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**Your Child's
Speech Problems**

ALSO BY DR. CHARLES VAN RIPER

Teaching Your Child to Talk

WITH KATHERINE BUTLER

Speech in the Elementary Classroom

WITH LESLIE GRUBER

Casebook in Stuttering

WITH DOROTHY EDNA SMITH

An Introduction to General American Phonetics

Charles Van Riper

Y O U R C H I L D ' S
S P E E C H P R O B L E M S

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Preface

It was Dean Swift who wrote, “What fool was it that first invented kissing?” We knew a lady once who felt that way about speaking. She was thirty-five years old and she had never spoken a word. Though it had a kink or two in it, she had an excellent mind. She lived on an isolated farm with her two bachelor brothers and this is what she wrote (for she could read and write very well) when we asked her if she would like to have us teach her to speak? “The tongue is a crooked snake. My brothers like a quiet woman.” And they did too, so we closed that case file of voluntary mutism.

We must confess, however, that it was difficult for us to understand the lady’s point of view. In thirty years as a speech therapist we have worked with thousands of children and adults with speech disorders who would have given their very skins to be able to speak normally. We have felt deeply their terrible hunger to share their minds by way of their mouths. We have too often witnessed in all its nakedness the deep hurt which most of them feel because they cannot talk as others do. We remember the young man who contorted and struggled his way for five solid minutes in the utterance of one sentence: “Even babies can talk!”

When these people, these children, put themselves into our hands and ask us to heal them so that they too may own the word magic which has enabled man to come from the cave, conquer the earth, and reach for the stars, we speech therapists always feel

a bit scared. For speech, precisely because it is the unique and highest invention of mankind, is also the mirror for almost all of the human ills. Speech is litmus-colored by grief and hatred and all of the other acids of emotion. Most speech disorders reflect some such coloring for it is a grievous thing not to be able to talk in a world where the buzzing of words never stops. If you wish to help your child learn to talk well, you will find that some of the color of these emotions will rub off on you too.

When we deal with speech or the disorders of speech we also deal with thinking. One of our stroke patients said, "My bubble is I don't stink right." He meant that his trouble was that he didn't think right. It was true, and it was part of our responsibility to straighten out that thinking. A child with baby talk not only says "wabbit"; he thinks "wabbit." If you know how to do parallel talking you may be able to help him to correct the thought as well as the spoken word.

Speech is also the personal trumpet we blow to tell the world that we exist. Indeed, we would bet that more than half of all the talking any of us do is to announce over and over again that behold we are here and we are important! One tragic adolescent girl with a purple birthmark splattered down half her cheek was referred to us because she spoke so softly no one could hear her. To be heard was to be noticed. Many children with defective speech are silent children. An archeologist once found a cuneiform tablet in Assyria which may have been inscribed by a stutterer. "Lord, move my tongue," it said. This is an ancient prayer in the human race. Today, two thousand years later, the stutterer is with us still—usually as still as possible. No one likes to blow a defective trumpet.

Speech has yet another function—communication. Without words, we can reach only as far as our hands. With them we can touch anything; we can hold everything. With words we earn our living and win our place in the world of men. One of our college students with cleft-palate speech met with fifty-four consecutive refusals before the fifty-fifth employer gave him even a trial on a job.

What we are trying rather desperately to say is that the ability to speak normally is probably the most important single skill possessed by man. It is difficult for those of us who speak so much so casually to comprehend this. Only the person with a speech disorder can truly understand—even as only the blinded can appreciate sight. Unfortunately, the person who cannot talk, cannot speak for himself. We've worked with so many of them. We've heard their tales of the tangled tongue, of the deep hurt and deprivation and anxiety. But *children* who have trouble talking do not tell their parents these things.

This is why we write this book—so that parents can understand. We've lost count, long since, of how many parents we've had to counsel but we've been working in this vineyard a long time. One thing we've discovered. Once parents understand what the speech problem is and what should be done, they can do great deeds. Some of the best speech therapy we have ever seen has been done by parents who knew exactly what they were doing. We've failed some of these parents and it's always been harder to forget our failures than our successes. Why did we fail? All we know is that they never did understand. Perhaps in this little book we can say what we must more clearly. If not, we at least may be able to postpone our retirement from the field of speech therapy a little longer. Ten years ago we swore a solemn oath that as soon as a child of a child with whom we'd worked came to us for help, we'd quit our profession, go back to the farm, and spend our remaining years teaching parrots to stutter. Surely no one should have to say the same things to three generations of parents.

C. V. R.

Kalamazoo, Michigan

December, 1960

**Your Child's
Speech Problems**

CHAPTER 1

What's Wrong?

THIS CHILD OF YOURS is probably just like other children. He likes ice cream and giggles when tickled. He tries your patience and wants to be loved, both at the same time. He loves a surprise. Continually changing, he still remains a definite personality in his own right. He loves to play and pretend he's working. In a thousand ways he is like other children—except when he opens his mouth to speak. And then he resembles either Mary or Sally or Jimmy or Bill.

These four children represent the four basic types of speech disorders. Mary's disorder was that of defective *articulation*. When she said the names of the days of the week, she said them

in this fashion: "Monday, Tooday, Weddy, Fuhday, Fiedy, Tattuhday, Thunny." It was the speech sounds themselves which were wrongly spoken. Your child may not have the same defective consonants or vowels that Mary did, but if there are sounds that he does not say correctly, then he has a disorder of articulation.

Sally's problem was in *language*, in being able to use symbols. Not only did she sometimes have trouble understanding what others said to her, but also she found it hard to find the right words and to assemble them properly in phrases and sentences. When Sally counted, she never seemed to be able to say "three." She would begin: "One, two, four, five." Often she would not even try; she would refuse by saying something like this: "Me, yes, no can it do do do no." She had spoken very well until a severe illness affected her brain. She had aphasia. Does your child resemble Sally in any way? Is his problem one of language symbols?

Jimmy's difficulty was one of the flow or fluency or *rhythm* of speech. This is how he counted: "One, t-t-t-two, three, ffffffffour, uh . . . uh . . . five." He stuttered. Perhaps your child also has a problem in the flow or rhythm of speech even though his speech is not exactly like Jimmy's. There are different kinds of stuttering and there are other disorders of rhythm which are not stuttering. But does your child have trouble in the smooth output of speech? If so, he may resemble Jimmy, in this regard at least.

Or is your child like the last of our four children, Bill? Bill had no trouble in finding the right words or the right sounds or with the flow of his speech. His trouble was in his voice, in the tones that carry the content of his communication. Most of Bill's voice seemed to come through the little trombone of his nose. He was very nasal. He seemed to whine even when he wasn't whining. Bill's problem, of course, is only one of the many voice disorders. Your child may squeak or have pitch breaks or be husky or use a monotone, but if it's his voice that's faulty, he resembles Bill.

Here again are the four children: Mary for *articulation*, Sally for *language*, Jimmy for *rhythm* and Bill for *voice*. These represent the major types of speech problems.

You may be thinking that your child resembles none of these four. However, we will bet not only our professional reputation but even our favorite pipe that your unique child's unique speech problem is a variant of one of these four kinds of speech disorders. We'd better hedge a bit by adding that it may be a combination of several of them. A child with cleft-palate speech may have defective consonants as well as a nasal voice quality. A child with cerebral palsy may show all four types of difficulty.

Not that there is anything magical about four. We've always been hunting for a fifth. Thought we had one once too. A man brought in his wife to see us. "Her trouble is that she never stops talking. She doesn't even stop to take a breath." It was true. The woman's voice and articulation and use of language were excellent, in fact copiously so. She didn't stutter or even hesitate. She spoke on exhalation and then continued on inhalation, in and out without a pause. It was logorrhea with a vengeance, but we called it a disorder of rhythm, of the flow of speech, and saved our pipe. We would also classify voluntary mutism, the refusal to speak, under this category for the same reason.

If you still can't place your child's speech disorder, the chances are that he has one of the sub-varieties under each of the major classifications we have listed. There are many of them. One old German speech pathologist found and named ninety-nine varieties of stuttering and we've never figured out why he didn't at least get just one more. We're sure we've had at least one more variety that he could have used. One fellow we saw only stuttered on the tuba, never in his speech. "Stottern tubalis" he might have called it. Yet stuttering is only one of the disorders of rhythm. So, if we are to help you know the kind of a speech problem possessed by your child, we will have to describe some of the more common speech difficulties which are to be found in each of our four major types of disorders of articulation, voice, rhythm,

and language. And we promise we won't give you ninety-nine of any of them.

Why is it important that you be able to distinguish these speech disorders, one from another? The main reason, of course, is that the rest of this book won't make sense if you cannot tell them apart or recognize which one your own child possesses. The treatment varies from disorder to disorder, and so do the other social and emotional problems associated with them. Some differences make a real difference! You perhaps know the old doggerel:

To tell the he's from she's in fleas,
You'll find the difference is slim,
But he knows her
And she knows him.

Unfortunately we have found widespread parental ignorance and confusion when it comes to telling one speech disorder from another. Some of these differences may also appear slim, but they are mighty important.

Many parents know when their child is not talking normally but they have a tough time describing the problem accurately enough to permit a diagnosis. Here are a few of the letters we have received:

Dear Sir: My boy's voice is changing but his speech is no better. We have had his tonsils out but it didn't help. He doesn't talk plain, more sort of fuzzy. He hasn't outgrown any of it. Can you help us?

Dear Sir: I am writing in behalf of my daughter's child who has a speech impediment. I'm certain that the difficulty is not hereditary since none of my family or my daughter's husband's family has ever possessed a speech defect. This letter is to inquire concerning the type and costs of treatment for the impediment since I have yet to persuade my daughter that my grandson may need help.

Dear Doctor: I got a kid needs help. He don't talk so good so you can unnerstand him except you lissen hard his broter can unnerstand him and tells what he says. Why is it and when can we come and bring him?

The first of these individuals turned out to have lalling; the second, cluttering; and the third had the voice and articulation disorders characteristic of the hard of hearing. None of the writers knew much more than that the child was not speaking normally. This is not enough if parents are to help their children.

We also frequently find parents using the wrong terms for the speech problems of their children. Here is a phone conversation transcribed by our secretary:

MOTHER: Hello, is this the speech clinic? Where they help people who can't talk?

SECRETARY: Yes, this is the speech clinic."

MOTHER: I want to bring my daughter to see you. She stammers through her nose. You ought to hear how bad she is. Her nose gets all twisted up.

It is true that there are a few people who stutter (and stammering and stuttering are merely synonyms for each other) with a nasal snorting, but this child's problem was not stammering or stuttering. She had recently undergone surgery in which large adenoidal masses had been removed and as a result, her soft palate was no longer closing off the nasal passage in the throat. To prevent some of the nasal leaking of air, she was squeezing her nostrils. Some training in blowing and sucking and moving her soft palate soon solved her problem, but it was not stammering. This mother had been doing all the wrong things, telling her daughter to relax, to take her time, to think about what she was going to say before she said it. Parents need to know what is wrong.

A father brought his son to us complaining that he too kept speaking through his nose, that the voice was excessively nasal. "Sammy talks like Mortimer Snerd," said he, "and the other kids are calling him that. I keep telling him to talk through his mouth but he won't do it. I want you to tell him good and strong that he's gotta."

We knew immediately that the father was way off base in his diagnosis. Mortimer Snerd, Edgar Bergen's dummy, always spoke

with a *denasal* or adenoidal voice, the chief characteristic of which was that he *never* spoke through his nose, not even when uttering the *m*, *n*, and *ng* sounds which all of us should emit nasally. Sammy had some polyps (growths) in his nose which prevented an escape of air through that route. We asked him to hum as we pressed first one nostril and then another. No nasality appeared or changed. Some simple surgery and retraining took care of the difficulty and the nicknaming. We found out later that this boy had been teased at school and heckled at home for three years, that he had failed a grade in school and was becoming odd, all for lack of essential and accurate information.

For some reason, parents usually have difficulty in telling the difference between defective speech sounds and defective voice quality in such a disorder as *lalling*. In *lalling* the speech sounds are slurred. The child finds it difficult to make those sounds correctly which require the lifting of the tongue tip. Such sounds are the *l* and the *r* and the *ch* and *j* sounds. These children usually anchor the tip of their tongues behind their lower teeth and try to make the sounds with the middle or back of their tongues. As a result the speech becomes distorted, but it is the consonants which are defective, not the voice. The voice is usually quite adequate. Yet this is the way one mother viewed it and reported it:

Peter has what I can only describe as a mushy voice. It isn't clear at all. It sounds foggy as though he had pebbles in his mouth. I think that there must be something wrong with his throat though the doctor tells me that there's nothing wrong physically and that he will probably outgrow it. But he's now in the third grade and he still talks oddly and we are very concerned about it. Someone advised us to have him clear his throat just before he begins to speak and he has tried very hard to do this but it hasn't seemed to help. And it's hard for a little boy to remember to do this.

Perhaps even more trouble is produced when an overanxious parent hears abnormality in speech which is essentially normal.

We examined the son of a college speech teacher who had married in her early forties. Her own speech was beautiful. Controlled and modulated, it was always thoroughly conscious. In our interview, she seemed always to be listening to her own voice more than to ours but she also listened in the same critical way to the speech of her child, William—not Bill or Billy, always William—who was five. William, she said, was beginning to stutter badly.

We took "William" into our playroom and, while he was playing with some interesting toys, we procured a very good sample of the boy's speech. We found no sign whatsoever of any abnormality. Indeed, the boy seemed much more fluent than most children his age. But we knew that in its beginning stages, stuttering comes in waves, and that there are periods when a stuttering child will be very free from any difficulty. So we asked the mother to enter the playroom with the child and to converse with him while we watched through a one-way mirror and listened through the intercom system. She was a very dynamic and demanding person, constantly structuring the child's play and questioning him and correcting his speech. We even heard him pause a few times when he expected her to interrupt him. So far as his fluency went, we did hear him repeat a whole word once and a beginning phrase twice. There were a few times when William said a few "ums" as he began a sentence but this sort of thing is not stuttering. All of us filibuster when we are having some difficulty in formulating our thoughts, and all of us repeat words and phrases much more than we know. The mother came out of the room triumphant. "See, I told you he was stuttering," she said in front of the child. "I heard him stutter thirteen times." We did our utmost to help that mother understand that she was labeling as abnormal something which was not. She was not persuaded and left the clinic in disgust. One year later she returned with the boy. And then he truly was stuttering very severely with facial contortions and struggle. She was again triumphant. "I told you a year ago," she said in beautifully pear-shaped tones, "that he was stuttering, and now, perhaps, you will

believe it." Her constant heckling had finally created a stutterer. We sighed and wondered about a career as a guide in the Maine woods.

Even more distressing are the comments of the children about what is wrong with them. Because the parents do not know what is wrong or because they are too ashamed or embarrassed to face the speech disorder as a problem to be solved, they often pretend that no speech difficulty exists. They never mention it—until after the child is asleep or pretending to be. This conspiracy of silence can become an evil thing. If the parents cannot accept the deviation in speech, how then can the child accept it? The unmentionable becomes first the unspeakable and then the unbearable. One of our stutterers wrote this in his autobiography:

No one at home ever mentioned that I stuttered. It was one of those topics like sin or sex or excrement that you just didn't talk about. When I did stutter, my mother and father just looked away with a shadow of a wince, or they changed the subject or took over the conversation. There I was, screwing up my face and fighting it and they just acted as though I weren't there. I got to thinking that I had the most repulsive thing that anybody ever had wrong with them. It was so bad that even my mother who loved me couldn't bear to mention it. It was like halitosis only worse. I was so unclean in the mouth that

Yes, we speech therapists have heard many tales of this sort. But perhaps the most vivid of all such experiences was the answer of a little boy with a cleft palate when we asked him what he thought was wrong with his speech. He was then in the fourth grade and doing excellent academic work. He said, "I'm an imbecile." We asked him how he had come to that conclusion and he said, "Somebody told me."

So let us help you know what's wrong with your child's speech. Let's begin with Mary's problem—articulation. All of us have known some trouble in being able to produce some of our speech sounds correctly at one time in our lives. We all liped and used baby talk when we were very young. But we finally learned how to utter all the vowels and consonants well enough to get by. Some

of us find this learning of sounds a more difficult task. Demosthenes, the most famous orator of ancient Greece, spent months with pebbles in his mouth and leaden plates on his chest, shouting, as he climbed the slopes of a mountain, those words and sentences that began with *r*. He is reputed to have been a stutterer but also he could not pronounce such words as "rhetoric" without distorting the *r* sounds in them. And there was the king of Spain who lisped very badly and whose courtiers all adopted his lisp so that his majesty would not feel embarrassed. It is true that the formal Castilian Spanish even today still requires the speaker to pronounce the *s* sound as *th*. San Juan is *Th*an Juan. The story may be more fancy than fact, but it at least illustrates that learning to speak correctly is a very ancient problem, not that of your child alone. It is not surprising to the speech therapist that there are in this country alone more than ten million individuals who have articulation problems. The miracle is that so many of us have none.

Let us illustrate by describing what happens when a child lisps. He's got to learn to shape his tongue in a most unusual way if he is to produce good sibilants. Sibilants are sounds such as *s*, *z*, *sh*, and *ch*, which have a sort of hiss in them. For the *s* or *z*, the child must learn to force a stream of air down a narrow groove on the upper surface of his tongue so that it hits the cutting edge of the front teeth. Some children cannot shape the tongue to form a groove and so the air leaks off the sides of the tongue to produce a sort of slushy sound, or they make too wide a groove so that it sounds more like an *sh*. These would be called *lateral lisps*. When Grandpa takes out his false teeth, he has this kind of a lisp.

