehension is a simple, original act of mind. How we come to apprehend, *e.g.* the influence of education, etc., has nothing to do with what we apprehend.

Now reflection on the facts apprehended soon leads us to divide them into two classes, internal and external, those facts belonging to each class which are interrelated amongst themselves, but not in the same way with the facts of the other class. Thus feelings, volitions, etc., fall in the first class, and colours, volumes, etc., in the second. *The latter are believed to be independent of the former.* In this way we come to the conception of an external reality.

At first all facts of apprehension are as such on the same footing. It is experience and inference which lead to the distinction of external and internal, and to the belief that those called external are independent of the internal. If there were no universal connections, which we could discover between the external phenomena, there would be no way to discover their independent external existence. But we discover universal relations by means of observation, *e.g.* A and B are cause and effect. Now when we apprehend B occurring, and do not apprehend A occurring, we know that A occurs unobserved, *i.e.* it occurs independently of the internal phenomena of apprehending. And because A and B are of the same nature, therefore we know that B too is an existence independent of the internal phenomena.

Hence according to Hobhouse, *we perceive the external objects themselves* (cf. *ibid.* pp. 532, 535). Representationism, even in Case's form of it, is overcome (p. 30), and all the

essential positions of modern realism are realized: Perception is immediate apprehension of objects, the objects exist independently of mind and have secondary as well as primary qualities.

But when the inquiry is pressed further, Hobhouse shows more affinity to the position of Cook Wilson than to those of Moore and Alexander. He readily gives up the objectivity of secondary qualities and makes them mental, when the subjectivist presses the facts of relativity and illusion (cf. *ibid.* pp. 525–6). It is not the facts of apprehension as such, but only those facts of apprehension which are consistent that are physical and have independent reality. Such are, Hobhouse seems to mean, the primary qualities or the reals of science "where we have reduced the phenomena of senses to an orderly, coherent body of facts" (p. 526). "The isolated judgment frequently breaks down, and so it is not necessarily this apparent colour or this perceived shape that belongs to the object, but the 'corrected' colour, or the 'true' shape as tested by the remaining judgments upon the object" (p. 527). This "corrected" colour would *prima facie* seem to be colour as conceived by science.

EDMUND HUSSERL

In Husserl, realism makes a further advance. Elements that were lacking in Meinong seem to be supplied by Husserl.

Husserl comes from the scientific (mathematical) side. He found that the scientific mind was suffering from an overdose of psychology, and the problem of truth, objectivity and knowledge, in other words, logic, was through and through hampered by the psychological way of thinking. As a necessary consequence, all knowledge and truth was conceived as *relative* to *our* faculties, and consequently subjective. He therefore undertakes to raise a protest against this "psychologism" and to put logic and the theory of knowledge on a sounder footing.

The first volume of the *Logische Untersuchungen* (1900), called the "Prolegomena zur reinen Logik," shows the futility

of psychologism in logic, and the second volume undertakes to investigate important problems of logic itself.

Husserl affirms the objective reality of the objects of thought with such force, that some of his critics found occasion to accuse him of the Platonic realism of ideas, which he openly rejects in his *Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie* (1913), § 22. The objects of thought *are*. They are not the products of our thinking faculty or its acts. They are independent of it. Nor are they merely for *us*. For, that would mean the relativity of truth. But the sense in which they are, in which they exist, is not the same in which individual objects exist. Their mode of existence is peculiar to themselves. They are universals, and cannot exist as the individuals do in definite times and spaces.

But what about the world of individual concrete things? Do they also exist, what is their nature, and how do we know them?

Husserl's answer is: Yes, they exist. We know them through perception, as we know universals through thought—both thought and perception are ways in which we grasp our object with intuitive certainty. For, intuition is the highest principle of all knowledge. It is to be in direct contact with the object, to have it in your grasp, which alone is the evidence of all truth. With this is also by implication answered the question about the nature of things. They are as we see them, temporal, spatial, red, blue, etc., hard, soft, etc.

But the subjectivist would urge that the supposed concrete transcendent object appears now so and now otherwise. Which of the appearances is the object and which not? How are we to decide? Is it both, and are we to affirm conflicting qualities of it? Or should not we rather say, it is neither? that all is mere appearance, appearance in our mind, subjective, with nothing corresponding to it in reality? The answer to this objection on Husserl's ground is this. Given a transcendent object in relation to a subject, it is a necessity of thought that it must appear to the subject different from various points of view, and these appearances must be infinite (cf. *Ideen*, § 42). It cannot be otherwise. So the

relativistic objection is not an objection which overthrows the truth of perception; it rather describes the necessary nature of all perception. But does not physical science also hold that these appearances are subjective, that they are effects in our mind of an objective reality which is fundamentally different from them?

Husserl's answer is an emphatic No, and an illuminating discourse on the nature of all transcendent reality and on the meaning of scientific investigation (cf. *Ideen*, §§ 48, 52). The transcendent real with which we are here concerned is not one which has nothing to do with experience. If it were such, one could say that a fundamentally different transcendent is logically possible because it contains no contradiction. But as soon as we try to grasp it, and to prove its existence, we find that it must, of necessity, be perceivable by some mind or other and therefore can conceivably be brought into relation with our experience. In other words, it is the essential nature of a transcendent object to be a possible object of perception. The object that science is said to postulate as behind experience, must therefore be a possible object of sense.

All the same, the subjectivist may point out that the appearances remain subjective. They are the effects which these objects produce in the mind.

Husserl has therefore to show that science postulates no such object as is attributed to it. It is with the actual objects of experience that it is concerned. It is *these* it measures and weighs and calculates. It is *their* relations it seeks to determine. The new element which it brings forward (adds to mere perception) is the *thought-determinations* of these very same objects. And these thought-determinations are as little real concrete objects as any other universals. To make them transcendent entities like Platonic ideas, of which the phenomena are effects, is absurd (*Ideen*, § 52).

Thus both the directness of perception and the independent existence and sensible nature of objects seem to be maintained by Husserl. But what does he understand by phenomenon, by appearance, and how does he conceive its

relation to the transcendent object? Does the object itself appear before us in perception and show us one of its sides or aspects? Is it the content of my presentation? Is it the objective part in the subjective act of see*ing* of which the whole is called perception?

By no means, is Husserl's firm reply. The colour actually apprehended and the act of apprehending form a whole, namely sensation. The whole of it is subjective. It is Erlebnis (= experience), and cannot exist apart from consciousness, of which it is a part. The appearances are these sensations, and exist only in mind. The colour and form, etc., of the object may be like the sensation-colour and sensation-form. But neither the object nor its qualities are the contents of sensation, of appearance. The object and its qualities are transcendent. They can never be Erlebnis (cf. *Prolegomena, Beilage*, p. 243, note; and *Ideen*, §§ 41 ff.).

The only reason which Husserl seems to give for this position is that the object is one and self-identical, while the appearances are numerous and various. So also each of its qualities (cf. *Ideen*, § 41). This is the same reason on which subjectivism builds and which was rejected above on Husserl's own principle. But Husserl does not argue the point at length. He does not consider the contention that the object must appear in all the appearances to give them the character through which they can be referred to the same object; and that if the object is put outside the appearances, there is no way to get to it again. Husserl seems to make the phenomenon subjective with an intuitive certainty, which admits of no question, a certainty with which the psychological idealism has ever made it so. In this sense the accusation that Husserl has at the end fallen into the psychologism he started by whole-heartedly rejecting, does not seem to be beside the mark. It is Descartes' and Locke's ideas and Hume's impressions, which he expressly claims his appearances to be; and like Descartes, he admits that the world of perception may only be a hallucination or a dream, and there may be no objective reality whatsoever (cf. *Ideen*, § 62).

HENRI BERGSON

In *Matter and Memory* (1896), Bergson expressly takes up the problem of perception. He rejects the physiological explanation of sensation as impossible. By means of it we remain confined to the motions of molecules of the brain-substance. Brain is an object amongst other objects—a part of the world; it cannot contain the whole; and this is what the physiological explanation tacitly asserts.

However Bergson does not deny the apparently necessary connection of the cortical substance and perception. It is a fact. *His problem therefore is to explain the fact of correspondence between processes in the brain and perception.*

He starts from determining the function of the nervous system. That is the reception of stimuli and the transmission of them into movements. This sensibility and activity is solely in reference to the weal and woe of the individual organism; *i.e.* it serves a practical end. Brain too is a similar instrument, only more complicated. Its function too is the reception of stimuli and the transmission of them into movements, and is directed to a practical end.

The correspondence of brain-activity and perception leads to but one conclusion, namely that *perception* is a practical activity of the mind, its function is *practical and not theoretical.*

The movement mediated through brain is not simple and reflex. The complexity of the brain makes it possible to transmit or hinder the stimulus through manifold possible movements. It makes choice possible. The same is the function of perception.

When the nervous system or the brain is damaged, no stimulus is received. The organism is not called upon to execute a movement. Hence there is no occasion to exert choice. Consequently there need be no perception.

Brain-activity and perception correspond, because they are functions of the same cause, viz. the freedom of our will.

This argument, the correlation of the activity and function of the brain with perception, in fact makes consciousness of

the object (= perception), unnecessary. There is nothing left for perception—the brain does everything already and would do it without perception. William Brown, in the *Proceedings of the Aristotelian Society* (1911–12), pp. 161–2, points this out and calls Bergson's view mechanical.

However Bergson's conception of the relation of perception and object is that of modern realism. The object is a self-existent reality independent of the percipient; and it is so as it is apprehended by our senses, *i.e.* is "image." Perception is an ultimate fact, not further analyzable.

Yet Bergson attempts to explain the process of perception (*ibid.* pp. 26–9). The explanation is enveloped in metaphorical language and involved in difficulties. The process is described as one of "reflection." A ray of light enters the brain through afferent nerves. It is thrown back (by the mind) on the object and held there in suspense. This is perception.

If this is perception, then perception is not an ultimate fact. It is explicable, and explicable on the same or similar lines as the physiological psychologist attempted. And Bergson's is open essentially to the same objections as the latter's explanation. Knowledge of objects, perception, is as much a mystery as before; and perception is an aftermath of physical happenings. It is *subsequent* to its proper objects; it is not of the present, but of the past.

So we are not much better off with Bergson than with the physiological psychologist. The reason seems to be that in both cases the start is taken from the side of the object and not from that of the subject.

However, Bergson goes still further in his objectivization of perception. In opposition to the subjectivist, he would put perception "there in the object," which reminds one of similar new realistic assertions (cf. Holt). But evidently this is an overstatement or a confusion. Perception may be held to be as objective as possible; but it cannot change into its own object, into a percept. The confusion of act and object seems to be quite apparent here.

It is by putting perception in objects that Bergson can

accuse the physiological psychologist of putting the whole into the part, of making brain "contain" the world within it. The accusation is apparently misleading, and based on the confusion of perception and percept. The physiological psychologist may be accused of putting perception in the brain, if he is a gross materialist; or of putting the whole world into the mind, if a subjectivist; but not of putting the world into the brain, provided we except some exaggerated statements like those of Schopenhauer and attend to what he really means. And, in fact, it is Bergson himself who uses the term perception for the physiological processes in the brain (cf. p. 24), and thus speaks in the language of the materialist.

Yet the objectivity of perception is not at all reconcilable with the metaphysical position of Bergson, according to which space and the spatial are not real, but a construction, a fiction of the understanding, which is of practical use, but of no theoretical value. They are illusion (see his *Time and Free Will*).

It accords with this metaphysical position to explain perception, like nerve and brain activity, as a practical function. To determine the place of perception in the order of the universe, is an element of value in Bergson's theory. The fact and validity of knowledge and perception can only be explained by such reference. All theories of knowledge imply such a metaphysics, but few apply it in the case of perception.

However, it is not a new theory to make perception practical. Descartes, whose problem Bergson is solving and whose dualism in essentials he accepts, ascribed to it the same function. So also did many others. In fact, very few philosophers have ascribed theoretical value to perception, besides empiricists, only Kant; and Bergson is not right in complaining that all have done so before him.

But is perception a *purely* practical activity? The conclusion that it is, is drawn indirectly: because the brain is a practical organ, therefore perception too is a practical function. This conclusion can be drawn equally well about all aspects of the spiritual life. They are all intimately connected with the body and with perception.

That perception is the only medium through which the *present* can be known, Bergson himself admits. He further admits that perception is (reveals to us) a part, of which the world, the objective world of science, is the whole. In view of these admissions, it is hard to see how a purely practical rôle could be ascribed to perception. The ground of the knowledge of reality is, apprehending it face to face, having it present, and the whole of reality is a whole composed of parts. Should not perception then be held as the only channel of true theoretical knowledge of objective reality?

The premisses on which Bergson's explanation rests hold equally well of animals. To animal perception, one could allow a purely practical rôle. But a new principle has entered on the scene, namely reason, which has transformed all that was handed down to us from animal life. In fact, one cannot correctly speak of perception as a function of freedom, as Bergson does, without taking the new principle into account. Reason, one of whose functions admittedly is knowledge and theory, puts perception into its service, and makes it yield theoretical results. Bergson's "pure perception" serves this very same end. But perception does not attain to theoretical worth only *after* reason has appeared on the stage. It must have that worth even *before*, as preparatory to the stage of reason. Otherwise reason could not make perception have it, as if by compulsion. And it is evident that perception even if practical must yield *knowledge*, of howsoever elementary kind that knowledge be, if it is to serve its end. Practice presupposes knowledge, of means and of ends. Moreover perception is a mode of consciousness, and consciousness includes knowledge in its essence.

H. H. PRICE and E. B. McGILVARY

The view which Price develops in *Mind*, January, 1924, is essentially that of the school of Cook Wilson. Only he yearns to bring secondary qualities nearer to the real qualities of things (see p. 38).

The novelty of his view consists in the doctrine of "apparent being" (pp. 33–6). He seems to hold that although

the mind and body of the percipient contribute to the nature of appearances, the appearances do exist in physical space like the real objects; and that the conflicting appearances can be in the same space, though two physical things cannot be (cf. above, under Holt).

The neo-realistic motives in his doctrine are evident, specially the influence of Russell. But Russell placed the conflicting appearances in "private" spaces and thus avoided the unthinkable, which Price does not.

It is true that appearance is a kind of being, simply because it has being, because it is. But all being is not being in physical space. To say "a thing *looks* so" means precisely that it is *not* so, that the apparent quality is not *in space*, though it seems to be there. Appearance is, like spatial reality, a kind of being *sui generis*, and cannot be reduced to it.

The position of McGilvary is similar to Price's. "According to him, one definite set of qualities makes up the 'material world,' and is studied in science, while all the other qualities are equally existent and 'out there,' but are no part of 'the executive order of the world,' and not found there by science. Qualities are to be divided into those which are 'space-monopolizing,' and those which are 'space-occupying.' The former sort he calls 'material qualities'; only one of each genus of these can exist at a given point. But an infinite number of the latter, which he calls 'immaterial qualities,' may exist together" (*C.-R.* p. 15).

WILLIAM JAMES'S REALISM

By his doctrine of radical empiricism, which he started to expound in print in September, 1904, James helped to give an impetus and a direction to neo-realism in America. The denial of the mind as subject, the reduction of all reality to a homogeneous objective material called "pure experience" or "neutral stuff," the conception of knowledge as a relation between objects—doctrines for which he is profoundly indebted to Mach, and further the fight against intellectualism and the doctrine of internal relations, are elements of decisive importance for the neo-realist. But neither James nor

Mach gives him *realism*. Perry indeed holds Mach's *Analysis of Sensation* to be a "classic of realism," and asserts that James passed from phenomenalism to realism with his doctrine of radical empiricism (cf. *P.T.* p. 365). Both conclusions seem to be mistaken.