There are other kinds of lisps too. Perhaps the most common is the *interdental* lisp. These children speak of "thipping thider through a thraw." What's wrong is that they groove the tongue hardly at all; in fact, they often protrude it between the teeth almost with impertinence. And there are whistled lisps that pierce our listening eardrums because the grooves are squeezed too narrowly or aimed wrongly. We knew one man who stood his wife's intermittently whistled conversation for three hours, then

grabbed her, relieved her of her new false teeth, and slung them into the Kalamazoo River. There are also nasal lisps where the sibilants are snorted through the nostrils. Once, sitting at a campfire in a dark wood, we heard a buck deer with a nasal lisp. And there are other kinds of lisps but in all of them, the person has failed to learn the correct postures of the mouth and tongue. He makes an approximation but it isn't close enough. He may distort the *s* sounds, or substitute some other consonant for them or even omit them altogether. We knew one child who said something like this: "On Shaterday and Thunday I don't have to go to 'kool,'" and had several kinds of lisps in the same sentence.

Another fairly common articulation problem which we mentioned earlier is called *lalling*. If you will open your mouth widely and keep your tongue limp and unmoving on the floor of your mouth as you say, "My difficulty is lalling" you will hear the kind of speech we are talking about. It sounds slurred and foggy. Many of us lall about midnight on New Year's Eve even when we can speak correctly the rest of the time. It's very hard to understand a severe laller especially when he is speaking swiftly because many of our sounds require an active tongue tip. The *l*'s and the *r*'s are almost always faulty in lalling but other sounds are also blurred and imprecise. Is this the kind of a speech problem your child shows?

Or does he use *baby talk*? This name is used more by parents than by speech therapists. If it means anything, it refers to a cluster of errors which consist of the use of the easier, earlier sounds for those which ordinarily are mastered later and with more difficulty by most children. The speech sounds are not all of equal difficulty. Every child must climb the ladder of speech sound mastery. The baby first masters his vowels, then the sounds made primarily by the lips such as the *p*, *b*, *m* and *w*, then next the simple tongue tip sounds such as the *t*, *d*, and *n*, then next the back tongue sounds like *k* and *g*, then those using both lips and teeth like the *f* and *v*. The *s*, *l*, *r*, *th*, *sh*, *ch* and *j* are among the most difficult. So are the blends such as *cl*, *fr*, and *str*. Most children do not perfect them completely until they are about in

kindergarten. So the baby talker is one who substitutes an easier, earlier sound such as the *w* for the *r* or *l*, or the *t* for the *k* or the *p* for the *f*. Something has blocked the normal sequence of speech development. A baby talker might say "Yook at duh pwetty wady" or "I want tum foap poh duh bat-tub, pwease." We knew one child who loved to recite:

Pea powid hah
 Pea powid toe
 Pea powid inna pah
 Nine day owed.

Some of these children may use only one or two of the easy consonants instead of almost all the others. One such child would count this way, "One, two, tee, toh, tie, tih, teben, eight, nine, teh." He could say certain of those numbers correctly only because they included only the easiest and earliest sounds. For the rest he used his well-learned *t* sound for all the other consonants. When he was speaking swiftly not even his mother could understand him. He talked a jargon or gibberish only because he had mastered too few of the sounds of English. It's as though you had to write a letter on a typewriter on which only the vowels and a few of the consonant keys would work. What that boy needed was a bigger repertoire, a bigger alphabet of sounds.

There are other children who have conquered all the speech sounds save one or two. Usually the *r* sound is one of them and you can see why if you attempt to put into words how your tongue is shaped in producing it. We'll bet that you can't do it even though you've said this sound correctly thousands of times. The *r* sound has two humps like a camel and the front hump of the tongue must be higher than the rear one. You can't see or feel the contours but they must be there. Learning to speak correctly is not an easy task.

"But don't people outgrow these articulation mistakes eventually?" one of our parents asked us. "They tell me that when I was a child I had a hard time talking but now I've certainly outgrown it."

We told him that many people were able to learn how to say their difficult sounds by blundering but persistent methods of self-help, once they recognized the fact that they were saying those sounds wrongly. But we also told him that far too many adults still showed articulation errors. We mentioned the seventy-year-old man who asked us wryly "How toon wih I outgwo my baby talk?" and we told the old tale of the lisping farmer who called a meat-packing plant to tell them he had two sows and eight pigs for sale and would they pick them up. To his surprise, eighteen trucks from the plant drove into the barnyard that afternoon.

"What you bringing all thoth truckth here for?" he demanded of the first driver.

"To pick up all your pigs. You said you had two thousand eight of them for us."

"You're nutth!" said the farmer. "I thaid I had two thowth and eight pigth, not two thouthand eight of 'em." No, articulation errors are not outgrown. Some people never learn to make the standard sounds correctly.

There are many technical names for the various articulation problems, but most speech therapists would prefer to speak of defective *r* sounds rather than to call the problem *rhotacism*. We say a child has defective *l* sounds rather than *lambdacism*. Even the common terms of lisping, lalling, and baby talk are merely labels for clusters of certain articulation errors. The names are not as important as the faulty sounds themselves. If your child has difficulty in articulation, you should try to identify the problem, not in terms of the *words* he mispronounces but in terms of the speech sounds he does not seem to be able to produce in the standard way. You should also try to determine the communicative conditions in which these defective sounds appear most frequently. Some children show more errors when talking to themselves; others when speaking to parents. Some show better speech when conversing with other children and worse speech when talking to strangers or authority figures.

Does your child have more trouble when reading aloud, or

when he is speaking fast, or when he is competing for the floor, or when he is emotional or excited? What sounds does he use instead of the standard sounds? Does he omit some of these sounds in certain words? Which of the sounds are always wrong? And which sounds are sometimes spoken correctly? These are some of the questions which many parents have helped us answer and which must be answered before we can begin intelligent speech therapy. We've got to define the problem before we can tackle it. Perhaps, if your child is now receiving help from a speech therapist, you may feel no need to participate in this job of diagnosis. If this is your feeling, it is not a valid one. Why? Because many times a child will not show the speech therapist samples of his average or worst speech. He may speak much better in the speech therapy room just because he knows that this is the place for better speech. Your speech therapist will greatly appreciate your own list of the child's defective sounds and the conditions under which they occur. He needs your help in viewing the whole problem as it exists everywhere.

On the other hand, your child may have no real trouble at all in pronouncing his speech sounds. His problem may involve only his voice. You will remember Bill whose voice was whiny and very nasal. A pleasant voice is a wonderful asset throughout life; an unpleasant one can cause much social rejection. As in the articulation disorders, the parents should help in identifying the communicative conditions under which the voice becomes worse or better. And they should know what to listen for. They must learn to listen with strange ears for most of us have become so accustomed to our children that we hear only the messages which are being spoken rather than the tones which carry them. What you need to do is to listen in almost the same fashion that you listen to your own voice as it comes back from a tape recorder. There's often a shock, as those of you who have had this experience will recognize. You might practice a bit by listening first to the voices of your neighbors, to the pitch or loudness or the quality characteristics they show. Or by listening to your

own. We'll never forget the reaction of one father when he first heard himself recorded on tape. "A fine voice!" he said, ". . . for cooling soup."

While there are many disorders of voice, those most commonly found in children are these: the *hypernasal* voice such as that owned by Bill and its opposite, the *denasal* voice which sounds as though a person had a very bad cold or sinus infection. This last is also called the adenoidal voice for obvious reasons. Then we have voices which are too *high* or *low* in pitch or too *soft* or weak in terms of loudness. Some children speak in a *falsetto* consistently while still others have *pitch breaks* upward into the falsetto which shake their confidence as well as their effective communication. Then we have the *monopitch* or monotonous voice which sounds deadened and without meaningful inflections. Occasionally we find a child with a *husky* or *hoarse* voice due to the strain of tension or screaming or to growths on the vocal cords. Does your child have any of these problems?

The other evening we were talking to a group of the parents of some of the children we serve in our speech clinic. We had been discussing some of the problems in articulation and voice when a father got up and addressed the other parents. "You think you've got problems," he said, "So far as I can see, your kids are just slowed down in their talking or they have funny voices. I wish my kid only had something like that. You're lucky. He wasn't. My boy, Paul, talked fine, right from the beginning and he was talking just as good as you or me until a year ago when we had an automobile accident. A damned fool hit us head on. Didn't stop at an intersection where he should have. Well, we survived, but Paul's speech didn't. He was in a coma for fourteen days and they didn't think he'd live. Well, he's alive and moving around fine except for an arm that won't lift anything and except for his speech and his reading and his writing. He's in the third grade—did fine in the first and second grades before the accident—but he can't read now or write or spell or talk. So if you think your kid has troubles. . . ." He looked around belligerently, then sat down.

We took over. "Your boy does have problems, Mr. Anderson," we said sympathetically, "but the picture isn't quite as bad as you've painted it. Paul is beginning to read and write again and his speech is coming back pretty fast. It seems hard to bear it when you compare him now with the way he was before the accident, but you've got to set your sights differently. You've got to measure his progress in terms of how much he has changed since he came out of the coma. Paul has what we call *aphasia*. The brain injury caused a loss of language. Aphasia is a *language* disorder. That's why it's so hard for him to read and write and why he gets so mixed up in his talking."

The father spoke again. "And that isn't all. There are times when he can't even understand what we are saying to him. His eyes seem to get blank. We've got him under medication and maybe that's what wrong. But it breaks your heart to see a fine boy suddenly all shot, just because of some hot-rodding young fool. . . ."

Another person put up his hand. "I thought aphasia was what happened to older people when they had a stroke. I had an aunt who talked a bunch of nonsense and who couldn't read or write after she had one."

"Yes, your aunt probably had aphasia too," we replied. "In this disorder of aphasia, the victims lose the ability to send or receive or to formulate messages. They use the wrong words or they can't find the words they want to say. All of us know a little of this problem when we have some person's name on the end of our tongues and yet can't remember it. We don't have aphasia, but the experience is similar. A person who has aphasia will hesitate and he may use the wrong sounds but the big problem is that he can't find the language to fit his thought. The words and sentences are all mixed up. For "up" the person may say "down"; for "yes" he may say "no," or some word that rhymes with it. Often these aphasics get stuck with one thing they are saying so that it sounds like a broken record, repeating over and over again the same garbled message. When there is brain injury, you see, the words and sentences can get all mixed

up. Fortunately, when this happens in younger persons, they seem to recover with time and training, and even many older persons with aphasia can profit from speech therapy. But aphasia is primarily a disorder of language."

The first man whose son had been in the automobile accident broke in. "Why is it that my boy is having trouble in reading and in writing now? Even when he doesn't read out loud, he gets confused. It can't be just his speech. And why is it so hard for him at times to understand us when we talk to him. Why sometimes he almost acts as though he's hard of hearing."

We tried to boil a lot of information down into a short answer. "Well," we said, "it's something like this. When a person has a severe brain injury of the type suffered by your son, it becomes difficult for him to handle symbols. Words are symbols. So are numbers. So are letters of the alphabet. When we speak we code our thoughts into verbal symbols, into words. When we listen, we translate the other speaker's thoughts into our own self-talk and then we know what he means. When we read, we look at the little printed symbols on the page and transform them into a sort of inner speech. The person with aphasia has a hard time in handling these symbols. He finds it difficult to find them, to understand them, or to use them in the expression of his meanings. It's like trying to do arithmetic without knowing all the numbers or to hold a conversation with a Frenchman when you only know a few words." We sighed. It's difficult to explain aphasia in a few sentences.

We now come to Jimmy's problem. Jimmy stuttered. He had a disorder of rhythm. The flow of his speech was broken up by repetitions and fixations. We have known a great many such children, since about one child in every hundred has this sort of trouble. Many famous people have stuttered. Charles Lamb, the famous English essayist, Charles Darwin, the author of the theory of evolution, and King Charles the First of England who was permanently cured of his stuttering. He never stuttered again after his head was cut off. These are but three of many who bore this first name and we would bet that almost every name on

earth has been stuttered upon by its possessor. Once we knew a man named Claude Chimansky who had his name legally changed to Rudolph Chimansky so he could say it, only to find that his difficulty instantly spread to the Rudolph. We worked with a Chinese stutterer once who got stuck and was unable to change his tone of voice and said the wrong things because in his language the meanings are different for the same syllables spoken with different pitches. We helped an Egyptian who was convinced that Al Kohol, which means the "devil," was inhabiting his mouth every time he stuttered. One of our stutterers would jerk his arms frantically and finally jump out of his seat in the effort to utter a one-syllable word. Another had worn his teeth almost down to the gums, grinding them viciously during his struggles for speech. We have a child of six now enrolled in our speech clinic who speaks with his mouth tightly closed for fear that it will jump around if he tries to talk in any other way. Stuttering has a thousand faces, all sad. It has mystified the human race throughout all of history. What is this strange affliction?

Perhaps the best way to help you understand is to show you how stuttering grows. In most children, stuttering begins during the ages of two to four and it can come out of almost any condition which appears to make speaking seem difficult. In its first appearance, which some of us call *primary stuttering*, the child's speech becomes hesitant and marked by repetitions of a syllable or sound. They buh-buh-buh-bounce their way through their utterance. Usually at this stage the children do not seem to be aware of these repetitions though they may occasionally show signs which indicate that talking is becoming laborious. Primary stuttering comes in waves and often there are comparatively long periods of fluent speech. One of our parents told us yesterday that his boy stops stuttering every week end and only begins again after he goes back to school. Another of the parents here has indicated almost the reverse situation. With the right kind of care, primary stuttering usually disappears in a short time. What we try hardest to do is to keep it from progressing to what we may call *transitional* stuttering.

Just the other day we had a frantic call from a mother. Another speech therapist had been helping to reduce the pressures on her son through counseling the parents. The stuttering had been of the easy repetitive sort, appearing in waves, and it had pretty well disappeared in all but the stress situations. But this is what the mother said:

"David is five years old. He just had his fifth birthday last week. He's been stuttering for about a year now, off and on, but it wasn't until after his birthday party that he really began to get the awful facial contortions and stickings that he's had ever since. During this last year my husband and I have had several conferences with the school speech therapist and we thought everything was under control. It certainly seemed that David's speech was improving. Then this! It almost breaks your heart to see the little fellow trying to squeeze those words out now. He tries so hard and they just seem to be stuck somewhere down in his throat. He won't quit. He just keeps forcing and struggling and finally the word comes out. And then pretty soon he gets stuck the same way on another. . . ." The mother began to cry. What really happened to David we never did find out. The change seemed to have taken place during or shortly after that birthday party. Such affairs are pretty exciting and noisy and the competition for speech is cutthroat. It may have been that David's repetitions and broken speech became so frustrating in that situation that he began to react to them by struggling. Or perhaps some other child began to mock him or tease him about them. All we know is that he had begun to force and struggle when he repeated or hesitated instead of letting them bounce out easily as he did before. Something new had been added—frustration. Before the birthday party, if he noticed his speech interruptions, he just let them go and ignored them. Now he does not and that makes a mighty difference. Fortunately, the chances are good that this phase may subside, if we can do the right things. We can hope that soon he'll be back in the relative safety of his easy hesitations again. But this is what we mean by transitional stuttering.

"We must recognize, however," we told that mother, "that now David is in danger of developing much more severe stuttering than he had before or has now. We must redouble our efforts to prevent him from going into the worst and chronic form of stuttering, the kind we call *secondary stuttering*. Just as the key features of transitional stuttering are frustration and struggle, so the outstanding features of secondary stuttering are those of *fear* and *avoidance*. David isn't yet afraid of speaking and we hope he will never get that way. Fortunately, he doesn't fear certain words or sounds. He doesn't refuse to talk nor does he use other words instead of those he expects to stutter on. When he comes up to a difficult word, he doesn't postpone the attempt but plunges right through it. He may be having a hard time but at least he isn't avoiding, retreating, or being fearful. It's this fear and avoidance which all speech therapists hate to see developing in a young stutterer. When they are present the therapy will be long and difficult. Fortunately, your son hasn't developed these fears."

But it is hard to reassure a mother who sees her son struggling with some unseen enemy. So many mothers rush in and do the wrong things when their young are so evidently in danger. We can understand their urgency to do something, anything, fast and immediately. But oh how often at these critical times have we seen them do the very thing which was bound to make the stuttering worse. Sometimes the instinctive response is not the right response. This is not the place to outline in detail how you should treat your stuttering child. We shall spell this out carefully later in the book. But surely we have shown that whatever you do, you must not do anything which will make that child more fearful of speaking or make him feel more helpless. How you treat your stuttering child should depend on what kind of stuttering he has and how he reacts to it. Does he ignore his speech interruptions? Is he frustrated by them? Does he fear and avoid speaking? These are the questions you must answer first.

One of the trials of being a parent of a child with a speech defect is that all of the neighbors feel qualified to offer advice

and prescription over the back yard fence. Some of the suggestions are palpably absurd but others seem to have a grain of truth in them. For example, parents of young stutterers are often told that they should ask the child to slow down because he speaks faster than he thinks. Such a practice often even seems to help momentarily but all that will happen finally is that the child will feel bedeviled by both his stuttering and his parents. D-d-double t-t-t-trouble! The little bit of truth in this snap prescription is that any kind of uncertainty may reflect itself in hesitant speech. Most normal speakers become more non-fluent when they are uncertain, when their thinking gets tangled. We all hem and haw at times. We filibuster. But none of us makes a practice of thinking before we speak. Do you? Do you ever rehearse ahead of time what you are about to say? Very rarely, if at all. We have to listen to ourselves to know what thoughts we've been expressing. Thinking and speaking are practically simultaneous in most communication. No, the speeds of thinking or speaking are not important factors in the production of stuttering. It is possible to stutter on a single word, spoken laboriously slowly.

But there is a disorder of rhythm in which speed of speech is the crucial problem. It's the disorder we call *cluttering*. We don't find it too often but most parents and teachers, and even the children themselves, confuse it with stuttering. Other people call it stuttering because they know no better. Actually, in cluttering the person speaks at a tremendously fast rate and in spurts. Words and sentences are so run together in the surges of speech that it's very hard to understand. When a clutterer gets really excited he becomes incoherent. And yet when he does talk slowly and carefully, his speech is very good. The clutterer often has a bit of articulation trouble too. He slurs many of his words and sounds just because he's talking so fast and so jerkily. It's like trying to operate a typewriter faster than you can type; the keys stick and pile up. Clutterers repeat too, like stutterers, but they usually repeat more whole words and phrases or parts of phrases than they do syllables and sounds, though they have some

of that too. Their speech motors race. It's a tough problem to work with especially after the person grows older and this manner of talking becomes a part of him. You've probably met a clutterer or two and you've probably done some cluttering yourself when you've been very excited. But this is not stuttering.

Some children have speech problems in which more than one of our four major disorders of articulation, voice, language, and rhythm are present. A bit ago we mentioned the meeting of parents to whom we presented some of the same information we have given here. We had hardly finished describing the four main classes of speech problems when a little woman with a slight scar under her nose raised her hand. Her voice was somewhat nasal but it was easy to understand her. "I've got a daughter who has a cleft palate," she said, "and I've been trying to figure out whether she has an articulation or a voice or a rhythm disorder, or what? She's had her surgery but her speech still isn't too good. But where does she fit into your scheme?"

"Cleft-palate speech is a good example of a problem which combines several of these speech differences we've been describing," we answered. "Most children with cleft palates don't say some of their sounds correctly. They use a sort of an *m* for their *b* sounds, an *n* for their *d*'s, and they frequently snort their sibilants and some of their other sounds. But they also have some excessive nasality in their voices and, because they run out of air fast because of the air leak through their noses, their speech is often a bit broken and halting. Yes, in cleft palate speech we find a combination of disorders."

Another mother spoke up. "My son doesn't have a cleft palate but I think he must also have a combination of speech problems too. He has cerebral palsy. The hardest thing for him is his consonants but he also runs out of breath and sometimes he just can't get any voice at all. Am I right in this?"

"Yes," we answered. "In very severe cases of cerebral palsy we sometimes find all four of our major classes of speech disorders. The patients find it hard to articulate the more complicated speech sounds; the voice is often nasal or difficult to

produce or sustain; the speech is broken in its rhythms and sometimes they have difficulty in learning or finding the words they need to express their thought." We ended the meeting by showing a film. We wish we could so end this chapter. It is difficult to describe abnormal speech in printed symbols. Perhaps a brief account of what was in the film will help to summarize the information we have been trying to present.

The film began by dramatizing some of the voice disorders. A boy of nine years was shown speaking and singing to his therapist. There was a curious flutter when he sustained a tone and the voice was husky. At times one could hear two tones at once, almost as though he were harmonizing with himself, and occasionally the pitch would break upward. The therapist was trying to teach him to speak without strain, to begin his vowels easily and gradually rather than suddenly. It was explained that he had vocal nodules on his vocal cords, little callus-like growths which had come as a consequence of much shouting and screaming.

The next case presented was a large seventeen-year-old high school boy speaking in a monotonous, high-pitched falsetto. His little child's treble voice seemed grotesque in such a husky athlete. Then there appeared on the screen two children, one a frail girl about twelve years old whose voice was extremely nasal as she spoke to the other child whose voice quality was deadened as if from a severe cold. The therapist was having the two children imitate each other on the principle that the hypernasal voice would improve by imitating denasality and vice versa. Finally, in this series on voice disorders, a boy of seven was shown speaking with and without the artificial palate, an appliance looking like an upper plate of false teeth but with a strange plastic bulb on its rear portion. When he took it out of his mouth, his voice was very nasal and it was difficult to understand his speech sounds. When he again inserted it, his speech became almost normal. The scar on his upper lip helped to corroborate the fact that his problem was one of cleft-palate speech.

Next a series of cases showed children with articulation disorders. The first was a girl whose mouth sagged on one side and

whose right arm hung limply. She had suffered a severe electrical shock three years previously at the age of four, had lost her speech completely, but was now in the process of regaining it. The speech was slurred and resembled lalling. Next there appeared a gay little boy full of beans and energy talking a mile a minute but clearly intelligible despite the characteristic errors of baby talk. He didn't seem to be conscious of his mistakes. Then it showed a college student who was repeating words containing *l* sounds. She was able to make the *l* sound perfectly at the beginning of any syllable but never at the end of one. It was almost amusing to watch her struggling to say something other than "bottoh" for "bottle" and "turtoh" for "turtle." She could easily say "lee-lah-loh-loo" but was helpless when it came to utter "all, ell, eel, or school." Then the film showed some lispers, one with a strident whistled *s* sound, another with a slushy laterally emitted *z* and *zh* sound, and finally a dainty little girl about nine who protruded her tongue in producing the interdental lisp as she said, "Thally and Thuthie are my two betht friendth."

In the next picture we saw a girl of ten watching her therapist's lips with a searching intensity of gaze, trying hard to understand, to make sense of the sounds she was hearing. Yet she was not deaf or hard of hearing. Her problem was aphasia. "How old are you? How old are you? . . . How old are you?" asked the therapist, pausing to let the words sink in. The puzzled expression left the child's face and it lit up. "Because!" she answered.

The film ended with a presentation of three stutterers. The first child was telling what had happened at school that day. "Duh-Duh-Duh-Davy he wen-wen-wen-wen-went t-t-t-to get a drink a-a-a-a-a-a-and he got all wwwwwet, he did," said he, but he didn't seem to be bothered or aware of his repetitions. The next child was a bit older, perhaps seven or eight, and although he had fewer stutterings it was obvious that he was struggling. His lips seemed stuck together; his jaw vibrated and when the words came out, they emerged explosively. This was the transitional

kind of stuttering. Finally, the film showed a college student in the throes of fear, dodging words he felt he could not say, backing up and starting again only to end by facial contortion and struggle. It took him at least a full minute to say "I am a secondary stutterer." The film concluded with a close-up of the therapist as she summed up. "We have presented some, but not all, of the various disorders. You have seen those who cannot make their speech sounds correctly and who have an articulation disorder; you have viewed some of the more common disorders of voice, one case of aphasia, one of cleft palate, and three stutterers. We hope that this presentation will help you understand what's wrong with your child's speech." Amen!

CHAPTER 2

What Causes the Speech Defect?

“WHY DOES THIS CHILD OF MINE have a speech defect?” “Why does this one of all my children stutter?” “Why can’t my daughter pronounce her *r* sounds?” These are familiar questions to every speech therapist. And they are often tough ones to answer though occasionally a mother who introduces herself as Mithith Tham Joneth will ask us why her child lisps. The difficulty is that a speech disorder is not a disease but a failure to learn or to sustain normal speech. Even in the medical field, the causes of the common cold, arthritis, and asthma, to name but a few, are still unknown. The sufferer and the physician know the symptoms well and they can often offer relief but the causes

are still mysterious. In many instances, there seem to be not one but many different causes for these ailments. If this is true of the physical disorders, we can readily see that a disorder of speech would also have many sources.

In answering the foregoing questions themselves, most parents seem to have a preference for one or the other of three explanations: The speech defect, they suspect, is due to something organically wrong with the tongue or throat, or it is due to imitation, or it was produced by some physical or emotional shock or conflict. In the great majority of instances, none of these three common explanations actually fits the case, but let us give some examples in which they did.

Mary was in the second grade when she came to us, a dainty, very pretty little girl, but her voice was very nasal, so nasal that she seemed always to be whining and unpleasant. Now such a voice can be learned, and in our first interview with the mother, we listened pretty carefully to the mother's voice to see if she were a complaining, unhappy woman. She was just the opposite, plump, jolly and good-natured. Mary was an only child, a situation which has been described by one psychologist as a disease in itself, but she was not a spoiled or pampered brat. She did not whine; she only sounded as though she did. Her home life and school life were happy ones. Excessive nasality can also be caused by a cleft palate or from the paralysis resulting from polio or from the removal of very large adenoids. But the mother said that none of these were possible factors.

"Did the father have a nasal voice or did any of the child's associates?" we asked. Again the mother replied in the negative.

"Has the child's throat been examined by a physician?"

"Yes," the mother answered, "and he said that there was no sign of paralysis or cleft of the soft palate." But we examined the child's mouth anyway and found the answer. The soft palate, that back trap door to the nose, lifted perfectly normally. It looked perfect. Then we put a powerful little flashlight probe up one of the child's nostrils and looked in the mouth again. A patch of light appeared on the upper surface of the hard palate.

It should not have been there since the roof of the mouth in this area is solid bone. We then asked the mother to think hard and try to remember any accident the child had had to her mouth. Finally she remembered that when the girl was three she had been running with an all-day sucker, the kind which had a stick in it, and that she had fallen and hurt her mouth somewhere. It had healed easily, she said. We then had the child chew some gum and wadded it against the roof of her mouth over the translucent spot where the light had shown through, and lo! the nasality was gone. The sucker stick had evidently pierced the hard palate, thereby interfering with its bony growth but the skin covering the hole had covered the gap. This skin covering, however, acted like a drumhead so that the vibrations of sound in the mouth were transmitted to the air in the nasal chambers above, thus producing the nasality. An oral surgeon inserted a plate and the problem was solved.

The search for something organically wrong in the mouth in individuals having speech disorders is not usually so rewarding. For more than a thousand years wise men felt that there must be something wrong with the tongue in stuttering. Demosthenes put pebbles in his mouth as he talked to strengthen his tongue. In the Middle Ages, they burned and put harsh ointments and spices on that innocent organ. Not much more than a hundred years ago, surgeons argued about whether the tongues of stutterers should be cut lengthwise or crosswise or whether a wedge should be taken out of its middle. We now know that, however tangled in utterance they seem to be, the tongues of stutterers are not different in terms of their structure from those of normal speakers.

“But how about the tongue-tie in children with articulation problems?” ask many parents. “Is not this a common cause of lisping and lalling and baby talk?” The answer again is a strong No. It occurs occasionally but it is certainly not commonly found in such children. One mother brought her daughter to us, demanded forthwith that she open her mouth and that we look in. “I’ve taken Sally to three doctors,” she staid, “and all of them

told me that there was nothing wrong. But look! You can see right there that she is tongue-tied." The mother pointed to the little white cord-like membrane that you can see on the underside of the tongue when it is lifted within the open mouth. This is the frenum and it is the visible part of the membrane that partitions the tongue in two halves anatomically.

"See!" she said belligerently. "There's the tongue-tie right before your eyes. That's what's causing my daughter to speak funny. What's wrong with those doctors?" We didn't argue with the lady. We merely asked her to look at her own frenum in a mirror. Then we explained that this little white cord was normally visible in most people, and that when it wasn't it was still there hidden within and dividing the two halves of the tongue. We showed the woman that the girl could lift and point the tip of her tongue quite as well as she could. "Now, if your daughter were not able to lift the tip of her tongue at all, or, when she tried, the upper surface of the tongue were bowed, and if the frenum came almost to the dip in the bowed tongue tip, then we would have the condition usually referred to as a tongue-tie." We went on to say that a real tongue-tie was comparatively rare.

"Occasionally we have also found normal speaking individuals whose tongue movements were severely restricted by their frenums," we continued. "Just as ventriloquists can learn to speak quite intelligibly without moving much of their lips, so we find that some people can learn to speak pretty well without moving their tongue tips." We illustrated this by saying the sentence "Take Daddy to the table" first while protruding the tongue and then by anchoring the tip behind the lower teeth on every consonant except the *b* and *k*. "It is possible to compensate for such an organic abnormality as a real tongue-tie by making such consonants as *t*, *d*, *n* and *l* with the middle of the tongue rather than with its tip. Some children with such a problem learn these unusual ways of speaking. Some do not, and then it is wise to have the frenums clipped before the speech training starts." We then played some taped selections of such compensatory speech, one of a woman who spoke with but half a tongue, and the other

of a man who had no tongue at all. Both had suffered from cancer of the tongue and the diseased portions had been removed surgically, and yet both were very easily understood. "It's pretty tough to learn to talk without a tongue," we said, "but it can be done. Fortunately your daughter has a fine one. So let's get to work."

Much more frequently found than a tongue-tie is a tongue which seems sluggish and clumsy in its movements. The person who has had a certain kind of stroke speaks thickly, almost as though he were drunk. He slurs and lalls and lisps. He has what we call *dysarthria*, a defect in coordination due to an injured nervous system. Some of our children with defective articulation show a similar clumsiness. They cannot trill the tongue or lift its tip without lifting the jaw or rounding the lips at the same time. Sometimes they have a history of drooling or difficulty in chewing or swallowing. Normal speech takes precision and these children do not seem to be able to move their tongues precisely. This may be due merely to a lack of experience and training.

Some children have never experimented with all the possible movements of their tongues just as those who have never attempted the hula have never known the potential of their buttocks. It has surprised us to find in the histories of these otherwise very normal children with clumsy tongues that many of them found it difficult to suck during their first months on this earth. Moreover, we find over and over again that the parents widened the hole in the nipple of the nursing bottle so that the baby would have an easier time of it or that the feeding would not last so interminably. "How in the world could enlarging a hole in a bottle nipple cause a speech defect?" we've been asked. Our answer has been tentative since we have no real research on the matter. "It's like this," we've said. "Many people think that in sucking the baby uses only his lips. This is not true. The nipple is also squeezed by the tongue behind those lips to squirt the milk out. This upward pressing by the tongue tip is the first and basic movement in all tongue lifting, and if the baby never gets a chance to practice it, he may never use it in his babbling or

in his later speech." But we aren't completely sure. All we know is that many parents of such lalling children report the opening in the nipples when we take a case history.

When we find a child with cerebral palsy the coordination problem of the tongue is often very evident. The tongue is unruly; it does not move when it should or it moves too far or too often. Some of our sounds require that a posture be maintained for a little while, that a certain contact place in the mouth be hit on time and with accuracy by the tongue. Such children find it hard to hit a vague and hidden target with a wobbly tongue. All speech therapists are interested in the way the tongue works but if they tell you there is nothing wrong organically, you can believe them.

But how about the teeth and the jaws and the tonsils? Do not all children lisp when they lose their first front teeth? Was there not a popular song entitled "All I want for Chrithmuth ith my two front teeth?" Yes, there was such a song, but there is also a piece of research by a Richard Swerzbin. This man offered a dime for every front tooth lost by kindergarten and first-grade children in a public school system and he recorded the speech of the children before and after the event. Excluding those boys who brought him a gopher tooth and a molar chipped from a grandparent's set of false ones, he found that lisping rarely occurred as a result of incisor loss. Those who lisped before lisped worse, but only a few of the hundred children he examined began to lisp when the first teeth were shed.

On the other hand we find children with missing side teeth who habitually thrust the sides of their tongues into the tooth spaces, making an *s* or *z* sound very difficult to utter correctly. The key word in that statement is "habitually." They *need not* use this lateral tongue thrust to produce their lateral lisps but they do, and they have to learn to make the sibilants differently. Tongues, like hound dogs, do tend to hunt for holes. Indeed the orthodontists tell us that often the bad placing or even loss of teeth is caused by bad tongue-thrusting habits. We worked with one child whose normal mouth position at rest was with the

teeth apart and the tongue protruding between them. Oddly enough his only defective sounds were the *l* and the *r*, due probably to his preference for tongue thrusting over tongue lifting. Other people also thought he lisped because he made his sibilants with that tongue protrusion. Visually he did lisp, but acoustically he did not. He had what is called a cosmetic lisp. He made perfect *s* and *z* sounds but he made them the hard way, with the tongue out. We had to teach him first to tolerate a closed mouth and then to speak within it.

We often find lisping children with what are called "open bites." The side teeth come together when they bite but there may be a wide open gap in front, the incisors failing to meet. To make good *s* and *z* sounds with such a set of teeth takes some extra learning and most speech therapists teach the child to anchor the tongue tip below the lower teeth to make the necessary groove with the middle or blade of the tongue. You can make an excellent sibilant this way but many children never discover how to do so by themselves. That is why we have speech therapists.

"We thought that when we had Junior's tonsils taken out it would help his speech." We have heard this statement often. Why tonsils should make speech defective is somewhat difficult to understand except in terms of lowered vitality due to illness. The tonsils are in the mouth but they play no part in the production of the speech sounds. They have no movement of their own. As we have said earlier, the presence of enlarged adenoids and their removal may cause nasality voice problems, but they have little effect upon the production of the consonant sounds except in denasality where the *m* sounds turn to *mb*'s and the *n* sounds to *nd*'s, as they do when we have a bad head cold. If tonsils and adenoids have a causal relationship to defective articulation it is usually not a direct one. It is oblique. Let us cite one example.

Cathy had a lateral lisp. Her sibilants were all slushy and sometimes there was a bit of drooling spray in them. We tried hard to find the cause of her trouble but in vain. Cathy could produce the *s* and *z* and the other sibilant sounds perfectly by themselves.

She could say *sssssss* and *zzzzzzzz* as well as any adult but whenever she spoke spontaneously, back she went to her slush. The teeth were perfect; her tongue was as agile as her mind. It was not until we had the opportunity to question her mother at some length that we found the key. According to her mother, the girl had spoken perfectly until the age of four or thereabouts and she began to lisp at first gradually and then consistently. For two or three years about this time she had many colds and sore throats and she began to "speak in a sort of muffled voice," said the mother. "We finally took her to a doctor who said she had the worst case of tonsils and adenoids he had ever seen and so we had them out. Her voice got O.K. then, but she still kept on with her funny *s*'s and she's kept on with that horrible snoring at night."

We observed the girl again more carefully and noticed that she was a mouth breather, that she seldom closed her lips at rest. We asked her to press her lips tight around a pencil and to see how long she could hold them shut that way. Cathy pulled out the pencil in only two seconds, showing marked anxiety and fear in her eyes. When we asked her to do it again she refused and cried. She had forgotten she could breathe through her nose. The early growths in her nose and throat, even though long removed, had so conditioned her that she was convinced that if she closed her mouth she would suffocate and die.