Perry seems to base his opinion about James on his paper "Does Consciousness exist?" On the one hand, James denies the existence of the subject, because it is no object of experience, and declares that in his experience what Kant called the "I think, which accompanies all my ideas" is nothing but the "I breathe, which accompanies them," and that it is out of this breath that philosophers have conjured up a spirit. On the other, he makes experience (= objects of experience) the stuff of all reality. No conclusion seems to be more natural than what Perry draws, viz. that James has passed over to realism, indeed to neo-realism. But strange as it may look, the conclusion is wrong. Philosophers are not necessarily consistent. The succeeding essays, "A World of Pure Experience," "The Thing and its Relations," "How two Minds can know one Thing," bear ample testimony to it.

James finds that his doctrine has more "affinity" to "natural realism" than to the subjective idealism of Berkeley and Mill. But his realism of sensa stops short just where the realism of his predecessors Mach, Avenarius and Schuppe did, viz. at the assertion of the possibility or actuality of percepts *common* to several minds, and does not go further and assert their *independence* of mind. A percept may remain the same if *some* minds are removed; but James does not say that it may remain even if *all* minds are removed. Yet he considers the question of the removal of all minds too. In that case, thinks James, the percept, in order to exist, should be "an experience for itself," *i.e.* it must be an entity which *experiences*, is conscious. In other words, only panpsychism can save the *independent* reality of percepts. But this is equivalent to saying that percepts can exist only as actual experiences of a mind (cf. *A World of Pure Experience*, VI–VII).

Again in "The Thing and its Relations" his objection to the doctrine of internal relations is, not that it conflicts with the

independent reality of percepts and with natural realism, but that it makes for a subjectivism of a solipsistic nature and is opposed to realism in so far as realism demands experiences (= percepts) *common* to several minds (cf. Summary). Again the question how "Two Minds can know One Thing" is a hard nut only for this ambiguous "realism." James's answer is beset with the difficulties of his position. "How *my* percept can also be *yours*" he answers as follows: The percept as such is a bit of pure experience. It is neither subjective nor objective. It is a neutral entity, which may turn into a subjective or an objective one according to the context in which it is placed. *Later, when it is remembered, i.e.* is put in a new context, it becomes *my* percept. It is this retrospective appropriation of it which makes it mine. It may similarly be remembered and appropriated by another context, and thus become *your* percept. In this way it can become a *common* percept by becoming equally yours and mine. Now, why this strange account? Because, taken from the side of the object, James could not say with common sense that the percept exists *independently* and can therefore be apprehended by two minds, one after the other, which so secure the *same* experience; for reality consists for James of *experiences*, of percepts as subjective. And, taken from the side of the subject, James could not say that the distinction of "mine" and "yours" does not refer to the percept which is an independent reality, but to the apprehending of it, to the activity of perceiving; because he denies the existence of consciousness. He could not say, as the realist can, that the percept is the same; what makes it my percept, is that I am perceiving it, that "my percept" means simply that there is a common sensum which I am apprehending. In other words it is because James denies both the positions of "natural realism," viz. the independent reality of the object, and the reality of the subject, that he is compelled to give such a strange and unnatural answer to his question.

How it is that he denies the existence of the subject and yet maintains the subjectivity of objects and is not a realist, can be understood not logically but psychologically. He has

thrown in his lot with empiricism. When consciousness, as subject, is considered for itself, as pure *form*, as the transcendental unity presupposed in all experiencing, empiricism demands its elimination, because it is no object of experience and observation. But after this has been done, the empiricist relapses into the natural attitude, the attitude which assumes the form as well as the content of experience. It is in this attitude that the *content* is taken up for consideration. Empiricism now demands that the content should be taken to be what it is "experienced as," viz. as the percept of a mind. It is not substance; it is therefore mind-dependent. This is the psychology of the view of James as also of those whom he is following.

Now the only consistent view which comes out of these two conflicting positions of empiricism is that the world consists of minds which are complexes of percepts, etc., a sort of panpsychism to which James subscribes with Price and Strong, and according to which the universe should be a complex of percepts, which is broken up into smaller complexes called minds. But this view is open to the objections incident to both the conflicting positions. On the one hand it asserts that percepts are not without the mind, which is subjective idealism; and on the other that these minds are complexes of objects (percepts, etc.) and not subjects of these experiences, which is unintelligible.

RALPH BARTON PERRY

William James is believed to have contributed two doctrines to philosophical thought, pragmatism and radical empiricism: in both he is following Mach. Perry combines them with realism. In his metaphysics and theory of mind and knowledge, he follows radical empiricism. In his Wertphilosophie, the theory of truth and error, good and evil, right and wrong, and religion, he professes pragmatism.

In the former, specially in his conception of mind and knowledge, Perry fully agrees with Holt, to whose "Concept of Consciousness" he refers as "the most able statement of the...theory" of mind and knowledge (*P.T.* p. 305, note).

It need not therefore detain us. The latter concerns us only so far as Perry differs in his account of truth and error from Holt and explains them pragmatically.

Now the neo-realistic account of mind and knowledge, in Holt, does not seem to leave any room for error. The action of the nervous system cuts off a section of the objects. Whether this section may be termed mental and therefore "subjective" or not, and whether this section does or does not "coincide with physical and logical lines of cleavage," it is all the same objective. It may be arbitrary, but it is not false. There is no mistake in the elements or the grouping of them. Perry admits this[1]. Yet he hopes to find a place for error in the circumstance that these "manifolds or fictions once instituted...may become stereotyped. This being the case, they may be mistaken for what they are not, and thus give rise to illusion and error" (*ibid.* p. 324). But this would be an intelligible account only on common sense presuppositions. How can these sections get "stereotyped"? what does "getting stereotyped" mean? where do they exist when stereotyped? and how can they be "mistaken" for what they are not and by whom? are questions which must be answered.

Yet, Perry is not ready to go further with the neo-realists and admit the "objectivity of falsehood." He has recourse to pragmatism to explain the nature of truth and falsehood. Truth and falsehood are harmony or discrepancy between thoughts and things; but this harmony and discrepancy are "*practical.*" "Whatever a (an idea) be, whether fact or fiction, it is true only then when the use I make of it is successful; or false, when the plans I form with it, and the explanations I base on it, fail" (*ibid.* p. 327). Clearly then, until I make use of it, it is neither true nor false. Its truth or falsehood does not depend on its agreement or disagreement with reality, but on the accident of my making use of it. But its success would, notwithstanding, depend on the *right or wrong* use I make of it. In other words, it should be in

[1] Though his reference to Nunn would put error in the grouping and make it subjective (cf. Section on Alexander); and that to Holt would put it in the "neutral" world of concepts or the physical world of things and make it objective.

harmony with its place in the constitution of reality. This consideration would seem to show that the ordinary conception of truth is not supplanted by the pragmatic, but is, on the contrary, assumed by it.

Perry further advances a theory of independence in the interests of realism in the volume *New Realism*. As it is "the central thesis of realism" according to all his colleagues (*N.R.* p. 11) and throws light on the presuppositions of their thought, it is worth while to consider it here briefly.

Perry defines independence as non-dependence; and then enumerates all the important cases of independence. An induction of the cases of dependence, discussed by Perry, gives the result that: *Something is dependent on another if the former cannot be without the latter.* A is dependent on B, if A cannot be without B. So formulated, his curious-looking statements, *e.g.* the cause depends on the effect, or the implier depends on the implied, become intelligible. For

(1) If A is the whole and B its part; or

(2) A cause or logical ground, and B effect or consequence; A cannot be without B.

(3) Again if A is the exclusive effect or consequence of B which alone is its cause or ground, A cannot be without B. A is in all these cases dependent on B; and these are all the cases recognized by Perry as of dependence.

Now the first is avowedly the relation of whole-part. But it would appear that the other cases too are cases of whole-part. For the logical relation of *ground-consequence* is, according to traditional logic, a relation of containing and contained, *i.e.* of whole-part. The premisses depend on the conclusion, because the conclusion is their part, is somehow contained in them. But the consequence is said to depend on the ground only in case it is not found contained in any other whole. This is apparently the case of the part depending on the whole. But in reality such cases are cases of the whole depending on the part (cf. *N.R.* p. 107 (3)).