Even the complete closure of her teeth in the production of an *s* sound had some death threat in it. So she made her sibilants with her mouth open and her teeth apart. Even after we had found the key and come to understand the situation, the going was tough. There was much explanation and talk and play with breath and sound. Cathy had to find rewards in breathing in and out of her nose, in sucking air and buzzing or hissing through closed teeth before she could believe. Once the fear disappeared so did the lateral lisp.

But such a case is unusual. More common is a history of enlarged adenoids blocking the Eustachian tube which equalizes

the air pressure behind the eardrum. A hearing loss can result from this condition and this in itself can cause defective speech either in voice or in articulation. Hearing losses may stem from many causes and speech therapists are alert to their importance. If your speech therapist tells you that his audiometric examination of your child's hearing indicates a hearing loss and that you'd better have her seen by a specialist, do so without delay. Don't let your child become ear-blinded.

So much for the organic causes of speech disorders. Now how about imitation? Speech is a learned thing and it certainly requires a model. Although babies practice sounds from every language on earth including Eskimo and the Hottentot, the sounds they eventually use for language are those of the people about them. What happens when the models themselves are defective? Let us tell you about the Erdler family. It was a rural schoolteacher who first brought them to our attention. She taught six grades in that one-room school far out in the country and, said she, "I have a little Erdler in every grade and an extra one in the third. And every last one of them snorts like a buck deer when they talk."

We went out to her school, examined all seven children, and all of them indeed had nasal lisps but only on the *s* sounds, and on them only when they began a word as in "soup" or "school." At the end of a word such as "yes" or in the middle of one as in "bicycle" the same sounds were correctly spoken. We went out to visit the family and found two more children, not yet in school, with the same snorted *s* sounds. But what was most significant was that the mother had an unrepaired cleft palate. They lived pretty much by themselves in isolation. The father was away from home most of the time, so the children learned the most obvious feature of the mother's speech, the nasal snort. Why the children did not imitate the mother's very nasal vowels or other defective sounds we cannot say, nor why only the initial *s* sounds were the ones adopted. Perhaps the first child picked up only the most noticeable of the mother's errors and the other

children learned their speaking from him. At any rate we worked only on his speech and when it was corrected, all the other children followed suit.

Children seem to adopt the speech patterns of their playmates much more quickly than those of their parents, perhaps because the identification is easier. In the case of twins, reared closely together, delayed development in articulation and language skills is very commonly found. Twins learn each other's gestures and postures so thoroughly that often there is little need to speak the thought. Or, if errors do occur, they do not interfere with communication. Speaking correctly is a hard task at first and when there is no need to adopt the standards set up by others, the task will not be undertaken.

Let us tell you about Rosemary. Her parents brought her to us when the public schools refused to accept her because no one there could understand a word she said. She said plenty and she talked in sentences and paragraphs, but the speech was so distorted by omissions and distortions and substitutions of one sound for another that only occasionally could the average person make out a word. Not even the other children got it, and usually they seem to be able to understand and even to translate a child's Scamboolian gibberish for the puzzled adult. But Rosemary's mother could understand her most of the time. She had learned her daughter's language instead of insisting upon the reverse. She wasn't able to speak it but she could understand it.

We have a sound film of a thirty-year-old man, married and with three children who still talks like Rosemary. His wife and children do his translating when it is necessary. He was born in this country but one would swear he speaks a foreign language. Reared by a completely deaf old grandmother on an isolated farm, there was no one to point out his mistakes or to demand conformity. He had gone to school for only one week but, because he was pleasant, bright, and willing, he had managed not only to survive but to find a woman who would take care of him and learn his language. We liked him but we couldn't help him.

He did not want or need to speak our language when those who loved him understood his own.

Yes, defective articulation can be learned through imitation if the appropriate conditions and influences are present. Ordinarily, they are not. Most of our children are so surrounded and bathed in normal speech that a casual acquaintance or playmate with a speech defect will make little difference. Certainly the majority of the articulation disorders we see are not caused by imitation.

But how about stuttering? Or voice problems? Almost everyone has heard of the mythical child who picked up his stuttering "habits" by mocking some other child who stuttered. We have carefully investigated many of these accounts and our conclusion is that imitation as a cause of stuttering is very rarely an important factor. Dr. Robert West, of Brooklyn College, has said that if stuttering were produced by imitation, then most of our school population would stutter, since the majority of children find some pleasure in such mockery or in playing with repeated syllables. Stuttering at times seems to run in families but this may be explained in other ways than through imitation. Even identical twins who have stuttered have stuttered differently. If imitation implies identity, a similarity in the kind of stuttering should be expected. We have often found a stuttering child of a parent who stuttered but very rarely one who stuttered in the same fashion. If a child is predisposed to stutter and is in an environment which tends to produce hesitant speech, a close companionship with some other stutterer might be enough to precipitate the disorder. But many parents seek to absolve themselves of all responsibility by blaming the stuttering on some casual acquaintance with an innocent child in the next block who happens to have that difficulty. Stuttering is not the chicken pox; it is not contagious.

Some peculiar voices do seem to be acquired through imitation. We have heard the odd voice quality of the deaf in the normally hearing child of such a parent. We have known monotones to run in families, and without organic cause. A harsh and strident voiced parent may pass on that voice to her child. A whining

child may have a complaining, unhappy mother with a nasal voice. But in each such instance, we must look deeper into the matter. We must find out why this child needs to identify in this way with this parent.

Another cause of speech defects much favored by parents is that of sudden shocks or traumatic experiences. Perhaps this is due to the fairly common experience of being speechless with fear, or of being unable to talk coherently during or after great stress. The boxer slurs in his punch-drunk speech; the shy young man stammers his proposal; the guilty confess non-fluently; the confused mix up their language usage; the nervous make phonetic slips of the tongue that are amusing; the intoxicated run their words together. These are stereotypes, the cartoons of truth. Truth is in them. If you look hard, you can find its outline. But to say that the addlebrained does not talk well is not to say that one who does not talk well must have been addlebrained.

Still there are occasional instances in which speech disorders do seem to begin in some crucial experience. One of the children with whom we worked was speaking very well at the very moment he was knocked down by a large dog and severely bitten. He did not speak or attempt to speak again for more than a year. He understood all messages and responded by gestures, nods, and appropriate facial expressions but he could not talk. He was mute. Or rather, as we discovered, he would not talk because the feel and sound of his own speech created in him the fear that something terrible would happen.

One of our lispers who had not responded to training in four months of concentrated effort finally mastered his *s* sounds once they became signals associated with affection and food. We learned that in his home (he was foreign-born) all danger was indicated by a sharp hiss. As a baby, when he went near flame, he had heard the hiss; when he started downstairs alone, it was there, and the boy had heard that *sssss* a thousand times as a warning of danger. Some speech therapists call the *s* the snake sound. We assuredly did not. We made it a signal of fun, and then the boy could learn it.

A fifth grade girl's voice was so soft and muffled it could not be heard three feet away. Her third-grade teacher testified that at that time, two years earlier, she spoke with normal loudness. Investigation showed that the girl was speaking with her mouth and lips closed as much as possible to hide the crooked teeth some classmate had cruelly commented upon. Only one person had ever said anything but often it takes but one. Vicious words have a long reverberation time.

Rarely do children regress or return to an earlier stage of speech development. Once they master a set of new sounds, they seldom give them up altogether. And yet one of our cases, Walter, whose baby talk and infantile speech seemed invulnerable to therapy, had this history. He had begun to talk at about a year and progressed very rapidly so that, by the age of four, he showed mature articulation of all the speech sounds. His parents had given him much approval for his speech mastery. But when he was almost five an unpleasant situation took place at the dinner table. Walter had mispronounced spaghetti as "pasghetti," and had been corrected for it by his father, not once but several times. Walter could not say it right, and became more flustered and tangled in the sounds and syllables. The father started roaring at the child for his stupidity and refusal to obey. For over an hour the scene continued, according to the mother, and the boy never did say the word correctly. When the mother attempted to protect the child and calm things down, the father flew into another rage, tore out of the house and got drunk for three days. When he returned Walter was talking a strange stereotyped sort of baby talk when he talked at all, which was not often. This continued unchanged into his school years and until we finally were able to help him.

Hysterical aphonia is usually an adult disorder, the person being unable to produce any voice due to a severe emotional conflict. No organic abnormality is present. During the World Wars many soldiers developed this loss of voice due to fear or great strain. One lieutenant who gave an order that killed all the men in one platoon and most of those in another, and who saw them die

right under his eyes, lost his voice when called upon to report the happening to his commanding officer. He came to us five years later, still without a shred of sound emerging from his mouth, still speaking in pantomime or with pad and pencil. He had what we call hysterical aphonia. Occasionally we find an instance of this in a child, though again, let us say, these instances are exceptional rather than the rule.

Julie, a seven-year-old, watched with horror the car careening around the corner and over the curb. She ran behind the tree just in time but failed to call out to her little brother, playing innocently there in the family driveway. He was killed and mangled. Thereafter, Julie would open her mouth to speak but no sound would come out though you could see her laboring to make voice. Like the lieutenant, Julie had a hysterical aphonia.

Perhaps it is in the disorders of rhythm, and especially in stuttering, that we hear more accounts of the beginnings being due to a sudden shock or fright. Indeed, we hear about more of these than we actually find. One of our college stutterers testified (and his mother gave exactly the same story) that he began to stutter when he was nine years old, that he knew exactly when and where it started. He said that he was coming home at dusk after playing with a neighbor child and there on the sidewalk was a man who had just cut his throat. "I was petrified," he said. "The blood was everywhere and his eyes were open and his tongue was out. And when I ran up the steps and into my house I couldn't say a word. My mouth was open and I tried and tried but it wouldn't come. Nothing would. I just had to pull my parents out by the hand and point and then I was sick."

It seemed significant that the kind of stuttering this man had was that of gasping and straining with a wide open mouth. The mother told exactly the same tale. "No," she said, "Joseph had never stuttered before that night. It began right then and it hasn't changed. I mean in the way he has stammered." But, in this case, we were able to double check the story by interviewing the young man's kindergarten and first-grade teachers both of whom remembered Joseph as a child who had stuttered, not

severely but frequently with many repetitions and hesitations. Were the mother and son lying? Not at all. The boy probably had never noticed his non-fluency before that night and perhaps his mother had not either. But he certainly noticed it from that time on. We must always be careful in objectively judging these accounts of a dramatic onset of a speech disorder. Most speech problems do not begin suddenly. Most of them creep in during the course of speech development. We have kept track of the parents' accounts of the onset of stuttering in many of our cases. Only thirty-two of them were reported to have begun suddenly in a shock situation. Not all of these could be verified but here are two which did seem to be genuine.

Earl's stuttering began at five years when, while talking to a playmate, he was hit by a baseball and knocked unconscious. Recovering in a few hours, he stuttered repetitively on almost every word. We knew the family and the child well and are sure that he had not previously shown any signs of stuttering. Careful medical examination revealed no brain injury but the boy did continue to stutter in waves of frequency for more than two years. Then it disappeared suddenly, according to the parents. What happened? Was the broken speech due to a brain injury the physicians were unable to detect? People with aphasia often become very hesitant. Certain internal brain injuries can produce a queer scanning repetitive speech. Or was the stuttering due to the fact that the boy had been speaking at the moment of the blow? Was it a conditioned breakdown in fluency? We don't know. We do know that stuttering began at that time.

Marian began to stutter in church. She was five years old at the time of the Christmas program in which she was the star with the fattest part in the playlet. She had been chosen for this part because of the excellence of her speaking ability. According to Marian's mother, the girl had memorized her various little speeches so that she knew them backwards and forwards. But that evening things began to come out backwards. Her first line was this: "We kelkum all of you to this our Pismus Crogram." The audience laughed, and she began again and again and again,

each time making more of a shambles than before. It was a long program and by the time it was over, the poor child was hesitating and blocking all over the place, and the audience and other participants were exhausted from hilarity. The girl continued to stutter for years. We checked out this story very thoroughly and it seems to be the truth. Stuttering does not usually begin suddenly, but it can.

When it comes to illness as a cause of speech disorders we find again that it is difficult to be specific. There is no one disease which invariably will produce a speech problem. Even polio may occur without the paralysis of the muscles used in speech though often it does cause the person to speak nasally, weakly, or lallingly. Measles in pregnancy may indicate a danger that the child about to be born might have cerebral palsy but this is not always true. Scarlet fever may produce a hearing loss and it may not. Meningitis may cause brain injury and that in turn aphasia or a clumsy tongue. There are other illnesses which can so affect the physical functioning of the body that speaking may become difficult. The speech therapist will always want to know about your child's health history.

He will be especially interested, however, in the child's early health history, even during the first year of life before any true speech had appeared. If this seems strange, we must remember that during this first year of life, the child is laying the foundation for a lifetime of talking. He must learn to coordinate his breathing with the closing of his vocal cords so as to sustain tone enough for phrases and sentences as well as for a single sound. He must learn to make his sounds on exhalation. Of course, if he turns out to be a Hottentot, this won't matter so much since in that language many of the essential sounds are tongue clicks and sucking noises uttered on the ingoing breath, on inhalation. But if he's to speak English or most of the other languages he's got to learn to inhale silently and use the outgoing breath for speech. This means that he cannot spend his first year crying, since we cry both on inhalation and exhalation.

True speech comes from the comfort sounds, the cooing and babbling that follow relief, not from wailing. Since sick babies cry, the longer they are sick the less practice time they have for the non-crying sounds and the more difficult will be the acquisition of normal speech. Also in crying, there is little movement of the tongue as compared with babbling, and the baby needs to learn to use his tongue while he makes sounds. He might turn out to be a Cree Indian and have to say, "Okimawiskewakitotew." Illness during the first few years can limit the amount of vocal play, can reduce the energy levels needed to learn the complex skills of speaking, and can create a communicative climate in which there is little motivation to learn to talk.

We knew one mother whose daughter had barely been able to survive her first two years of life. Indeed the child—and the mother—spent most of those years in the hospital, coming home only for an occasional visit. The mother had become so closely identified with the child that she showed an uncanny, almost superhuman, ability to anticipate every one of the child's needs. She not only fulfilled all the child's needs but she seemed able to express all the child's feelings even before the child did. We saw her spontaneously cry for the child when the latter pinched a finger in a playpen hinge. That child would never have learned to talk had not the mother suffered a nervous breakdown, which automatically resulted in a more rigorous environment for the child.

It is probably in this lack of practice or a lack of energy or motivation that illness can be said to be a cause of a speech disorder. The parents of a cerebral palsied or cleft-palate child must learn to keep from overprotecting their children. Both the cerebral palsied and the cleft-palate child must learn to eat and chew hard foods so that the tongues may become more mobile and coordinated. Both must learn that they must make extra efforts to speak well. Both must have parents who realize that talking, like walking, is earned as well as learned; it cannot be acquired as a gift. There is no royal road to speech.

We have been speaking of organic abnormalities, of imitation, of shocks and illnesses as though they were the exceptional causes of speech disorders. And so they are. What then are the common causes? Parents want this information and they should have it, even if it may hurt a little. Perhaps you can picture yourself anonymously in the back row of another parents' session as the speech therapist explains:

"We first must remember that a speech disorder is not a thing like a wart or a rash. It is a different way of talking, of behaving, or functioning. Perhaps a parallel would be an odd way of walking, a toe-heel sequence, or a limp or a pigeon-toed gait. The person is walking but not walking like the rest of us. The person with a speech disorder is talking but not as we do. Now this limping speech or this abnormal way of making the mouth move in communication is usually due to a failure to learn the skill correctly in the first place. It probably took the human race a million years to learn to talk; a small child must cover the same ground in a few months. It is not strange that one child in twenty will find the job too difficult; it is a miracle that the nineteen accomplish the task successfully. This is especially amazing when we see the sort of teaching most children get.

"We're not trying to make you parents feel guilty about this. We certainly do not think it is at all your fault. You have not known very much about speech or about how to teach it. You did the best you knew, and it was probably good enough to help your other children learn the complicated skill. But some children need more careful training than others do. You know how different they are. Even in the same family they differ, in temperament, in activity, in mood, in desire. Most children learn to read; some children, even though very intelligent, find it very hard. These need special teaching and care. It is this way with speech.

"Why do your children have speech defects? Usually because they failed to learn how to talk right in the first place. Consider the child who lisps or who cannot say certain of his consonants. We find that he seldom knows the words or sounds with which he has trouble—unless they have been pointed out to him. In his

ears 'thoup' sounds exactly like 'soup' and 'wadio' like 'radio.' You have known people who find it difficult to sing in tune. Most of them cannot recognize their errors; they do not know when they 'sing sour.' This is not usually due to a hearing loss but to a failure in perception. These children do not hear their own speech. They listen to the thoughts they utter rather than to the sounds of their words. Speech soon becomes very automatic. It runs itself. If the sounds are perfected before speech becomes automatic, this does not matter so much, but if they are made defectively and are not noticed by the speaker they cannot be corrected without retraining."

One mother of such a child found this very difficult to understand. "But we've told our son that he says such words as *bird* and *train* and *bus* incorrectly. We've told him so many times and we've said the words correctly so that he will know them. But he still keeps on making mistakes." We hear such comments many times and it is difficult for parents to understand that such simple methods of correction just do not do the job that must be done. We have a taped excerpt of such an interaction which might be revealing. It goes like this:

CHILD: "Atter I fru here, Mama, can I go pway in the no?"

MOTHER: "Not 'no' Johnny—snow! . . . Snow . . . SNOW!"

CHILD: "I thaid 'no.'"

MOTHER: "No. You said 'no.'"