There remains the *cause-effect* relation. Causation *ex nihilo* (= production) is excluded. A does not create or change B.

What kind of necessity then attaches to this relation? The relation is functional (mathematical, cf. Mach); *i.e.* the necessity is of ground-consequence, which is as we saw reducible to whole-part. Or it is the relation of whole-part itself. "*A* followed by *B*" is the whole empirical fact, of which *B* is the part; it therefore depends on *B*. But the examples which Perry gives tend rather to show that the relation is of whole-whole or of identity. For, as cause, he gives the assemblage of conditions which constitute the effect, or are its descriptive definition. Taken loosely, this will be the relation of part-whole, which is reducible to whole-part (cf. *op. cit.*).

Thus in reality, it is the whole-part relation alone which is recognized as the case of dependence—the whole depending on its parts. This is in fundamental agreement with the neo-realistic ontology: All simples are independent realities, only the complexes which they constitute are dependent—dependent on the simples which are their parts. Overwhelming importance is attached by neo-realists to the "method of analysis" as the means of discovering the real constitution of reality; and its recognition of but one relation, viz. whole and part, as the object of analysis bears ample testimony to this (see *N.R.*, Spaulding's "Defence of Analysis"). Holt admits this in so many words (see *C.C.* p. 104); only there is for him also one more sense of independence, viz. the self-identity of a term, and that settles for him the independent being of all objects of consciousness (*ibid.* pp. 104–6).

But these simples are neither atoms (material substances) nor monads (spiritual substances). Matter on one side and soul on the other, as substances, have been eliminated by positivistic thought, according to the teaching of Mach and James. These simples are empirical "sensory" qualities or "impressions" like colour, roundness, etc.; and logical "indefinables" or "categories" such as relation, identity, difference, etc. They exist by themselves, and are fully independent. Colour can therefore exist without extension, extension without volume, volume without something of which it is volume; relation without terms, identity without

difference, and both without the something which is identical or different. For, "All simple entities are mutually independent," and "independent of the complexes of which they are members" (*N.R.* pp. 118–19). But this does not sound intelligible. There are therefore also some other modes of dependence besides that of a whole on its parts. Qualities depend on other qualities, and on things; universals on particulars. The category of substance-attribute cannot therefore be got rid of, be the substance material or mental.

It may perhaps be said that "qualities" are for neo-realism characters which are themselves particular existents and need no substance to inhere in, and are not universals which require the particulars in order to exist, though the last statement is not true at least of Holt. However this does not help. For, firstly, the universals too are held to be self-existent; and secondly, certain particular characters, *e.g.* "the redness of this rose," are inconceivable without other characters and the rose. Even if the rose be taken to be only a complex of its characters, the individual characters depend on the whole. We have then a genuinely new case of dependence, viz. of part-whole, which Perry denies.

It is moreover worth while to remark that the reduction of dependence to whole-part, however congruent it be with the neo-realistic ontology, does not harmonize with its epistemology. For, it makes the world dependent on mind or knowledge, because mind or knowledge is, according to neo-realism, a section of the objects—a part, of which the whole is reality.

W. P. MONTAGUE

Montague starts with the logistic universe of being, of the possible "objects of thought" comprised of terms and propositions, true and false, which is *eo ipso* "subsistent." Within it is placed a smaller "subsistent" domain, which is his positivistically conceived "existent" world. The existent is real, the rest unreal. The existent is through and through physical and perceptual. In it there is an organism over against the rest of reality. Apparently there is no room in it

for consciousness and knowledge and for truth and error. His problem is to find room for them.

He conceives knowledge physiologically—it is somehow the relation of interaction between the organism and the physical reality (cf. "Program, III," *N.R.* p. 475). Now, if it were the effect of the latter, then it would be a brain-state, and would be cut off from its object, hence representationism and subjectivism. But as effect the brain-state has a reference to its cause. Consciousness, knowledge, may therefore be identified with this causal reference. It thus reaches the object, and this agrees with realism. Knowledge would be true, if the reference is correct; false, if incorrect; true, if the object to which the brain-state refers is existent, is real; false, if it is merely subsistent, is unreal.

Consequently the difficulties incident to his theory are partly due to the positivistic conception of reality, partly to the physiological explanation of knowledge, and partly to the special contribution which Montague makes to the neo-realistic inquiry, viz. to his identification of consciousness with causal reference.

Now, what is his theory of consciousness and knowledge?

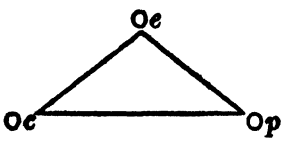
The world of pure fact is, according to Montague, constituted of three fundamental elements, space, time and quality. Most of the fundamental concepts can be described as various combinations of these three, *e.g.* event; qualitative identity, similarity, species, class; numerical identity, inherence, "isness"; duration, rest; succession; change; extended thing; plurality of things, distance, motion; accident; substance (*N.R.* pp. 263–4). But there are two very important concepts which cannot be described in terms of space-time-quality, viz. causality and consciousness. Montague does not give his reasons for this assertion, which is rather opposed to his positivistic and neo-realistic metaphysics. Yet the reasons are not far to seek. As Kant maintains, causality is an *a priori* concept, because it is not a character of things that can be *perceived*. Similarly, consciousness defies *observation*; as Moore said, it is diaphanous. Montague therefore cannot find them in his real world, which is the world of objects of per-

ception. Causality and consciousness therefore agree in being imperceptible and not real in the sense in which objects are.

Again in knowledge, the knower transcends itself and, so to speak, reaches the object. So also in causality, the effect transcends itself and reaches the cause. This self-transcendence is the essential feature of both consciousness and causality.

Consciousness and causality therefore agree in their essence, and also in their difference from the real world. Hence they may be identified. Only causality has to be conceived as potentiality, as implication, if consciousness is to be identified with it. Then the reality of these two entities will not conflict with the positivistic conception of reality as consisting only of space-time-quality. This is the meaning of "the potentiality of the physical is the actuality of the psychical," of which Montague is perfectly convinced.

Now we can describe knowledge thus: The object sends currents of energy to the brain and causes a brain-state. This brain-state has the object as its causal implication. The brain-state knows the object. But evidently there can be more than one cause or effect of the same brain-state. Which of them would be its implicate, its object? "The cerebral state would be conscious of such objects as it implies, or of which it is the potentiality. What will these implicates or objects be? My answer is," continues Montague, "that *they will consist of the events which would most simply have caused the cerebral state and of the events which the latter would produce as effects if it acted alone and uninterfered with*" (*N.R.* p. 287). But the actual cause may be other than the event which would most simply have caused the cerebral state, etc. It would then be other than the implicate, than the object of which the cerebral state is conscious. This would be the case of false knowledge, of *error*, illusion and hallucination. But when the implicate, the object coalesces with the actual cause, we have true knowledge, *truth*. This yields the "epistemological triangle": *Oe* is the real object or cause, *Oc* the cerebral state, *Op* its implicate, the object perceived. When *Op* coalesces with *Oe*, we have truth; when not, falsehood.



The actual process of perception or knowledge would be this: The object sends out currents of energy to the brain, through physical and physiological media. If its character is not distorted by the media or, if distorted, is corrected by the brain, the perception is of the real, is true; otherwise false. Of true knowledge there are two cases. The first is the case of "immediate or sensory" knowledge. It happens chiefly when the stimulus is intra-organic—then knowledge is feeling; or when it comes from a brain-state—then knowledge is self-consciousness or self-knowledge. The second is the case of "mediate or inferred" knowledge. Corresponding to true knowledge there are two cases of false knowledge: If the distortion is due to physical or peripheral media, it is a case of "immediate or sensory error," or illusion; when due to intra-organic causes, it is hallucination. But if the distortion is due to brain-habits, to "apperceptional masses," it is "mediate error or error of inference" (*N.R.* p. 292)[1].

Now as there can hardly be a case in which currents of energy sent out by the object are not modified by the intervening media or by the brain itself, Montague has to maintain that "*all or almost all of our cognitions are partly true and partly false*" (*N.R.* p. 297). Again, the *secondary qualities become positively doubtful for him*, simply because the real causes of the brain-state are currents of energy, but what is perceived in the case of secondary qualities is not these currents of energy. Montague would rather leave it an open question whether the secondary qualities are or are not objective. Yet he proposes a method which is "the only way" to decide it, viz. by means of observing and comparing the "primary energies" of the object with the consequent "primary energies" in the brain, to ascertain whether they are the same or not (*N.R.* p. 299).

But there is an obvious objection to this account of know-

[1] It is important to note that in all these cases the object perceived is in the "subsistent" universe, and is as such objective. Further, it must also be "existent," because it is, on the theory, the simplest cause of the brain-state, though not its actual cause. As the possible, indeed the simplest and most natural cause of the brain-state, it must be a part of the real world. For how else could it be a cause at all? This agrees with the fundamental principle of neo-realism, though Montague's account of illusion and error looks more "subjectivistic."

ledge, which Montague anticipates. The epistemological triangle explains the possibility of error; but it does not explain that of truth. In the case of truth the real cause is apprehended, the real object which is the cause of the brain-state. But it is not, *by itself*, its cause. How is this difficulty to be overcome and the theory made to agree with the fact? Montague again has recourse to physical modes of thought. The currents of energy from some partial causes (the physical and physiological media, etc.) neutralize each other and strengthen those from some others (the object of perception), which thus become the object of attention, the only object of apprehension. All the same, the object is not the only cause of the brain-state, and the objection remains.

On Montague's theory self-knowledge is knowledge of the preceding brain-states by the subsequent brain-state; simply because it is brain which knows, which is the subject, the self (cf. *N.R.* p. 290). The point is not worked out. Otherwise it could perhaps be urged that because self-consciousness is consciousness of consciousness or awareness of awareness, and because consciousness is identical with the causal implication of a brain-state, therefore self-consciousness should be the awareness of the causal implication, or rather it should be identical with the implication of this implication. What this would be is not quite clear. Perhaps, it would be the causal implication of the object, and as consciousness resides in the brain, self-consciousness would reside in the object, and would be the awareness of the originating cause of the object.

That consciousness, the subject, the mind, is the brain or a brain-state, and consequently that self-consciousness is awareness of a brain-state, is part of the positivistic metaphysics which neo-realism has made its own under the influence of Mach and James. For, if only the object, the perceptible, the space-time-quality complex, is real, then the knower too, in order to be real, must be a kind of object; and if so, what can it be other than the brain or a brain-state? But this is nothing short of materialism, *i.e.* it is making knowledge an action of the brain, a movement of particles, of which Montague accuses the behaviourists (*N.R.* p. 272). The

subject simply cannot be identified with any object. To deny its existence altogether, as James does, has more sense than to identify it with one of its objects. It may further be added that if it were a brain-state, if consequently self-consciousness is an awareness of a brain-state, one must deny the existence of self-consciousness, because we are never aware of our brain-states.

These are difficulties common to the metaphysics of neo-realism. Its alliance with the modes of thought of physical science and its consequent physiological explanation of knowledge involve it, in Montague, in further difficulty concerning the validity of any knowledge. As we saw, Montague is compelled to hold that "all or almost all of our cognitions are... partly false." By saying "almost all" he probably aims at saving the first kind of knowledge, viz. feeling and self-knowledge (see above). But this is arbitrary. The currents of energy coming from intra-organic centres or from other brain-states, must necessarily be modified on the way and by the brain-state which is cognizant of them, because transmission and reception involve activity. Not only the objectivity of knowledge in general for which modern realism stands, but also the objectivity of secondary qualities, to assert which is its distinctive feature, are impugned as we have seen above; and the method which Montague proposes as "the only way" to ascertain whether they are objective or not, is certainly "the only way" if physiological explanation is the only explanation, and the scientific procedure of observing and comparing the only procedure to decide the question. But the method is beset with the same insurmountable difficulties as the physiological explanation of sensation in general. There is no way to get out of the circle of "my objects" to the "primary energies" which are the real causes of the brain-states, and to compare them with the "primary energies" in the brain-state. Nor can the interfering influence of the brain itself be ever eliminated. The upshot is that the objectivity of secondary qualities is doomed to remain for ever uncertain. They must, however, share the fate of all knowledge and be partly false. But in fact, their fate is worse.

They must be totally false and subjective. Because if the "primary energies" of the object could be compared with the same "primary energies" in the brain, and even if it were found that the brain has not interfered with them, it will be easy to detect that these "primary energies" are totally different from secondary qualities—the real cause is different from the object perceived, simply because the real cause is, *ex hypothesi*, a current of energy, and the secondary qualities are not currents of energy or motions of particles.

Again, it is due to this alliance with physiology that although Montague's definition of true and false knowledge in the ontological part of his essay, as knowledge of the real and knowledge of the unreal, is broad enough to include all kinds of knowledge; when he comes to describe its process, he assimilates it to sense-perception in which there is no room for thought. The objects of thought are universals, concepts and propositions. They are not like physical entities, particulars which would send out currents of energy to the brain. Still less is there room for the knowledge of the unreals. For they are *merely* objects of thought, and are not, like real universals, involved in physical objects. How can they send out currents of energy? According to his own admission they are incapable of causing any effects in the real world (see *N.R.* Appendix, Montague's note on Holt). To say, as Montague might, that they are not objects of true knowledge, does not help. They are objects of knowledge. Moreover, as judged to be unreal, they can very well be objects of true knowledge. On Montague's principle they are entities independent of the knowing process, and can be known in this character of being mere subsistents and unreal. His ontology therefore is in conflict with his physiology of knowledge. The conflict makes itself patent, when the former is seen to maintain the objectivity of the unreals, and the latter their subjectivity.

The fundamental error of Montague's special theory that consciousness, or knowledge, or awareness is identical with causal implication, is that it identifies two *generically* different entities. Causal implication is essentially an object of know-

ledge. We cannot say that knowledge is an object of causal implication. The error is made possible by overlooking the distinction of causal implication *in itself*, and causal implication *for a conscious being*. The effect does not contain the cause bodily in itself. In the effect, the cause is present only as a physical modification of the effect. That is, "in itself," the cause is *outside* the effect. "In itself" the causal implication is the actual state of things produced in the effect by the cause. *It is only "for a conscious being" that the effect implies the cause itself.* Montague takes the physical fact of "causal implication," the causal implication "in itself," to be the spiritual fact of causal implication, the causal implication "for a conscious being." It is this confusion which makes it possible for him to identify consciousness with causal implication without qualms, simply because he has already unconsciously assumed it as part of his notion of causal implication.

It may further be urged that if knowledge is causal implication, then every physical event must be aware of its cause. Montague is ready to admit this and to confess to a sort of panpsychism. But as soon as he makes the further admission that causes are of fundamentally different natures, viz. mechanical, organic and sensory (= conscious), there remains no sense in saying that causal implication as such is consciousness. To identify mind with energy, may be good metaphysics. But mind in this sense is not awareness, it is *unconscious* mind. And the problem is to explain consciousness, awareness, knowledge, which is a *new* quality and cannot be reduced to mere energy.

Another point which Montague anticipates is that if consciousness is causal implication, it must be awareness of all the causes of the brain-state, which in fact it is not. Logically there is no way out. The attempt which Montague makes to meet the difficulty seems to explain nothing. Whether the currents of energy neutralize each other or not, they do not reduce the number of real causes. This is a difficulty which all causal theories of perception have to meet, and as Meinong points out, there is no way to meet it. In fact one may press

it further, and say that the theory involves omniscience at every moment, because somehow the whole universe is involved in the causation of the brain-state.

WALTER B. PITKIN

For Pitkin, as for his colleagues, the Mach-James metaphysics has decided the place of consciousness. There is the organism over against the environment. The environment sends out stimuli, the organism reacts. This is the "biological situation." Consciousness is an activity, a reaction, a response of the organism to environment. The problem of the nature of consciousness and of knowledge is therefore to determine the *peculiar* nature of this reaction, the nature which distinguishes it from other reactions of the organism, *e.g.* from digestion, breathing, etc.