There madness lies! But what is the underlying cause behind the child's inability to perceive the difference between the way he says the word and the way his mother pronounces it? Why can't he match his own utterance with hers? Why can't he recognize the difference? Some parents have felt that this was sheer stubbornness, negativism. Generally this not the case, though it could be. Usually the difficulty lies either in the inability to produce the necessary sound with ease or it lies in the child's tendency to perceive words as chunks of sound rather than as sequences. Johnny was perceiving the word "snow" as a whole, as a lump or chunk of sound, almost as though it were a single

sound. And he was attending more to the meaning of the word than to its acoustic features. "Snow" to him was the white stuff he wanted to jump into; it wasn't this series of tones and noises all lined up in a row: *sss . . . mmm . . . o*. That serial aspect of the word, its sequence of sounds, was not being scrutinized. He knew what he meant by "no" and so did his mother. "No" equaled "snow" at that moment. Sure, the mother's word had a little hissing *s* noise at its beginning but it lasted at most but a thirtieth of a second and then it was lost in the stronger remainder of the word. Some sounds are sliced pretty thinly. How is a little boy, anxious to play, to watch for such tiny cues hidden in the corner of a word, hidden at the tail of a sentence, buried in a paragraph?

How can a child hear these little substitution or omission errors as they flick by in the swift rush of messages sent in response to messages received? He, like all of us, has his receivers set to absorb meanings rather than sounds. We listen for content rather than for sound. Am I saying what I want to say? That is the important question for all of us, not how well I am saying it. So difficult it is to pay attention to the sound of our voices that you find radio announcers cupping one hand to an ear as they talk. You find actors, TV announcers, listening to recorded playbacks, to kinescopes. Our own voices and speech appear strange to us when we cock our ears to listen to the sounds rather than to the meanings. So let us make the point again. Most of the disorders of speech find some of their original and maintaining causes in this lack of self-hearing, in this automatic utterance. Certainly, children with articulation disorders must learn to open their ears again to what is emerging from their mouths. They must learn to scan their verbal output, to listen to sounds in their sequences. They must come to discover their errors, locating them, recognizing them, and comparing their features with those of the sounds they should be saying. We cannot expect them to do so without help or without understanding.

This difficulty in hearing ourselves also shows itself in voice disorders. We have learned to be very careful in letting our voice cases first hear themselves on tape. The shock of self-confronta-

tion can be overwhelming to the person with a falsetto, to the monotone or cleft-palate speaker. We have seen the expressions on their faces change from shock to surprise to disbelief to revulsion to panic. We have had them tear off the tape or break the recording. We have had them run from the clinic and never return. So we are careful. There was a little rhyme attributed to President Woodrow Wilson which helps to explain this lack of awareness of a serious speech disorder:

My face, I don't mind it,
Because I'm behind it.
It's the people out front
Whom I jar!

This listening to the meanings of our speech creates a layer of insulation which protects the person with defective speech from the distress of its abnormality but unfortunately it also prevents him from noticing the abnormality. We cannot change that which we do not recognize. The voice case must come to hear his voice, unpleasant as that experience may be.

It has been said that the stutterer has acquired a morbid set of ears, that his difficulty lies in his excessive listening for abnormality, that he listens to himself so much that the automatic flow of speech is thereby broken. We cannot deny that in the more severe stutterers this seems to be true. As one of our teenage stutterers said:

I'm always expecting to stutter even before I open my mouth. I see the hard words coming, the hard sounds. I look them over. The words beginning with M's and P's look as big as a house. I'm scared. I'm scared of the faces I'll have to make, of the way my listener will look. Sometimes I rehearse what I have to say ten, twenty, thirty times and then, when I begin, bang! I'm stuck and then comes the struggle. Finally the word comes out and I get going again—only to find myself jamming again and again and again. If I could only forget this rehearsing, this hunting for trouble, this constant watching of my speech, I bet I'd have an easier time of it. But I can't. I'm caught.

There is something very important for parents in this account. When a child's attention is called to his speech, the experience should not be a punishing one. The irritated parent or teacher who points out an articulation error angrily, impatiently, or scornfully is not going to help matters much. The speech therapist often has to work hard to counteract the evil which unwise "correction" has created. No child will want to listen to his speech if previous experiences in self-hearing have been painful. When you visit the speech therapist at work with your child you will find a situation full of fun, a situation where speaking is enjoyable, a place where even spotting mistakes is pleasant. There is no anger in the therapist's voice as she points out how far off from the target sound the child has been in his attempt. The therapist will share the stuttering, will duplicate the nasal snort, will vary the defective *s* sound in her own mouth to show the child that these are not painful, that he can listen to them, that he can change them.

Indeed it is fascinating to see how often this creation of a permissive climate for self-listening does the whole job of therapy. Here is an account from the logbook of a student therapist who was working with a child named Charles Churchill who was unable to produce a good *ch* sound. He had never been able to say his own name. It was always Sharles Shurshill and other people could usually guess the first but not the last. He was ten years old.

As my previous reports have indicated, Charles has been a very difficult child to work with. He's been resistant, bored, restless, angry. I couldn't seem to get him interested in any of our games or activities. But today things really changed. I'm not sure I can describe exactly what happened but here goes. I had prepared a list of CH words such as CHAIN, CATCH, and so on and I rigged up two microphones which fed my voice into one of his ears and his own voice into the receiver on the other ear. Then I told him that he could wallop my hand on the table with a rolled up magazine, or at least have the chance to do so because I'd try to pull it away in time, whenever he could guess which ear he was hearing his own voice in.

I forgot to say that I'd rigged up a little switch so I could shift my voice or his voice into either ear I wanted. So then we began to say these words at the same time and I used his pitch level so he couldn't tell from that. I made the word right and he, of course, made it wrong. Well, he found it harder than he thought but he won enough times to get a couple of good swats in. I hollered louder than I needed to and he liked that. Then I began to imitate his mistakes instead of saying the words correctly. That really made him listen hard. Well, when I shifted back to saying the words correctly, to my surprise, so did he. Not all the time, but most of the time. So then I added some new words: CHOOCHOO, CHURCHILL and CHARLES and what do you know, he made them right too. So I kept strengthening them and then took off the earphones. He was still able to make them, to say his own name. So we recorded it on tape and played it back to him and wow what a look on his face! Almost made me want to cry. He kept saying it over and over again, Charles Churchill. . . . Charles Churchill. Even when he wasn't talking he was saying it over and over again in his mouth, and he left at the end of the hour still doing it. I wish I knew what happened.

What happened was that this boy could listen to himself for the first time without the static of failure and frustration blocking out the sounds he was saying. He was able, under these conditions, to hear his words matched against the therapist's models. And so he was able to change his utterance. And, finally, he could say his own name. He will have few achievements as great as that one.

While many articulation disorders are due to poor perception of the individual speech sounds as they occur in the flow of speech, there are also those which are due to a failure in learning the necessary coordinations needed to produce the sound. Why do some children fail to learn these coordinations? Why are they content with making a sound which only approximates the correct one? We must return to the baby to find out. As we have said, the infant spends much of his waking time in babbling and vocal play. He practices all sorts of sounds, both by themselves and in syllables and in jabber. What is more important, he seems to listen to them. One parent reported that his son confined his utterance for three weeks to his *m* and *b* sounds, ringing all the

changes, combining them in every possible way. "Buh" he would say. "Buh . . . Buhbuh . . . ummmmmmmmm . . . mmm . . . mmbuh . . . Mamamamammee . . . ooboo . . . bemmbuh . . ." and so on until the poor father almost went nuts. Babies listen to themselves when they do this playing with speech sounds just as they watch their fingers when they play with them. This is how they learn to control their movements. Adults forget the careful scrutiny they needed to exert when, as children, they first learned to tie their shoes. As adults they can tie a bow even in the dark, by the feel alone. In similar fashion adults can easily utter sounds by feel alone which once required much careful listening along with the experimentation. It is possible for us to speak perfectly even in a boiler factory when the noise level is so great that no auditory control of speech is possible. We doubt that any infant could learn to speak in a boiler factory.

We feel, then, that most of the articulation disorders stem from a lack of this early learning and experimentation. We feel if parents would encourage this sound play, would do it themselves and reward it in their children, that few children would lisp or lall or fail to speak their sounds correctly. Most parents fear this verbal play, thinking that it is akin to baby talk, to the itsy-bitsy silly stuff that certainly should be avoided. But the child has a real task before him if he is to master the more than forty different sounds in English, if he is to know them in his own mouth as well as in the swift speech which flows unceasingly past his ear. He needs help and most parents do not give it. Someday, when more information for new parents is available, they may be better teachers. Some children need more than a ceaseless flood of meaningful speech from the giants about them. They need to imitate the parents who should play with sounds too or else they need a speech therapist to provide them with the opportunity they missed. They must learn their alphabet of speech sounds by experimenting with imitation.

They should learn it early, for soon the need to listen to meanings will become more important than the listening to sounds. Once the child's need to express his desires is coupled with the

necessary vocabulary, the controls for speech are turned over from the ear to the mouth. He talks by feel, by the feedback from his organs of speech. "Thoup" *feels* just as good, or even better, than "soup" to the person who lisps. It may not *sound* as good but as the gay old psychiatrist said to the worn-out young one, "Who listens?" The feel of the tongue in the mouth, the contacts and postures it makes, these are the cues to which the person responds rather than to the sound. The need to send the message overrides all concern for the way it is spoken. Meanings can become tyrants. Listen to this clutterer:

I know what I should do to make my speech more fluent. I know that I should slow down and speak carefully and distinctly. But the moment someone asks me a question or I need to say something, here I go, Gallegher! Off I go like a racehorse! The need to say what I want to say drives me. The thought can't wait. Not a second. It must be said right then. I know I've got to learn to control my speech but really what I need to do is to control the hunger of my thinking to be expressed.

Few children become clutterers but most children find themselves very impatient when they are asked to listen to their speech while it is coming out of their mouths. That is why such parental admonitions and advice such as to "Watch your speech now!" or "Be sure to say it right!" have little value. The best way to help a child do the self-hearing he must do is to make the experience a very pleasant one. The child whose parents have helped him play with sounds early, who have enjoyed his taking words apart and putting them together, who have rewarded him with love for his experimenting with sounds, that child will not develop a disorder of articulation. He will be able to listen to his speech without pain. He will be able to spot the differences and change them to fit the models provided by his parents. Self-hearing can be turned on when it is needed.

We have spoken before of models. Any learned skill implies some teacher who provides a model to be followed. Among the common causes of speech disorders are the providing of improper

models for speech. We are not now speaking about parental baby talk or about parental speech defects acquired by the child through imitation. We are speaking about speech models which are too difficult for the child to follow. One of the most obvious of these is the fast rate of speech which some parents present to the child. Children do their best to adopt the patterns of behavior they see about them, but there are some models which are just too difficult to duplicate. You perhaps have witnessed some harried mother on a shopping expedition, her little toddler trying his best to keep up. You've seen him stumbling, running, being swung through the air in an arc as he clutches the mother's impatient hand. We would wager that this same mother was most patient and tolerant and careful in teaching her child to take his first steps. But once he has learned to walk, keep up! The same situation is often found in talking. The same parents who worked so hard to get the child to say his first words are the very ones who thereafter rattle away at a pace no child can possibly follow.

There are many ways in which rapid parental speech can make it difficult for a child to learn to talk correctly. When the words run together in a rush, how is a child to notice the tiny bits of distinctive sound which he must learn? It's like trying to grab a bullet on the wing. How can he hear that "yes" ends in an *s* rather than a *th* if the mother says, "YesIthinkitllbeok" almost as though the sentence were a single word? If this is the pattern he must follow, his only recourse is to hit the high spots, the vowels, and duplicate the general sequence of inflections. He's talking like his mother but he just can't do everything so fast. And so he drops and distorts the harder sounds and ends up speaking what to him is sense but what to others is gibberish. And then we say that he has delayed speech. Or perhaps, he manages, as the years go by, to acquire through his blundering methods of self-help some of the sounds he needs. There still remain others more intricate in their coordinations which his own fast rate of speech will not permit him to learn. Speech therapists always listen to the rate of the parents' speech when they come for a conference.

Parents also forget that the complexity of the speech patterns

they exhibit as models for their children may be too difficult. When you've just learned to walk, you should walk, not attempt ballet lessons. Somewhere around the end of the child's second year, he begins to speak in sentences. This is a crucial time in speech development. If the parents speak to him in simple sentences, usually short ones, he will have the models that he can imitate and perform. They are within his reach. And then he can go on to the compound sentences and then to the complex ones of mature speech. But if what he hears most of the time is something like this, he will tend to have trouble.

Now-Jimmy,-pretty-soon-now-your-father-will-be-coming-home-if-he-gets-out-of-work-on-time-for-once-and-then-we'll-go-in-the-car-to-Grandma's-so-you'd-better-get-upstairs-and-wash-up.

We would hate to have to learn French from models of that sort even as an adult. What the mother should have said was this:

Jimmy! Daddy comes home pretty soon. Then we'll go see Grandma. So let's go upstairs and wash. We'll go in the car.

These verbal goals are within his reach. Such sentences are not too hard. They can be managed.

Consider for a moment what choices are open to a child whose parents set for him speech samples which are too fast and too complex. He can either imitate the fast flow and talk jabberingly or else he can speak his consonants correctly and falter hesitatingly. If he takes one path, he may stutter; if he takes the other, he will have a disorder of articulation. If only parents would blaze the third trail of easy simplified speech, we speech therapists would pretty well be put out of business. But they do not know this third trail and no one has told them about it. There is much more to learning to talk than the acquisition of the first words. Fortunately, many parents seem to take the right path instinctively, and most children are tough and agile enough to learn in spite of the models provided by their parents. But we are speaking about those who cannot.

Many children who would otherwise acquire normal speech

fail to do so because they are not given any models for revision or self-correction. One of the hardest things to get parents to do, we have found, is to put a few mistakes into their own speech and then to correct them. The mother of a lisper, for example, should occasionally lisp and casually correct it before proceeding, thereby showing the child what he should do. When this is done well, it provides a tremendous incentive for the child to undertake some self-correction. Similarly, it is sometimes wise for the parent of a young stutterer to hesitate and falter deliberately, then to say the sentence again calmly and fluently and without any emotion. Children will imitate the action of their parents much more readily than they will do what their parents tell them to do. How can a child learn that he can take another crack at a word which is wrong except by such an example? Parents find such suggestions hard to accept because of their own sensitivities, because they fail to understand that speech therapy is a learning process.

Indeed, we are sure that the major maintaining factor for most speech disorders is this very reluctance to come to grips with the problem. If parents hate to touch it, will not the child? Then too, the types of correction generally used by the parents are often emotion-ridden and unpleasant, when they are not misguided. Listen to this selection from an autobiography:

My father never mentioned my stuttering except once. I knew he was very conscious of it because he held his breath. I could almost hear him hold his breath whenever I stuttered. He froze but he never said anything except that once. Then he said, "Oh, for God's sake, why in hell don't you stop that stuttering? I can't stand it!" I'd never heard my father swear before. Nor have I ever since, except that every time I stutter anywhere I hear again what he said that once.

Somehow our sympathies are all with that harried father but a bitter word lives a long time. Most of the reactions of parents are not this drastic, nor have they been repressed so long. But often they tend to become irritable and impatient as the speech disorder drags on year after year. The natural anxiety which parents feel, their dread of what may happen when the child goes out into

the cruel world of school or playtime or work, these can shift so quickly into impatience and irritability as they seek expression. And so the mother interrupts and makes demands and reproaches and the child feels guilty and helpless and lost. Many of the children, with whom speech therapists work, feel that it is hopeless to expect to speak well. They have known too many times when they tried and were found wanting. And so finally they do not try any more.

These then are the major reasons children fail to learn to talk normally. They may not possess the necessary intelligence or hearing or coordination ability. They may have organic abnormalities which place obstacles in the road to good speech, obstacles which they have not learned to detour. There may have been traumatic or shocking experiences which broke up the speech which was present or which prevented progress. In some instances they may have learned their defective speech from others. But in most cases, the speech disorder is due to the task of learning to speak itself, to the ignorance of parents concerning the best ways to teach talking or to correct speech deviations. This is why this book was written.

CHAPTER 3

Creating a Good Speech Climate in the Home

ONCE IN CONVERSATION a minister of the gospel informed us that he felt that God was not half so concerned with original sin as he was with the sins of everyday living. We feel much the same way about the causes of speech disorders. It is not the original causes but the maintaining ones which are most important. We feel that any child will eventually learn to talk normally if he lives in an environment favorable to good speech. To create such a climate, both inside and outside the child, is the basic responsibility of the parents. But it's hard to do this when you don't know what's wrong or what's right.

Most of the mistakes made by parents are not willful mistakes.

Rather they are due to lack of information or to misinformation. Some of the influences which keep a speech defect going are mysterious only because they are not recognized. It's so difficult to know what goes on in a child's mind. It's equally hard to scrutinize your home life with unprejudiced eyes. As we have said before, some of the best speech therapy we have ever witnessed has been carried out by parents. Also some of the worst. In each instance, the difference was due to the amount of understanding possessed by the parents. Let us cite some examples.

Larry was seven, an only child. We knew a psychiatrist once who said that being an only child was a disease in itself. Larry spoke very rarely. When he did speak, the words and sounds were recognizable but not very clear. However, the boy spoke only to himself. A child guidance clinic had diagnosed him as an autistic child, as one who was so supersensitive to emotion-producing stimuli from the outside world that he had detached and defended himself from it. At times Larry appeared deafened, failing to respond in any way to other people when they tried to talk to him. At such times he did not even seem to hear loud sudden sounds which would have made any normal child jump halfway out of his skin. A bright yellow ball seemed invisible to him. No, he was not epileptic! It wasn't that he was mentally retarded either. He had discovered numbers and he would spend hours by himself adding and subtracting them. Other hours were spent in the manipulating of puzzles. As this experience shows, his memory was excellent. Once, when his father began to take him out to an uncle's farm by a different route, Larry became excited and said, "No, no. Other way." Although the boy had ridden out there only once before, a year earlier, and the route was very complicated, he was able to give precise directions, one of the few times he had actually talked to his parents. Usually the boy was mute. He could not bear confusion or the impact of others. When these bore down upon him, he would retreat to a corner by himself and rock back and forth in a crouched position humming always the same odd little tune. He was a strange child.