Consciousness being a peculiar reaction of the organism, it is worth while to analyze the nature of reaction as such. Pitkin undertakes this analysis. This gives him occasion to controvert some anti-realistic theories which connect themselves with biology. These theories assume that all reaction is of one kind, and that it is transformative of the stimuli. If so, then perception—a form of reaction—cannot be only apprehension of the stimuli (or objects), but must modify them. This is the position of the "biological pragmatists" whose leader is Dewey. But, contends Pitkin, the assumption of these theories is false. Reactions are not all of one kind; they are fundamentally different, *e.g.* adjustment and selection; and moreover, no reaction is truly transformative, *i.e.* generative of *new* qualities. All so-called transformative reactions are either analytic, separating an element from the complex stimulus; or synthetic, adding an element to it as a solvent, in order to analyze the elements of the stimulus. But in each case, only that which was already there, is taken hold of; and nothing new has been generated. Thus it is that though the physical stimulus as such is devoid of qualities of touch, taste, and smell, these qualities are analyzed out of it by the reaction of the organism. Other theories which come in for criticism are the neo-vitalisms of Driesch and Bergson.

They rest upon the assumption of final causality in organic reactions, and on the Kantian ideality of space. But modern analysis of reaction steers clear of final causes, and finds that direction and distance as such (the spatial modes) are actual objective stimuli and cannot therefore be mental. Thus reaction is neither transformative, nor purposive. It is in its general nature physico-chemical activity.

The analysis of reaction in general is thus seen to be on the side of realism. Consciousness being reaction is not transformative of the stimuli (the object). But what differentiates consciousness from other functions of the organism? Every function, *e.g.* digestion, etc., has a definite organ allotted to it. It reacts only to definite kinds of stimuli. To what kinds of stimuli does the organism react in being conscious, and what is the organ for it? Pitkin's answer is not clear. Yet he seems to say that the organ concerned is "the central nervous system"; and the kind of special stimuli to which it reacts are "the commoner features of the environment as a whole," "the deepest peculiarities of the whole space-and-time order of nature" (*N.R.* p. 444). Thus it would at once be seen that Pitkin is thereby identifying consciousness with *thought*, with the apprehension of the universal features or relations of the real. His further explanations, though obscure, corroborate this. "The relations," he says,

> to which the reagent responds through the help of consciousness are relations among spatio-temporal entities, but they are not spatio-temporal relations in the strict adjectival sense. That is, they are not distances nor directions nor magnitudes nor durations (not these, because *these* are, according to him, real stimuli in general to which the organism responds and for which therefore no special activity, like that of consciousness, is required).... What these specifically cognitive relations are is a question too extensive for the pages allotted me; but I should like to say at least that Woodbridge has long since pointed out the most important class, namely, implications. These certainly are not spatio-temporal relations, in the proper sense of being developed or present as efficiencies in physical and chemical processes; and yet they are not created by being known, they are not mental devices, but real relations between real entities. (*N.R.* p. 455.)

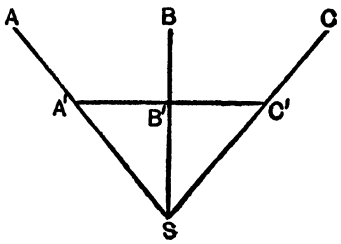
In his criticism of Montague's conception of implication, Pitkin points out that besides being causal, implication may be between two simultaneous events, *e.g.* sunlight in New York implies darkness in Hong Kong; between timeless entities, *e.g.* triangle implies a constant sum of interior angles; and also between unreal entities, *e.g.* the death of the Emperor of U.S. implies the death of the head of the ruling American house (cf. *N.R.* p. 485). Besides "implications," the other classes he would seem to include as the peculiar stimuli for consciousness, are distant past and future objects, and purely imaginary and impossible (= unreal) objects (cf. *N.R.* p. 457). That is, the special stimuli for the sake of which consciousness is called forth are the objects of thought in the widest sense of the term, *i.e.* as including thought proper, memory, and imagination, together with the imaginary, the impossible and the unreal—all that is not immediately present and affecting the organism[1]. Consciousness is therefore that specific reaction of the organism which enables it to adjust itself to these entities. It is not itself the adjustment, it "is the crucial advance towards this adjustment" (*N.R.* p. 457).

Apparently it would seem that Pitkin does not identify consciousness with any physical activity of the organism, or with any of its objects, *e.g.* implication, etc., as his colleagues do, and that he is only seeking a place for this specific activity in the economy of the biological world. But, to call consciousness a reaction of the organism, and at the same time to reduce all reaction to physico-chemical activity, undoubtedly exposes him to the same criticism with them, viz. of identifying consciousness with something which it is *not*. The special defect of this account of consciousness is that it identifies consciousness with a part of itself, viz. with thought. But consciousness is wider than thought. It includes also perception. It is awareness not only of the distant and absent, of the universal and of the imaginary, it is also awareness of the immediately present, the particular and the real. The case

[1] It should be noted that Pitkin is asserting the realism of being like his other colleagues. For it is the world of pure being of which he is thinking as the specific stimulant (object) of consciousness.

for realism is primarily based on the objectivity of perception, and a theory which has no room for perception is hardly realistic.

But Pitkin does not halt at this rather diffuse description of consciousness. He goes further and makes it definite with the help of the geometry of projection. In doing this, he incidentally gives his theory of perception, and of illusion and error. Steering clear of his metageometric language and involutions, his position is this: A, B, C are, say, distant physical objects, S the percipient organism, A', B', C' the "cognitive field." A, B, C send out influences (lines of energy) to S, which cross the plane of A', B', C' and there become conscious.



Thus a new "dimension," beside space-time, viz. consciousness, gets added to them. Yet they remain physical. Now A' is a function of A. It is equally a function of any other point on the line AS. Therefore, though physical and objective, A' is essentially indeterminate. It cannot be said of what it is the function. The same is true of a combination $A'B'C'$. Hence the possibility of error, illusion, and hallucination. Pitkin thus believes that he has gone beyond Alexander and Nunn, who only asserted the objectivity of the *elements* of illusion and hallucination, and referred their *combination* to the subject, and has succeeded in making both the elements and their combination objective. Thus all sensa, real, illusory or hallucinatory, together with their configurations, are independent of the percipient. Because the plane of $A'B'C'$, the cognitive field, is transverse to ABC, therefore Pitkin terms his theory the "transverse hypothesis."

Now the following doubts suggest themselves: Firstly, if S is aware of A', B', C' which are *physical* and immediately present entities, the hypothesis does not agree with the account of consciousness as that reaction of organism which responds to non-physical stimuli (see above). The justification of the existence of consciousness seems to have been

lost. Further, these entities, though physical and immediately present and somehow in the cognitive field, are *not* the entities of which there is perception. They are functions of physical things on the cognitive field, and somehow their *representatives*. Perception is therefore essentially representative. For the sake of saving illusions and hallucinations from the taint of subjectivity, Pitkin's theory thus risks the objectivity of all knowledge. Knowledge is not in direct possession of its object. It is mediated by the effects of objects in consciousness. They may yet be physical, but they are scarcely different from the "ideas" of the subjectivist as vehicles of knowledge. In fact, Pitkin does not differentiate them from "ideas" in another sense; for he gives identically the same account of concepts as of percepts[1]. Moreover, neither of the two conflicting accounts Pitkin gives of consciousness—the former identifying it with thought, the latter presumably with perception—has room for self-consciousness. For self-consciousness is neither awareness of the general objects nor of the particulars. It has no corresponding *object* at all. It is awareness of awareness.

A. N. WHITEHEAD

Whitehead belongs, like Mach and others, to the reformers of the theory of physical science. He undertakes to correct its fundamental concepts (see his *Principles of Natural Knowledge* (1919) and *Concept of Nature* (1920)).

The chief influences that converge to form the basis of Whitehead's thought seem to be the anti-metaphysicism of Mach, the realism of Moore, and the theory of relativity of Einstein, though neo-Hegelianism and Bergson too contribute their share.

Whitehead rejects Substance and absolute Time and Space as the fundamental concepts of science. *Time and Space are characters of Events which constitute Nature, and we apprehend Nature directly in perception.* Nature is a field of activity. Its constitutive events are sometimes relatively permanent.

[1] This may mean that concepts too are physical. But then it makes the concept an individual entity.

They are recognizable. Their characters are *objects*. Common sense and science explain events by reference to such objects. But an object, *e.g.* an electron, is no bit of a limited thing. It is where it acts, and is therefore in the whole of nature (see *Concept of Nature*, chap. VII).

The fundamental concepts of science, space, time, substance, he would "construct" out of sensa, as indicated in the section on Russell.

Thus all the fundamental positions of modern realism seem to be maintained by Whitehead. Perception is direct apprehension of external objects. These objects are more or less permanent and independent existences and have primary as well as secondary qualities. They should be defined in terms of sensa.

But the relativity of space and time in his doctrine is the result of philosophizing on Einstein's theory of relativity. However the latter does not involve the former. Relativity in the philosophical sense makes space and time evanescent features of objects; it turns space and time into spatiality and temporality. But, as Kant brought out, they are not abstract concepts but individual percepts. It further makes the irreversibility of space and time unintelligible. So also their infinity, which compels the relativist to the unnecessary assumption of an eternal continuity of events in space and time—*in space and time*; one sees thus that one cannot get rid of the priority for thought of space and time.

In his rejection of substance as a reality behind the perceptible attributes, and in his rejection of the "bifurcation of nature" into objective and subjective (*ibid.* p. 29), Whitehead joins issue with the most modern thought. Objects are more or less permanent combinations of sense-qualities; and science has to take all dicta of sense, primary as well as secondary qualities, as facts of nature, and to determine the laws of their relation. But when Whitehead passes from the distinction of primary and secondary qualities, and would make all that appears real, and defines object in such a way as to include all its possible appearances, he passes over to a neo-realistic position akin to Alexander's and Holt's. He

points out that no definite limit can be set to an object. It is where it acts, and it acts everywhere. And he invokes the philosophical theories of Leibnizian continuity and Hegelian unity of nature. But if this position is to be taken seriously, the object becomes the whole of the universe in its spatial and temporal entirety. It is the Absolute of philosophers. Such a monism may be true. But firstly, it is not philosophically established, and Kant would say, cannot be established; and secondly, scientific thought cannot take its stand on such abstruse metaphysical doctrines. As scientists and ordinary men, the clearest fact for us is the plurality of objects, and it is through their interaction that we can explain the phenomena of nature. Thus a certain kind of atomism is inherent in human thought and it is on it that science builds. It is not the result of the Aristotelian logic of substance and attribute, as Whitehead thinks (*ibid.* p. 10); on the contrary, that logic is the result and expression of the inherent atomism of the human mind.

Whitehead gives an explanation of perception which would keep it clear of the difficulties of physiological explanation. The ray of light affects my body, and this event excites me to the perception of its "significance." This significance is the objects which I directly perceive. But it is not clear if the "perception of the significance" of an event can be identified with sense-perception. Perception of significance is rather comprehension (thought) than perception (sense). Moreover, why the sensed object should be called the "significance" of the physiological event is doubtful. Scientifically, it should rather be called its cause than its significance; and we are back to physiological explanation. Further, the physiological event (Whitehead's "percipient event")[1] should itself be perceived, in order to excite the mind to the perception of its significance. Thus perception would be the presupposition of perception. It would appear therefore that no explanation can be given of perception. Whitehead is clear on this point. Knowledge is, according to him, an ultimate fact. We cannot get behind it.

[1] Whitehead substitutes "bodily sensorium" for "percipient event" in *A.* 1922–23 (see *M.* 1924, p. 289).

S. S. LAURIE[1]

Inspired by Hegel's philosophy and speaking its language, Laurie is trying to construct theism on its foundations. The position and rights of the finite mind over against the whole of being thus become emphasized; and the problem of its knowledge comes to the fore. It is a reproduction of the Divine Mind in finite form and its knowledge is, so far as it goes, reproduction of the Divine Knowledge. Feeling, sensation, perception and reason are all stages of this knowledge and true apprehensions of reality.

Thus Laurie is a modern realist in the sense that he believes in direct perception and the independent reality of the object together with its nature as consisting of primary as well as secondary qualities, though the primary have greater objectivity because they are prior to and presupposed in the secondary. What is clearly and distinctly apprehended, *is*.

He conceives of the finite mind as a developing consciousness of the real nature of the object. *At every stage what it clearly and distinctly apprehends, is real, is in the object.* It may sense only some qualities which are useful to it, yet these qualities are real. Thus he combines the practical view of sense (Bergson) with an ascription to it of theoretical worth.

Laurie attempts an explanation of the process of perception (or sensation or attuition which is the precondition of perception), and conceives it as receptive and reflexive. That is, the object sends a stimulus to the subject or somehow approaches the subject, the subject reflects it back and then grasps it as its object (see *Synthetica*, I, pp. 21, 23, 24, 27, 31–32). However, all this process is unconscious. In other words, perception or attuition is projection. Clearly all this is hypothesis, and yields too much to the mode of thought which leads to subjectivism. The subject is conceived as a stationary infinitesimal point, to which the object must go in

[1] See his *Synthetica*, 2 vols. (1906). Laurie refers in the preface and in the course of the book to his two previous books in which he seems to have propounded similar views, viz. *Metaphysica Nova et Vetusta* and *Ethica, or the Ethics of Reason*, 2nd ed. 1885. J. B. Baillie has two articles on "Laurie's Natural Realism" in *Mind*, 1908, 1909.

order to be thrown back and apprehended. But the subject must, somehow, already know where to throw it back, otherwise it would be misplaced and perception would be illusion; *i.e.* the subject must know before perceiving. If we are to speak metaphorical language, it would perhaps be better to attribute activity to the mind and to conceive it as going to the object. It will save us from the absurdity of knowing before knowing, and is more in harmony with the natural view of man, *i.e.* with natural realism. The reason why Laurie does not conceive the process of perception in this way, in spite of his theory that mind is creative energy gradually unfolding itself of its own inner initiative, seems to be that he has to find a place for reason. Reason is fully spontaneous, active activity, it is free will. Perception can consequently be only receptive activity. But the distinction between the two does not lie in this, that one is active and the other passive. It lies in the difference of their objects—the object of one is universal, and that of the other particular; and in reference to this object both are receptive, though in proceeding to it and in assimilating it, both are active.

BIBLIOGRAPHY

1. First Era of Realism:

Descartes: *Discourse on Method*; *Meditations*; *Reply to Second Objections*; *The Principles of Philosophy*; *The Passions of the Soul.*

Norman Smith's *Studies in Cartesian Philosophy.*

Locke: *An Essay Concerning Human Understanding.*

S. Alexander's *Locke.*

J. Gibson's *Locke's Theory of Knowledge.*

Reid: *Inquiry into the Human Mind*; *Essays on the Intellectual Powers of Man.*

Hamilton: Supplementary Dissertations to his edition of *Reid's Works*, specially *B*, *C*, *D*, *D**; *Lectures on Metaphysics.*

Mansel: *Metaphysics.*

Case: *Physical Realism.*

Andrew Seth's *Scottish Philosophy.*

2. Second Era of Realism:

(i)

Schuppe: *Erkenntnistheoretische Logik*; *Grundriss der Erkenntnistheorie und Logik*; *Die Bestätigung des naiven Realismus*; *Offener Brief an Herrn Prof. Dr Avenarius.*

Mach: *Analysis of Sensation*; *Mechanik*; *Erkenntnis und Irrtum*; *Wärmelehre.*

Hell's *Ernst Mach's Philosophie.*

Avenarius: *Kritik der reinen Erfahrung*; *Der menschliche Weltbegriff.*

Ewald's *Richard Avenarius als Begründer des Empiriokritizismus.*

(ii)

Meinong: *Abhandlungen*; *Annahmen*; *Die Erfahrungsgrundlagen unseres Wissens.*

Husserl: *Logische Untersuchungen*; *Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie.*

Stout: Besides his three Psychologies: The Common-Sense Conception of a Material Thing (*A.* 1900–1); Things and Sensations (*Br. Ac.* 1905); Are Presentations Mental or Physical? (*A.* 1908–9); Immediacy, Mediacy and Coherence (*M.* 1908); The Object of Thought and Real Being (*A.* 1910–11); Reply to Mr Joseph (*M.* 1911); In Symposium on Moore's Status of Sense-Data (*A.* 1913–14); Prof. Alexander's Theory of Sense-Perception (*M.* 1922).