Our examination of the boy was difficult and time-consuming.

We spent an entire afternoon with him before we finally heard enough to know that Larry was a severe laller. He used only the vowels and consonants made with the back of the tongue. Subsequently we tried working with him in the speech clinic but he only seemed to be getting more withdrawn, and the amount of his speaking or communication grew even less. We then called in the mother. Previously she had presented the picture of a complaining, overburdened housewife, helpless and unable to cope with her son's admittedly difficult problem. Dissatisfied with her marriage and overcome by her responsibilities, it was difficult to judge her hidden strength. We told her that Larry would undoubtedly end up in an institution unless she could do what we could not. And then we outlined a program of home treatment which we felt few mothers could follow and shook our heads pessimistically.

But this is what that mother did. She stopped talking to the child. She stopped her constant wailing aloud about her lot. She sat quietly beside him for hours. She lay by his side when he lay on the floor. She rocked and hummed his tunes when he did, played with his puzzles, worked out his problems on the toy blackboard. She removed the bright and colorful things about him, subdued the noises, turned off for keeps the TV and the radio. She moved slowly. In a word, she created an island of safety in a world which had seemed too much for Larry, and she shared that island. He began to smile at her. She'd smile back. Then he would jabber a little. She'd echo it quietly, sharing it again. Then, very gradually at first, she began to make little comments on what she was doing or seeing or feeling. "I sit down now. . . ." "There kitty . . . by window." A long silence. A comfortable silence. Then, "Kitty go way." More silence, safe silence. Well, Larry began to talk, to think aloud too, and finally to communicate. It took a year and a half before he was able to enter school even for half days, and three years before he became the normal, happy child we finally came to know. We have never underestimated a mother since. We have seen a few miracles but this change in a woman as well as a child was probably as im-

pressive as any of them. Fortunately, few mothers need undergo such an ordeal.

In contrast, there is the tale of another mother, a strong, pleasant woman who was determined that her son was not going to continue to stutter as her brother had done all his life. Until the child was five, she had done nothing, hoping that Mark would outgrow it, but the boy kept getting worse and worse. Finally, he was struggling in the transitional stage of the disorder, though he was still an outgoing, happy little fellow. Something had to be done. And so, one Monday morning she went to the boy before he got out of bed and said, "Now Mark, we've got to cure your stuttering before you start school this fall. You stutter because you get so worked up and tense. You've got to learn how to relax when you talk. Now you aren't going to get out of bed until you can talk without stuttering. Now tell me who I am." Mark lay there jerking his jaw and squeezing his lips until finally the word "Mother" came out. Firmly and patiently she demanded that he try it again and again and again without success. Then she said, "All right, I'm going to leave you for an hour and then I'll come back and we'll try again but don't get out of bed. Just relax." When she returned the same miserable experience took place. She then brought some pictures for him to name after he had thought about them in silence and prepared to speak. Again he stuttered. She brought him his breakfast, his dinner, and his supper. He did not sleep well that night, nor did she. As we have said, this woman had a strong character, and she kept that boy there in bed for three days and nights. Mark has never forgiven her. He is one of the most severe stutters we have ever known, fearful of so many sounds and words that he cannot bring himself to attempt them. He is practically mute. We met him in college and he told us this tale. We haven't been able to help Mark. These two admittedly extreme cases illustrate clearly the point that success in therapy depends greatly upon proper techniques as well as upon the parent's desire to help.

Most of the helpful or hindering things which parents do are less dramatic though no less important. Once we face up to the

fact that the task of learning to speak normally is influenced by hundreds of subtle attitudes and happenings, many of which are to be found in the home, the importance of the parent's role in speech therapy becomes very vivid. An unhappy child learns slowly if he learns at all. No one conquers a speech defect without having to endure frustration and temporary failure. When a child doubts his abilities or carries a hidden burden of guilt, he will not be an efficient worker. The angry child will find it hard to be patient, to be content with small victories. The fearful child cannot try the new pathways he must explore. We have been working with speech-defective children for a long time and we know how utterly important the home is in determining the success of speech therapy, for the child is the concentrated essence of the home from which he comes.

Most parents get a bit uneasy in confronting this thought. No home is perfect. Human beings in a house are bound to produce conflicts, occasional evils of omission or commission which do not look good when scrutinized. Mothers get tired. The dishes must be done unendingly; so must the ironing. Fathers come home tired and hair-triggered from their workday battle. Brothers and sisters wrangle. All say things they wish they hadn't; all do things they know they shouldn't. So be it! Let us now give and accept absolution and start from there. Parents need not create that mythical impossibility, the perfect home life. They need only see what they can do to give the child who has a speech disorder a better chance to conquer it. There are always little things we can do, conditions we can change, behaviors we can inhibit which will help. The child with a speech disorder needs all the help he can get. An ounce of change is better than a ton of guilt. A pox on the past. Let's do something different.

Perhaps the best way to begin is by looking at the child as though with the eyes of a stranger. This is not easy. Our children have become so familiar—almost like the dining room furniture—that we do not see them as they really are. The father of a teenage girl often experiences shock when suddenly he confronts the young woman going to the door to meet her date. It is hard

to notice the changes that occur so gradually. We worked with a high school girl whose infantile lisp was unconsciously maintained so as to fit the father's picture of his beloved girl baby. The mother had deserted the family and the girl's basic security lay in her father's devotion. It was his unrealistic picture of her, his inability to see her as she was, which prevented her from maturing in speech as well as in many other ways. We attempted speech therapy with her for two months before we came to understand that we were working with the wrong person. Every time she did manage to get a perfect *s* sound, she became upset, and that was the clue we needed. Some counseling interviews with her father alone, and then with both of them, unraveled the situation and soon she was speaking normally. So it is wise for parents to take a long look with objective eyes at the child who has lived with them so long.

But how can we do that to one who is so much a part of us, flesh of our flesh and bone of our bone? That was the question put to us by the mother of a boy who had been held back in the first grade for another year because of his reading and speech difficulties. His speech was garbled by so many articulation errors that his attempts to fit his defective sounds with certain of the alphabet letters had resulted in confusion, frustration, and hopelessness. This mother's picture of her son was also warped. To her, he was a brilliant (which he was), artistic (which he was not) paragon of all virtue (and there aren't any) who had met with constant misunderstanding in the cold, cruel world outside her lovely home. Actually, he was a whining, unattractive boy who responded to difficulty or challenges by begging for help or by giving up. He had never known responsibility nor did he want any. In the home, he was constantly shielded from frustration or failure. The mother's idealized picture of her son was also a mirror of her unrealistic picture of herself and of her home. Only after a series of visits to a child guidance clinic was she able to open her eyes and ears. Only then did we ask her to observe her child on the playground and in the schoolroom. What she saw was not pleasant and our sessions with her were stormy ones but,

in the end, objectivity prevailed. Once again, when the parent understood, she did what had to be done. That child is all right today.

We hesitantly suggest that one way of beginning is to discuss your child with others who know him. Our hesitation stems from our knowledge of how often teachers and adult associates of a child paint the pictures which the parents want to see. However, if you will start by expressing your concern for the child, your awareness that there may be problems that you do not know and your desire to do everything you can to help him, these individuals may break down and really tell you the straight truth. The teacher, the speech therapist, the Sunday school teacher, the Scout leader, any of these may help you. We're not so sure about the neighbors or about your mother-in-law. It's hard to listen to some of the things they may tell you without becoming angry. You'll want to argue, to defend. But look for the grain of truth in the chaff of their descriptions; it may be only half-said but it will be there. It is also well to remember that some of the best criticisms come from those with the worst motives. It is the hostile arrow that hits the bull's-eye.

Nevertheless, the most important thing to do is to take a long, hard look yourself. As a human being, what are the child's assets and liabilities? How does he differ from his associates, his play-mates? In a child with a speech defect there is always the tendency to see only this difference, probably because it is so obvious. But there may be others even more important. For example:

Jerry's speech was pretty bad. Much worse, indeed, than it should have been. True, he had been born with a cleft lip and palate but the surgery had been very successful. There was little scar tissue. The boy was able to close off the rear door to his nose by lifting and spreading the soft palate. Organically he was all right. In the speech clinic we were able to get Jerry to speak isolated words and sounds, and even sentences, without nasality or nasal snorting or lalling, but the moment he really had something to communicate, back he went to the honking abnormalities of the cleft-palate speaker. He could blow up a tough balloon;

he could play a trumpet; but he talked terribly. In the clinic and under our watchful eye and with careful preparation, he could repeat perfectly almost anything we said to him. It wasn't that he was lazy either. He would work for hours on his speech. He wanted to talk well. We asked him why he was having such trouble in carrying over his new-found skills into his real speech and he said he didn't know, that maybe he "just forgot. Or maybe it's that I'm just like my uncle."

We had known that Jerry's uncle had also had a cleft palate and that his speech was very defective. We had also known that this man lived on the farm next to that of the boy's father and that they were together frequently. But what we did not know was that, like Jerry, the uncle had red hair and freckles. The uncle was fat—and so was Jerry. And, to top it off, Jerry had been named after his uncle. As the mother said later, "Jerry's been the spitting image of his Uncle Jerry from the very beginning. They're as like as two hound dogs from the same litter. He gets his speech from his uncle just like everything else, I guess." We cannot be sure what bearing the red hair, the freckles, the fatness, or the name had on Jerry's difficulties, but certainly an identity of speech existed despite his surgery and therapy. All we know is that when the boy was sent to another uncle's ranch in western Colorado for a year he came back speaking normally. Jerry helped us understand how necessary it is to look for differences other than speech in the speech defective.

These differences, of course, need not be physical. Our patterns of behavior may be as distinctive as any feature of face. One child may be as curiously explorative as a monkey; another feels secure only in the familiar. One child will tenaciously struggle with a puzzle board for an hour; another will give it a brief token effort and quit. We all know, even in the same family, the quiet child and the rambunctious brother or sister. Children differ in many ways. What is important is that we recognize that those who have speech defects differ in ways other than speech.

We remember well the clue provided by an observant mother which solved a boy's stuttering problem when we in the speech

clinic had made but small headway. Julius was the youngest and most frail of five children in a highly active and competitive family. His speech was broken badly by vowel prolongations and consonant repetitions as well as by frequent retrials of phrases. He would say: C-C-C-Caaaaan, C-Can, uh, C . . . aaaaan I, Can I, C-C-C-Can I, I, I, Can I go nnnnow?" It was very difficult to get him to tell us anything. At times Julius would get so exhausted from his efforts he would lie down on the floor and fall asleep, even in the middle of a conversation. One morning, after we had asked the mother to observe the boy very carefully and with the eyes of a stranger, she reported that he had a habit of moving his mouth silently as though he were talking to himself. This occurred most frequently when he was playing by himself but the mother had noticed that the behavior was beginning to creep in even at mealtimes. So we bought Julius a puppy. It was his, all his, but we kept it out at our farm and he came to visit it and play with it each day. With it he explored the lanes and fields, the barns and shop, the gardens and the badger hole and, as he did so, he began to talk to the pup. Youboy, as he called his waggled-tailed friend, would cock his ears and listen but he never interrupted. Julius explained everything.

We overheard him once when he was below us in the manger. "Now, Youboy," he said. "Don't you be scared. They're bigger 'n you and they're bigger 'n me and that black cow over there can make a nawful hollering but I'll take care of you, Youboy. If he scares you, I'll just go up and hit him with the milk stool. Right between the eyes. Now, let's go over there. See, I told you it's ok. You weren't scared anyway? Aw, yes you were. No I wasn't. Yes you were, and I can prove it. . . ." So the conversations went, and there wasn't a speck of stuttering in them. After allowing time for stabilization, we casually managed to join the tours and to participate as a third party. Then we got the mother in on them, then a brother or two, and at the end of the summer Julius took Youboy home with him. We wish we could say that his stuttering disappeared suddenly and completely. It did not,

but we are sure that his recovery, which did eventually occur, dated from this vivid set of experiences. And it was his mother's keen observation which served as the essential key. Speaking had become too tough a job in that family situation. Julius needed someone who would listen, someone who needed him, someone to dominate and to love. The mother told us later that she had been vaguely aware of this peculiarity of her son's behavior for some time but had never felt that it had any importance.

Let us cite just a few more examples of the results of keen parental observation. It was the father of one of our lispers who noticed that his daughter would not eat uncooked carrots, peanuts, crackers, or other hard foods. He said also that she seemed to chew in an odd fashion. This led to the discovery that the girl's front teeth were abnormally sensitive and that hard contacts caused actual pain. In the utterance of *s* and *z* sounds in the fast pace of conversation some tooth clicking often occurs, although it need not. The girl was using a tongue protrusion to make sure that saying a word like "scissors" or "yes" would not hurt her. Some dental cooperation and some teaching of non-clicked *s* sounds solved that girl's problem.

Jimmy's mother found the key to an oddly inconsistent form of baby talk in his pocket when he was awake and in his hand when he was asleep. It consisted of a few small scraps of blanket. Until Jimmy entered kindergarten, he had never gone to sleep without fingering and clutching that old baby blanket of his. His parents had humored him, washed the thing when it had to be washed, taken it with them on their vacation trips, seen that he had it with him when he went to the hospital for a tonsillectomy and so on. Sporadically they had tried to free him from its tyranny but the boy always put up such a terrible scene, refused to sleep, and could not be comforted that, in the interest of their own peace, they had let him have his way. However, the week before he entered school, the parents talked things over with the boy and the father threw the old blanket in the ash can, closed the lid, and said sternly, "Son, now you are a big boy!" To the

parent's relief, everything seemed to turn out all right. Jimmy seemed to accept the inevitable, and he slept that night as well as ever.

For more than a year he kept his secret, his little scrap that he had cut from the blanket there in the ash can. It was the boy's curious habit of putting his hand in his pocket rather than around his father's neck when the latter carried him upstairs to bed which led to the discovery. That night the mother searched the boy's pockets. In it there were three marbles, a pipe cleaner, some string, and a candy wrapper, a normal inventory. Then she looked at her son and saw the scrap of his babyhood clenched securely in a tight little fist. Fortunately, she told us about her observation before she told her husband. We suggested that she tell Jimmy she knew about his scrap of blanket and that he could keep it as long as he wished. But we also told her to buy the jackknife he wanted very badly and to offer to trade it whenever he thought he'd like to do so. The boy held out a week. We aren't sure about the symbolism involved but we do know that from the day of that decision to swap, Jimmy's speech therapy made rapid progress.

We probably should resist putting down the sequel to this story but we can't. A month later, Jimmy's mother came in again, again disturbed. The boy was going to bed with the jackknife. We asked her if it were opened and she said no. We told her to forget it, that he was probably reminding himself that he was boy rather than baby. "But suppose he has to keep going to bed with this knife all his days," she wailed. We smiled and reminded her softly that someday Jimmy would have a girl.

Here is another example of keen parental observation. Sandra had cerebral palsy. At seven years she had managed a stumbling sort of walk and she could feed herself though the food often failed to find its mouth target. But she couldn't talk. When she tried, she would contort her face. Her Adam's apple would jump up and down as though in swallowing. So expanded did her chest get that she seemed to shudder with the effort. Nothing but a squeak or guttural grunt would come from all that labor. How

she tried! And then one day her mother saw something. Sandra, still playing in her padded playpen, was hunched down on her knees with her arms folded and she was making sounds, babbling easily and freely. She almost seemed to be talking to herself. Using this posture as a starting point, the mother eventually was able to teach her child to speak.

It was during a summer vacation that the father of a cleft-palate child noticed that his son occasionally would make a quick sidewise shake of his head. The boy's speech had seemed to be slipping and he was getting harder to understand. "Suddenly the idea hit me," the father said, "that the boy's head shaking was just what I did after I got water in my ears when swimming." The boy had developed a severe middle-ear infection which cleared up under appropriate treatment by a specialist. The speech improved swiftly.

We could continue with this anecdotage but we fear that we may leave the impression that the solutions to all speech problems lie in such dramatic discoveries. They do not. Usually only patient daily training ultimately does the job. But even here the information provided by observing parents is still vital.

What activities should the parent be observing? Certainly the common ones of playing alone and with others, certainly how the child eats and sleeps. In observing these, parents can procure many helpful bits of information. Moreover, such observation often leads to past experiences which may have significance.

A public school speech therapist told us this one. "I have one game I use with a group of children to strengthen their new-found sounds. I have them line up, holding and swinging a large stick and pretending to be a locomotive. Each in turn says his sound alone or with a vowel, perhaps like this: *choo-koo-sssss*, and then they chug around the track chalked on the floor. I check them every time they pass the station and switch off on a side-track those who need more help. It usually works pretty well but one of my boys, Ted, always refused to play this speech game though he always cooperated in every other way. Finally, I asked his mother if she could explain. She was puzzled too at

first and then she suggested that I line up the children with Ted at the end of the train. I did this the next session and the boy readily joined in without objection and had a fine time.

When I told the mother she laughed and said, "Ted still remembers, I guess." Then she told us that when Teddy was three or four, a group of children were playing train and going through tunnels made of upturned chairs on their hands and knees. Evidently Teddy hadn't been going fast enough or something, because the little girl crawling through the chair tunnel behind him had taken a good big bite out of Ted's bottom. No wonder Ted preferred to be the caboose rather than the engine.