Critical-Realists: *Essays in Critical Realism*, by D. Drake, A. O. Lovejoy, J. B. Pratt, A. K. Rogers, G. Santayana, R. W.

Sellars, C. A. Strong; Where do Sense-Data exist? by D. Drake (*M.* 1915); Transcendence and Bifurcation, by R. W. Sellars (*M.* 1922); Mr Russell's Theory of the External World, by C. A. Strong (*M.* 1922); A Vindication of Common Sense, by C. A. Strong (*M.* 1923).

L. A. Reid: *Knowledge and Truth.*

(iii)

(*a*) Cook Wilson: *Printed Papers* (Lecture Notes on Logic): published in *Statement and Inference.*

Joseph's John Cook Wilson (*Br. Ac.* 1915).

Prichard's Prof. John Cook Wilson (*M.* 1919).

Prichard: Appearance and Reality: Discussion (*M.* 1906); *Kant's Theory of Knowledge*; Mr Bertrand Russell on Our Knowledge of the External World (*M.* 1915).

Joseph: The Psychological Explanation of the Development of the Perception of External Objects (*M.* 1910–11); On Occupying Space: Discussion (*M.* 1919).

Hobhouse: *The Theory of Knowledge.*

Norman Smith: *Prolegomena to an Idealistic Theory of Knowledge.*

Price: Reality and Sensible Appearance (*M.* 1924).

McGilvary: *Philosophical Review*, XXI.

(*b*) Alexander: *Space, Time and Deity*, Gifford Lectures; Papers in *A.* from 1907–18; Basis of Realism (*Br. Ac.* 1914); Some Explanations (*M.* 1922); Sense-Perception: A Reply to Mr Stout (*M.* 1923).

Nunn: Papers in *A.* from 1906–16, specially Are Secondary Qualities Independent of Perception? (1909–16) and Sense-Data and Physical Objects (1915–16).

Turner: Papers in *M.*—mainly Discussions and Critical Notes; *Direct Realism.*

William James: *Essays in Radical Empiricism.*

Holt: Program of the Six (1910); The Place of Illusory Experience in a Realistic World (in *N.R.*); *The Concept of Consciousness.*

Perry: Program (*op. cit.*); A Realistic Theory of Independence (in *N.R.*); *Present Philosophical Tendencies.*

Montague: Program (*op. cit.*); A Realistic Theory of Truth and Error (in *N.R.*).

Pitkin: Program (*op. cit.*); Some Realistic Implications of Biology (in *N.R.*).

Marvin and Spaulding: Their Essays in *N.R.*

Woodbridge: Nature of Consciousness, in the *Journal of Philosophy*, etc., II, 119.

Whitehead: *The Principles of Natural Knowledge*; *The Concept of Nature.*

Russell: *Philosophical Essays*; *Problems of Philosophy*; *Our Knowledge of the External World*; *Scientific Method in Philosophy*;

On Propositions (*A.* 1919, supplementary vol. II); Meaning of Meaning (*M.* 1920); *The Analysis of Mind*; Physics and Perception: Discussion (*M.* 1922); *The Analysis of Matter.*

Broad: Besides his Papers in *Mind* on Russell's Book (*M.* 1914) and Alexander's Book (1921): *Perception, Physics and Reality*; *Scientific Thought.*

(*c*) Moore: In Symposium on "In what Sense if any, do Past and Future Time Exist?" (*M.* 1897); Freedom (*M.* 1898); The Nature of Judgment (*M.* 1899); Necessity (*M.* 1900); Identity (*A.* 1901); Mr McTaggart's Studies in Hegelian Cosmology (*A.* 1901–2); Experience and Empiricism (*A.* 1902–3); Kant's Idealism (*A.* 1903–4); *The Refutation of Idealism (*M.* 1903); *The Nature and Reality of Objects of Perception (*A.* 1905–6); Discussion on Joachim's Nature of Truth (*M.* 1907); *William James's "Pragmatism" (*A.* 1907–8); *Hume's Philosophy (*New Quarterly*, 1909); The Subject-Matter of Psychology (*A.* 1909–10); *The Status of Sense-Data (*A.* 1913–14); In Symposium on "The Implications of Recognition" (*A.* 1915–16); Are the Materials of Sense Affections of the Mind? (*A.* 1916–17); *The Conception of Reality (*A.* 1917–18); *Some Judgments of Perception (*A.* 1918–19); *External and Internal Relations (*A.* 1919–20); In Symposium on "Is the Concrete Universal the Type of Reality" (*A.* 1919–20); In Symposium on "The Character of Cognitive Act" (*A.* 1920–21); Are the Characters of Particular Things Particular or Universal? (*A.* 1922–23); A Defence of Common Sense (1925) (*Cont. Br. Ph.*).

His *Philosophical Studies* contains the papers marked *, and also The Conception of Intrinsic Value; and The Nature of Moral Philosophy.

Laird: *A Study in Realism.*

Dawes Hicks: Papers in the *A.*, specially The Basis of Critical Realism (1916–17) and In Symposium on Moore's "Materials of Sense" (*ibid.*).

Wolf: Natural Realism and Present Tendencies (*A.* 1908–9).

Laurie: *Synthetica.*

Bergson: *Matter and Memory.*

Külpe: *Realisierung.*

Lossky: *The Intuitive Basis of Knowledge.*

3. Theory of Science:

Stallo: *Concepts of Modern Physics.*

Pearson: *The Grammar of Science.*

Thomson: *Introduction to Science.*

Einstein: *The Theory of Relativity.*

Cassierer: *Zur Einsteinschen Relativitätstheorie.*

4. Classics of Philosophy having a bearing on realism besides those mentioned in (1):

Spinoza: *Ethics.*
Leibniz: *Monadology*; *Metaphysics* (*Discourse on*); *New System*; *New Essays*; *Correspondence with Arnauld.*
Berkeley: *A New Theory of Vision*; *Principles of Human Knowledge*; *Dialogues between Hylas and Philonous.*
Hume: *A Treatise on Human Nature*; *Inquiries.*
Kant: *Kritik der reinen Vernunft*; *Prolegomena.*
Vaihinger's *Kommentar zur Kritik der reinen Vernunft.*
Norman Smith's *A Commentary to Kant's Critique of Pure Reason.*
Kühnemann's *Kant.*
Rickert's *Gegenstand der Erkenntnis*; *Kant.*
Hegel: *Logik.*
Kuno Fischer's *Hegel.*
Wallace's *Prolegomena to Hegel's Logic.*
Schopenhauer: *The World as Will and Idea.*

5. Subjectivistic and idealistic Books that stimulate to Realism:

Mill: *Examination of Sir William Hamilton's Philosophy.*
Herbert Spencer: *First Principles.*
Huxley: *Sermons.*
Lotze: *Metaphysics.*
Green: *Prolegomena.*
Bradley: *Appearance and Reality*; *Essays on Truth and Reality.*
Bosanquet: *Logic*; *Distinction between Mind and its Object*; *Contemporary Philosophy.*
Joachim: *The Nature of Truth.*
Ward: *Psychology*; *Naturalism and Agnosticism.*
McTaggart: *Studies in Hegelian Cosmology.*
Croce: *The Philosophy of Hegel.*
Royce: *The Concept of God*; *The World and the Individual.*

6. General Books of Reference:

Erdmann: *History of Philosophy.*
Windelband: *History of Philosophy.*
Lange: *History of Materialism.*
Merz: *The History of Modern Thought in the Nineteenth Century.*
Adamson: *The Development of Modern Philosophy.*
McCosh: *The Scottish Philosophy.*

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