The mother of a little stutterer noticed that the lad seemed terribly tired every morning. He would nod even as he ate his cereal. She reported this to the speech therapist who was finally able to get the boy to verbalize his night terrors. The boy was lying awake half the night, afraid to go to sleep, afraid that once more he would dream that his father would drown because he (the child) could not call for help.

One bit of significant information provided by another father was that he'd noticed that his boy's voice was lower in pitch and steadier when he talked with food in his mouth. We not only found this to be true but were able to stabilize his deep natural voice through the use of gum chewing. Until we hit upon this, the boy had always been uncertain about the new voice and fearful of pitch breaks upward into the falsetto. The chewing not only relaxed him but it also was something fundamental that he could control.

An eleven-year-old girl, Sally, had experienced bulbar polio which resulted in no apparent paralysis of the limbs but a partial paralysis of the palate and tongue. The girl could move both of these organs but more effort was required than she could afford. Our task was to strengthen these muscles through speech, and at the same time to improve the latter. Unfortunately, the girl had experienced so many failures that she would not try. Her parents had demanded too much. When she, for example, by a herculean effort had managed to say "church" perfectly, they would ask her

to say it again and again, a demand which always resulted in final failure. The girl had lost confidence in ever being able to speak correctly with ease. She was convinced that clear, non-snorted, non-nasal speech meant hard labor. As a result she made it so difficult she preferred to be silent. We were making very little headway until one day her mother reported the important information that the previous night Sally had talked in her sleep and had talked very clearly in the few sentences and disjointed phrases they had overheard. We asked the mother to tell the girl about it and then began to do all our speech therapy on a cot, with the girl lying on her back, a position which seemed indeed to facilitate tongue and palate action. Using this supine position, we were able to get a nucleus of good speech which eventually we were able to transfer to an erect posture.

Observations of children at play can also yield real dividends. It was an aunt who reported that her niece, when playing house, spoke almost perfectly when she played the part of the mother, but returned to her usual baby talk when being the play-child. A boy who had never made a decent *l* sound was overheard shouting "Pom Pom Pull Away" in the heat of that ancient game. A lisper was heard buzzing excellent *zzz* sounds as he played dentist with his sister as the victim of his imaginary drill. A laller was observed not only lapping up imaginary milk from an imaginary saucer as he pretended to be a cat, but also licking off the milk from his upper-lip whiskers. And this was the same child who seemed unable ever to lift his tongue in speech. A youth with a falsetto voice could growl like the bear he told about, a growl that was in a deep-toned bass.

Quite as important too are the clues provided by the study of the child as a learner. Whether the mother must herself do all of the speech therapy or whether she must help the speech therapist, it is essential that the child be studied from this point of view. We must always remember that the task of speech therapy is one of learning and unlearning. New coordinations, new controls, new attitudes, new discriminations must be acquired. The old ones must be weakened.

How does your child learn? Learn what? is probably the only answer. Most difficult tasks are usually attacked only by trial and error by all of us while simple problems are solved by a sudden flash of easy insight. Moreover, no child is always consistent in anything. And yet there seem to be patterns of approach to problems which repeat themselves. Take the matter of aspiration levels: Billy was a child who always shot for the moon. Just like his father, he was a perfectionist even at seven. He always tried to hit the bull's-eye with every shot. Coming close gave Billy no comfort. To him a miss of an inch was as bad as a miss of a mile. We have never known a child so constantly frustrated. He always set his goals, his aspiration levels so high that his performance never equaled his hopes. Then he'd cry. And then he'd try again for the ultimate, the very best. When he did succeed it was never enough; he had to do it again and again immediately. We once watched him trying to learn to roll a hoop until we could bear his agony no longer. No wonder he stuttered.

Andy was Billy's opposite. Andy characteristically set his aspiration levels as low as possible. While other children learned to sit in a swing, then to stand up and pump themselves into wide arcs, Andy was content merely to run back and forth leaning against the seat. Andy never failed—except in satisfying the goals of other people—because he never tried anything hard. At nine, his speech was almost unintelligible.

Why did these two children differ so much? No one can ever really be sure. But Billy was the youngest of three boys in a highly competitive family and he identified closely with a father with a similar bent. Andy was an only child of only children, living next door to grandparents. He had been idolized, and, praised, sheltered and protected. Why try when whatever you do is good enough?

Most children learn to revise their hopes and aspirations in terms of their probable performances. If they find their aim too high, they lower it. They learn that there is something to be said for hitching wagons to horses rather than to stars. They also learn that setting one's goal just a bit beyond one's immediate

grasp gives great satisfaction when it is occasionally attained. They learn how to try and they learn how to react to failure. Both are important.

The ways in which children respond to failure are always important in speech correction. Billy ignored it; Andy prevented it. Some children quit instantly when failure comes; others respond to it as a challenge. Some revise their attack on the problem and vary their approach; others use more effort but employ again the same old inadequate methods. What sort of a child have you?

Since most of us are doomed to experience a host of small failures as well as a few large ones in our lifetimes, it would seem wise to teach our children how to react wisely to this most common experience. When children show consistent patterns of inadequate response to failures, we are usually able to trace them to the models exhibited by the parents. The father who rages when he botches the carving of a roast because his knife keeps hitting bone should know that he is not only a bad carver at that moment but also a bad teacher. The mother who uses complaining excuses to justify her domestic failures and frustrations will be teaching too. Our children are little pitchers with big ears and an infinite capacity for retaining parental inadequacies. You may not find yourself reflected in the mirror of your child's reaction to failure but surely you can see your spouse therein. And all of us can change.

In any learning task, motivation is crucial. One of the first unhappy discoveries by student speech therapists is that they cannot expect children to be delighted to learn how to conquer their speech disorders. Some children indeed actually battle the person who tries to help them. This resistance, when it does occur, should be understood. We have heard the exasperation in the voices of many parents when they met with this problem. "Edwin just *won't* work on his speech," said one of them. "He can pronounce his *l* and *r* sounds perfectly when he really tries but we have to jump on him continually to get him to speak clearly. I don't like to nag, but how else can I act? Why can't he see how important it is?"

We have hinted at the reasons earlier in this book but let us state them again. First of all, by ignoring the defects and letting speech run on unscrutinized, the child can escape the unpleasantness of confronting his problem. Secondly, since speaking is generally operated by automatic controls, it is easier and less laborious to let it go than to watch or manipulate it. Finally, most children have had some unpleasant times in their attempts to improve their speech—failures, frustrations, penalties by their parents or other children—and when they try again to do something, these old painful memories return.

Speech correction is like archery. The final skill is acquired only by much shooting and many misses. It is a process of approximation rather than substitution. The child cannot flop over from his defective speech to normal speech in one motion. He must make many little changes. It's like learning to skate or swim or walk. Let us observe how the normal baby learns to say "Santa Claus." He begins perhaps by using only the vowels *a* and *ah*. He says "a-a-ah." Then he may say "Kan-a-Kah," then "Kankakahs," then "Sanakahs" and so on until finally he arrives at the correct pronunciation. Similarly, the child who overcomes his stuttering does not suddenly exchange his blockings for fluent speech. The stuttering gradually changes in its form; the blockings become easier and as they do so, the frequency with which they occur lessens.

The child with an excessively nasal voice does not suddenly shift into normal voice. A few vowels begin to get less nasal; certain combinations of consonants and vowels begin to clear up first, then others. In all the speech disorders, progress appears first under especially favorable conditions, and under them alone. Under stress, no change will be apparent. But gradually, the child will gain the ability to do better and better under increasingly difficult conditions until finally his normal speech becomes stabilized. If parents could only realize this fact, that speech correction occurs not by an exchange of the correct for the incorrect but by little progressive changes in the direction of

normality, they would find encouragement as well as understanding. And so would the child.

If the child is to be motivated to improve his speech, parents should learn to recognize these small changes and to reward them. This is what we told the mother of a young lisper, a mother who had complained that the boy was showing no improvement after a month of therapy. "We know how anxious you are to have Danny free from his lisp but you aren't helping him very much with your anxiety. When he comes home from school and excitedly tries to tell you everything that has happened in one breath, his speech will sound as bad as ever. But we don't think you're listening right. You're listening to the over-all impression. You aren't hearing the little changes which have already begun to occur. Today, when he was being very careful, he made these real accomplishments. He said 'thsoup' instead of 'thoup.' He remembered to put his teeth together on several other words, even though the *s* sounds were still defective. He said 'the cat stuck his head in the can' and had a fine *s* sound on the word 'stuck.' He also stopped after three *s* words and tried them again, even though his second attempt was still faulty. And you say he's making no progress? It is out of these little achievements that final success always comes."

If parents are to help their children to be motivated in their speech correction, they should show their interest in the child's attempts to do something about his speech, whether they are successful or not. They should reward the little gains. They should express their own attitudes of faith and patience. They should not ignore or penalize the defective speech for this will make it that much harder for the child to touch it or to work with it. They should verbalize their appreciation of the difficult task the child has set up for himself and always show their interest in his efforts. One of our stutterers wrote this: "I'm sure I would not be fluent today if it hadn't been for my father's real concern and helpfulness. He never looked away when I got stuck, or seemed ashamed. I always had time to tackle it again

if I wanted to. And he didn't praise me only when I talked without stuttering. He'd give me a fine smile even when I wrestled with a bad one and lost. I could always talk to him about it. Whenever I cased out of a hard block, even if it took some time, he'd hold up two fingers in victory. Dad was a swell guy and he always seemed sure I'd make it eventually."

We have been making a plea for parental understanding as the solid foundation of any attempt at speech therapy. We have stressed the need for objective study and observation of the child as a speaker, a social being, and as a learner. We now would like to ask parents to seek to understand the child in terms of his emotional reactions toward his speech disorder. Few parents seem to know very much about these usually hidden feelings; they appear surprised and often disbelieving when the speech therapist, to whom the child has talked freely, gives them a glimpse of this secret turmoil. Why would your own child tell the speech therapist things that he wouldn't tell his own mother? The answer is simple: the speech therapist seems to understand; this is his business, just as sin is the priest's business. At any rate, these children tell us many things they tell no one else. Since you must understand if you are to help your child, we must summarize some of this information here.

Perhaps the best way to boil it all down is to introduce you to the family of *Pfagh*. *Pfagh* is what is called an acronym, each letter of which stands for a word. *P* represents penalty. *P* is the father in this family of evils. *F* equals frustration, perhaps thereby appropriately representing the mother. They have three very unpleasant children: *A* for anxiety, *G* for guilt and *H* for hostility. *Pfagh!* When a person is penalized or frustrated, one or the other of these anxiety, guilt, or hostility reactions is bound to be born. More penalty and frustration will feed them; they will grow strong if nourished. All of us find ourselves members of the *Pfagh* family far too often, and the measure of our happiness is the degree to which we are free from *Pfagh*.

Consider, in terms of *Pfagh*, the child with a speech disorder. Penalty is usually a regular part of his existence. By this we do

not mean physical punishment, though we have known several stutterers whose parents, in the attempt to effect a cure, slapped them every time they faltered. Nor do we mean mocking or nicknames, though these are common reactions of schoolmates to any severe disorder. The penalties that often hurt the worst are more subtle: the barely half hidden grin when the cleft-palate child asks a question, the morbid curiosity in the fascinated eyes of a stranger, the impatient scowl of a listener. Occasionally there will be the cruelty of "What's wrong with that child? Is he nuts or something?" or "Junior, come home this instant. I don't want you playing with any child who talks so terribly." Then there is the punishment of the label, of being called a stutterer or a dummy, of being known as the boy with the funny voice.

One of our college stutterers cried when he told us of the many times his father had grunted to himself "My God, how will he ever be able to make a living?" shortly after the boy had stuttered. Another, a girl, claimed that when she stuttered, her mother always wept and left the room. Some of the things these people have told us have seemed so outrageous that we can hardly believe them. One mother made her little son put his face down in the toilet bowl and say over and over again, "I must not have a dirty mouth. I must not have a dirty mouth." We are sure that some of the tales we hear are exaggerations of reality or perhaps pure fabrications. They cannot possibly be true but, even if they are not, the fact that the child can tell them shows that he has been badly hurt.

Most of the penalties, though just as painful, are not so obvious. Of all the hurts, pity can be the bitterest for there is no defense against it. You can hate the person who spurns or attacks you but what can you do if he merely feels sorry for you? One of our high school boys with a cleft palate once blurted out this: "Why do they have to pity me? I don't want it. They make me a beggar. They take away my pride, my self-respect. I feel smaller and dirtier and uglier every time they smear me with it!"

Then there are the little rejections, hardly big enough to be

noticed except by a child who has been hurt before. Another person says the word the stutterer is trying to say. Or he interrupts and takes charge of the conversation. Or the listener freezes his face into an immobile mask the moment he perceives the speech abnormality. Or everyone in the group stops talking so that silence hangs deadly. Or everyone starts talking swiftly, animatedly, and loudly. One researcher found that fourth grade school children gave as their last of four choices any playmate who had a speech defect. And this was not in speaking games, just in playing.

Equally punishing are the parent's anxiety and concern when they appear at the moment of the speech defect's appearance. The fleeting wince, the furrowed brow, the transient expression of despair, of helplessness, these almost seem to shout to the speech defective "There's something terribly wrong with you." We must also remember that some of these children become almost paranoid about these things. They scan the faces of their parents and their listeners for the slightest evidence of rejection or distress. Into what they see, often they read an evil which is not there. They become abnormally sensitive. Once again we fear that we may be making our case too strong. Not all children with speech disorders get this way. They all get punished but most of them grin and bear it pretty gallantly. But our job here is to help parents to avoid pitfalls by showing them where they are. You can be sure that if your child has an obvious speech defect, he will know the first letter of Pfagh.

He will also know the second, the *F* for frustration. There are many sources of frustration in a speech defect. In stuttering there is the sheer mechanical frustration of being unable to say what you want to say at the moment it should be said. One stutterer described the experience as akin to that of the sticking of typewriter or piano keys for the skilled typist or pianist. "I'm going along fine and then blooey, I'm jammed tight. I can't move the part of me I want to move or else it keeps jumping when I want to hold it still. Sometimes it almost drives me crazy." The clutterer or the person with pitch breaks tries hard to keep his

speech under control only to have it take off in a burst of syllables or a swoop of pitch. To be unable to control oneself is terrifically frustrating. For the person with an articulation defect, the thwarting lies in the inability to say the word as it should be said. Many normal speakers have known a faint facsimile of this frustration when attempting to say "statistics." We have seen little children with delayed speech try over and over again to have us understand their garbled sentences, then break down and sob with utter helplessness.

Children with defective speech also get frustrated because they may begin to avoid talking. The school child pretends he does not know the answer to a teacher's question rather than exhibit his difference. He finds things to do in the kitchen or recreation room when company comes. He may not take part in the family dinner conversation either because he cannot win in the competition for the floor or because of other reactions by the rest of the family. Denied by his speech defect that wonderful safety valve of the emotions which utterance can provide, his fears and hates remain seething within him unexpressed. It is more difficult for him to win or keep friends, to take his part in the normal activities of the school, home, or playground because most of these involve some kind of talking.

One of our college stutterers told us this tale: "I'd dearly love to tell a joke now and then or to say something witty when it comes to me but even though I start out pretty good, the moment I come to the point, I block and it's ruined. Someone else always says the punch line or the key word. Man, it sure slays me! For example, here's a joke I've tried to tell at least five times and I never once was able to finish it. Seems that there was a nosy little girl called M-M-Mary who had a reputation for always saying the wrong thing at the right mmmmm-moment. And one day the preacher, who had a monstrous big nose, was coming to afternoon tea. So M-Mary's mmmmother warned her in advance, 'Now Mary, remember, don't you dare say anything about his nose. He can't help it if he has a big nose and we must be puh-puh-polite. Now when he comes, you just say How do you do and

then run along upstairs to bed for your afternoon nap.' Well, that's just what happened. The preacher came, and M-M-Mary, with her eyes fixed on the preacher's nose, greeted him and then said, 'I have to take my nap now.' 'Now run along, Mary,' said her mother. The girl went part way up the stairs, then she called, 'Mummy, Mummy!' 'You go right upstairs, right now, Mary,' said her mother firmly. Mary went up a few more steps and then she called again, 'Mummy!' and her mother turned to the preacher and asked hurriedly, 'Would you like one lump of sugar or two lumps of sugar in you nnnnn . . . in your nnnn . . .?' The stut-terer sighed. "See," he said dejectedly, "At that point I can never say N . . . ose!" Yes, the person with a speech disorder is well acquainted with frustration.

What can be done? First of all, parents should survey their own practices in the light of this information. We often ask a mother to write a diary for just one day, putting down all instances of behavior on her part which the child could possibly construe as punishing. This is an excerpt from one of these accounts:

7:30 A.M. Called Johnny to get up. He didn't answer so I called him three more times, getting a bit more impatient each time. Finally I heard him answer in a very strained and stuttering voice. Perhaps he was trying to answer all the time.

8:00 I asked him whether he wanted Post Toasties or Bran Flakes. He stuttered on "Bran" and I went out to the kitchen before he finished his block. Maybe he thought I didn't want to hear it. I was just busy and in a hurry.

8:05 Johnny asked me a question as I was just beginning to pour the coffee so I looked away from him at the very moment he had some trouble. Had to keep from spilling the stuff. Could this have been viewed as rejection on my part?

8:15 I interrupted him. He was stuttering and I finished what he was trying to say. We had to hurry to get him to school. Didn't mean to but I did. I do this a lot more than I should.

8:30 Much traffic on the way to school and he kept talking and asking me questions. I'm afraid I was short with him—impatient in my answers. When he left the car I told him to be a good boy and to answer when the teacher called on him. I don't know why I said that.

This was a good mother, trying hard to do what she could to help her son. As a result of her diaries, she made some real changes in the speech climate of her home and Johnny's speech improved.

Stuttering increases with punishment; it subsides when penalty is removed. We remember vividly what one mother said when we expressed our surprise at the sudden almost overnight improvement her little boy had shown in coping with his stuttering problem. "We had a family conference, my husband and I, after Danny went to bed the other night. I told him you had said we had to take the pressure off the boy, that we had to stop making him suffer when he stuttered. We had some arguments at first because my husband kept telling me all the things I was doing wrong and I told him the same, but all week end I guess we tried extra hard. We let him have the floor. We didn't interrupt. We waited patiently for him when he stuttered. We took it easy and didn't hurry anything. It certainly seemed to help and we're having a conference like that every evening now."

There are times when parents must take direct measures against those who seem to get a sadistic pleasure from teasing and badgering the helpless child. The difficulty is to discover who is doing it, for usually the child will not tell you. He doesn't want to relive the miserable experience all over again. This is what a high school boy with a severe articulation disorder told us: "I've always talked funny, I guess, and every once in a while I'd meet some bird who'd give me a really bad time. My folks always made me fight my own battles but there was once when my old man stepped in. I guess I was about eight years old at the time. At the corner drugstore they had a clerk, a young smart aleck sort of a guy, who used to mock and tease me every time I asked him for something. I'd just grin and shrug it off, ignore him. But one evening my dad was in the back of the store and he

heard what was going on. Well, he quietly walked around the back of the counter, took the clerk by the hair of his head and punched him a hard one right on the nose. 'Maybe this will help you remember never to tease that kid again,' he said and then he marched out. I don't know why but things were different from that time on. I guess I felt the old man was on my side." There are times for direct measures. Some people must at least be told in no uncertain terms what they are doing to their victims. Some children need protection by their parents.

Sharing always implies dividing. When the child can tell his parents of his hurts, they are thereby diminished. The child with a speech defect needs special encouragement if he is to verbalize his unpleasant experiences at school or on the playground. He must trust his parents; he must be sure of their understanding. Often the parents must break the ice by verbalizing for the child. This is what one mother told us about her daughter's trouble: "Sandy came home from school today crying as though her heart would break. I tried to comfort her but she just sobbed and sobbed. I didn't ask her what had happened. I just said, 'Sandy, honey, somebody has been mean to you, I suppose. Some people can say and do some awful things, but you're home now and everything's all right here. So go ahead and cry and get it out of you.' Well, that really opened the floodgates for sure and finally she told me what had happened. The other kids had chosen Sandy for Snow Queen in a playlet but one child said no, that Sandy couldn't talk good enough, and then they had chosen someone else. Well, after she had finally told me this, she stopped crying for a time but the rest of the evening she would begin again and again. I didn't get the rest until bedtime when she told me the last of it. 'The kidth thay I can't even thay thnow, tho how can I be thnow queen.' That sentence had been stinging her all evening. Once it was out and spoken, she got peaceful, put her thumb in her mouth as she used to do when she was three, and fell off to sleep at once. I looked at her again when we went to bed and she was smiling in her sleep, poor kid. But you've got to teach her to say 'snow' as quick as you can."

We did. And we certainly had an easier time of it because of the mother's wisdom. Wounds must be opened to be healed. Hurts must be shared to be halved.

If frustration and penalty are the evil parents of the speech-defective child's troubled existence, what of their evil children, anxiety, guilt, and hostility? Unless we understand these feelings it will be difficult to create the kind of a home he should have. These three children of Pfagh show themselves in many kinds of behavior which can only be comprehended in terms of their origin. To spank a child whose destructiveness or asocial behavior stems from the hostility generated by his frustration in speaking is only to make the evil that much harder to bear. To become angry with the frightened child who keeps calling us from his bed in the dark is very human but it does not ease the anxiety which may be coming from tomorrow's recitation in school. And it is easy to punish when a child deliberately invites it, when he challenges our authority or steals or lies or sets fires. Yes, it is easier to punish him than to realize that he may be seeking punishment for his hidden feelings of guilt, for being a child unworthy of his parents' love. In the hot tempo of daily living, it is so hard to be a parent and be wise, so hard to be human and be just! Thank God they forgive us our sins of commission and omission so readily. Children must dimly know that someday they too will have children.

To cope with these offspring of Pfagh we need, above all else, understanding. So let us tell you a bit about the anxieties of the child with speech defect. First, let us make the point again that often the child hides his fears from his parents. He does not want to worry his parents even more than his speech problem already does. We worked once with a mildly spastic girl whose speech coordinations were much worse than those of her arms or legs. She laughed continually and everyone thought she was a very happy person though perhaps a bit scatter brained. She was always joking, always gay. She never seemed to have a serious thought. Once we got to working with her, however, these defenses came down and she revealed herself (but only to

us) as one of the most anxious, fearful persons we have ever known. The façade was a fine one but it hid a terrific inner burden which the girl barely managed to sustain. Her parents never knew that burden.

Anxiety seems to increase as the child grows older. We have witnessed drastic changes in the personality of these children as they meet the onslaught of society's reaction to those who are different. At first they seem to be able to forget the penalties and frustrations, to pass them off with the other unpleasantnesses of the day. A few years later those same children may become moody, irritable, or withdrawn. Unfortunately we seem to be able to store penalty and frustration in the very fibers of our being. Unless provision is made for their ventilation and release or unless the person learns to talk again, the dammed-up evil is bound to break loose. Most of the children with whom we work in speech therapy seem to be able to maintain a rather precarious equilibrium but the stress is there always. Have you seen it in your child?

Of what is the child afraid? What is he worrying about? Often the fears he confesses are only the hooks on which he hangs his basic anxieties. He fears the rejections, the pity, the mockery, the inability to make himself understood. He fears the judgments other people may make of him. As these children grow older they fear the future, the unknown. What will happen to them when they are through school? Will they ever get married? Will their children also have speech defects? Will they be able to get a decent job? Every speech therapist has heard these questions often. We doubt that many parents have.

With some of the speech disorders there are specific fears which are piled upon the others. The lisper may anxiously scan her sentences for *s* words and falter as she hunts for others less difficult. The advanced stutterer may fear not only certain sounds, but certain "Jonah" words as well. We knew one stutterer who always dreaded the number "two" and did his best to avoid it whenever he could. He would always ask for "a couple" instead of for "two" of anything. We heard him even ask at a post-office

window for a "couple cents stamp" once when he was panicked by the fear of his stuttering. Yet this same stutterer never feared the preposition "to," or the adverb "too" though both of these are uttered in exactly the same way as the number. Some speech-defective persons build up terrific word phobias of this sort. We knew a man whose word phobia on "Walnut" cost him five thousand dollars. His home was on Walnut Street so he sold it at a terrific loss and moved to one on Cedar Street, a word he did not at that time fear. Two weeks later, he was afraid of "Cedar."

How intense are these fears and worries? They range all the way from a vague feeling of doubt or half-expectancy of unpleasantness to profound panic. We have seen stuttering children of four years completely petrified at having to speak up in Sunday school. One of our high school girls with cleft-palate speech fainted whenever she was asked to read aloud, even when she remained in her seat. And we will never forget Harry's pulse. We took it just before we asked him to call a certain phone number and ask for Janet. Harry's pulse was beating at 72 per minute. The moment we gave him the assignment it went up to 87. When he was dialing, it was over a hundred, and when she answered, it was racing at over 120. Such profound upheavals in physiology give some inkling of the intensity of some of these fears. Fortunately, most of our children, with proper care, can be prevented from ever experiencing such panic.

Normal speakers have found it very difficult to believe that a speech disorder could possibly result in such emotion. Speaking seems so easy. On one of the standard tests of attitude toward stuttering there is this question: "Would you rather be blind than stutter?" We have often seen it answered with a yes. We asked one man to explain his affirmative answer. "If I were blind, people would accept me," he said. "They wouldn't look at me as though I were a monster, or if they did I wouldn't see it. And if I were blind, I could get used to it. I would always be that way. Now, I never know when my stuttering will hit me. I live in constant fear." It is an interesting footnote that stutterers made

excellent combat soldiers in the late wars. They did not break down. They were used to anxiety and frustration. They had lived with these evils all their lives.

But there are deeper fears than fears of rejection or mockery or pity. There is the fear of death. Surely, you may protest, these little children do not fear this merely because they have a speech disorder. Let us explain. Suppose, at the very instant you read this, you wish to move your arm and it will not move. How would you feel? Or suppose you wanted to open your mouth to say something and suddenly your jaw began to jerk open and shut uncontrollably. You would run to your doctor in fear of your life. You would also know how the stutterer feels a hundred times a day. One of our stutterers from France called the moment of his blocking the *petit mort* ("the little death"). No wonder the stutterers made good combat soldiers.

The G in Pfagh stands for guilt, the miserable nagging feeling that all of us have known and hated. Why should a child feel guilty because he does not talk right? There should be no reasons but there are. Guilt and punishment have walked hand in hand so long through our lives that when one is felt we expect the other. The child learns very early that there are things he must not do, that if he does them he gets punished in one way or another. Following the same line of thought, he thinks that if he is punished for the way he talks, then that way of talking is bad. One little boy with delayed speech came to his mother with a cake of soap. "Wah duh mau me, mama. Ih duddy." (Wash my mouth, Mama, It's dirty.) He had been trying to talk to some of his playmates and they could not understand him. The infirmities of mankind have often been viewed as signs of guilt. Remember the Bible story of Job? This ancient attitude is with us still, and innocent little children with harelips, with broken or slurred speech, with odd voices, learn it early.

Unfortunately our culture does regard speech defects as blemishes. There are comic book characters such as P-P-Porky-the-Pig. TV comedians use odd voices to get bigger belly laughs. Mothers overhear the "Isn't it a shame that poor Dicky talks like

that?" sort of comments. Parents are blamed by neighbors (who know nothing of the circumstances) for not doing something about the bad speech. There is shame in the air, the vague hints of reproach which cannot be combated. "Isn't it too bad they don't have a normal child!" "You know he's eight years old and he still can't talk right?" "I wonder what's really wrong with her daughter?" These are the invisible pressures of a society which rightly places a high value on communication but which wrongly interprets a speech difference as something shameful. The only way we can fight these whispered evils is by exchanging information for ignorance. Speech therapists have done much in the last thirty years to educate the public but there is much still to be done. A speech disorder is a problem, not a curse. If children are to be freed from their feelings of guilt, parents must acquire this basic problem-solving attitude. Attitudes are as contagious as the measles.

We tried hard to convince one mother of a stuttering child of this. His name wasn't Dennis but he was certainly a menace. A very trying child. He seemed to go out of his way to get into trouble. He set fires; he wet the bed; he broke windows; he dirtied the car. The only time he really smiled was after he'd been punished. Never did he do these deeds on the sly, always in the open. He always got caught, or if he didn't he'd voluntarily confess what he had done. It was hard for us to get that mother to understand that these were reactions to guilt. Finally, after a period of counseling, she got some insight and began to cry. "You know," she said, "last night when I was lying in bed worrying about him I suddenly thought: Why he's doing this in order to keep his illusion of me. He's got to think of me as a perfect, loving mother. I'm not. I'm terrible. Sometimes when he stands there stuttering I can't bear to look at him or listen to him, the awful faces he makes. I get so impatient and irritable. I know I do. I just can't help it, being nervous like I am. But that was the thought, that he was being bad in order to justify the way I've felt about him. What have I done? What have I done?" Things began to change after that outburst. As her attitudes improved,

so did his behavior and his stuttering. Guilt is a terribly strong acid. It will eat away its container if it is not released or relieved. Again the best treatment is the reduction of penalty, the increase of support and the opportunity to talk it out.

Pfagh ends with the *H* of hostility. When you are hurt, you tend to hate the one who hurts you. When you are frustrated, the anger rises red. How many times we have had to reassure the parents of children with delayed speech that their orneriness and negativism would disappear once they learned to talk and how often this prediction has come true! In our speech clinic we must purchase a new plastic punching bag, one of those five foot ones shaped like a clown which stands on the floor, almost every other week. The children we work with pummel them to pieces, bang and slap and kick them all over the place, and then they can go to work on their speech therapy with enthusiasm. We have watched a dainty little girl take a chunk of clay, model a father, a mother, a sister and then smash them all to smithereens with a toy mallet. "Hit him in the mmmmmouth!" cries Wilbur as he aims a deadly bean bag at the pictured face on the wall. We'll never forget Mary, aged six, who kicked out the glass panel of the playroom door and threw furniture out of the window. Or Phil who methodically banged his head against the door jamb forty-six times in a row. Or Ivan the Terrible whose teeth marks are still to be seen on the hand of the therapist who had been shaping his mouth to produce a better *l* sound.

These children got their hostility as a result of the frustrations and rejections they had known. All they needed was a permissive environment in which to reveal it. Most parents would be aghast to hear the fantastic tales they tell us, or to see the pictures they draw. "Thee!" said Wilma, pointing to her picture, "I dwawed my mummy an' deh my daddy an' deh my bwuvvuh Tommy an' duh twain hit duh kah an' dey dead an' dih ih me!" She pointed to the picture of herself, the biggest figure of all, laughing. One of our children came to the clinic each day by himself and began each session with this statement. "My daddy dead. I kill him." Each day he had killed him in a different way. Fortunately,

speech therapists understand the relationship between penalty and frustration and the resulting hostility. They also know that it is better to have hostility expressed than to have it lie hidden within or converted into anxiety. Anger is an acid too. It is not a good lubricant for learning. Parents must come to understand this also. So when your child comes back from school or from a session with the speech therapist and tells you of tales of hate and woe, listen to his need rather than to his words. He may be merely getting the evil out of his system.

One last word about Pflag. Parents should also realize that anxiety, guilt, and hostility can change skins. They can convert themselves one into the other. Anxiety can masquerade as hostility. If all outlet for hostility is blocked, the child develops new fears, new worries or even a host of different symptoms. When a child feels guilty but does not know why, he may either show his conflict only in the form of anxiety or instead relieve it by a temper tantrum or smearing. These children of Pflag are changelings.

You may have felt that we have been describing someone else's child, not yours. So we have. But let us say again that any child with defective speech in our culture will experience some penalty and frustration and some anxiety, guilt, and hostility as consequences thereof. We have had to cite the extreme examples to make our point very clear. Your child may have suffered from these evils much less than many other children with speech problems because you have been wise and understanding. Or lucky! We have seen children from wonderful homes take a cruel emotional beating once they entered school. One vicious bully on a playground, one sadistic teacher or stranger can start pflag on its evil growth. Parents must know how to create within the child the basic attitudes which can defend him from these dangers.

So far as penalties and frustrations are concerned, there are two ways in which parents can help. First, they can reduce the amount of punishment or frustration being experienced by the child, and second, they can help him learn to tolerate and to resist that which remains. To begin, some sort of survey must be made. Who is now hurting the child and how? What ancient wounds

still ache when the wind blows cold? How is he being frustrated? What basic desires remain unfulfilled? What part does the speech disorder play in all this? Parents need to ask these questions even though some of the answers may come home to roost. Once again we say that once parents know what is wrong, they usually remedy it.

Danny's mother made such a survey. He spoke very little at five years of age and much of what he did say was unintelligible. We asked the mother to watch for a week and to record what she saw. This is a part of her list for the first day.

Danny asked at breakfast for some oh-doo and I'm afraid I got pretty impatient before I understood that he meant orange juice.

Again he was at the window watching the other children going to school. He called me to look and I said, "Yes. And you can't go to school if you don't learn to talk." He got some tears in his eyes. I felt like a heel but it's true.

I was out on the back porch when the phone rang. Before I got there, Danny had answered it and hung up. I was pretty short with him when I explained he must never do that again.

He came out into the kitchen where I was working and jabbered at me. Something about dah which he said over and over. Sometimes it means dog and sometimes doll and sometimes I don't know what it means. This was one of those times. He kept gesturing and explaining but I couldn't get it. Finally, I told him to go back and think and tell me later.

At noon, when his sister Myrta came home for lunch, Danny tried to talk at the table but my daughter was too full of everything that had happened at school that morning. Both of us ignored him, I guess, and more than once. He got a newspaper and sat in the corner jabbering to himself, pretending to read it. Myrta went over to him and pointed out some words she knew and tried to teach him but he forgot and I had to tell her off again for calling him a dummy.

In the afternoon Danny cried again when he was meowing at the cat and she got up and left. . . .

Perhaps the worst thing of all happened after my husband got home. Usually he's pretty patient with the boy but I suppose he'd had a hard day. Anyway, Danny greeted him with "Da-oh-fatun-woohbee" and his father gave me fits for letting him see so much TV and not really

teaching him to talk like a human. I was tired too, and it was unfair anyway so we had a miserable meal. I guess I should explain that Danny was imitating the commercial for "Dad's Old Fashioned Root Beer."

Somehow the very act of having to record these instances of penalty and frustration seems to jar most parents into change. We have mislaid this mother's report for the final day of her survey week, but we recall that most of Danny's penalties and frustrations were so reduced that it bore only one or two items.

Punishment and frustration do not create favorable environments for the learning of speech. They must be decreased. We remember Alan's stuttering eased when his elder brother went to camp and he no longer had to tag after and compete with him either in climbing waterspouts or in speech. And the lisping girl who quickly conquered her difficult sounds shortly after she had finally learned to read. And the cleft-palate boy who stopped squeezing his nostrils after the little leaguer coach nicknamed him Slug and the other boys stopped calling him Deedee. Deedee had meant Donald Duck. Almost it seems as though any reduction in penalty or frustration creates new energy for constructive purposes, for speech improvement. We need not and we cannot remove all of either, but every parent can find some way of easing the burden and facilitating therapy.

But what of the ancient wounds, the thoughtless words or deeds that reverberate for years? What can parents ever do to erase them? We remember a cerebral palsied high school girl who finally told us why she was so withdrawn, why she never associated with her classmates. Virginia was a pretty girl and her speech was quite adequate except in loudness. "It happened at the breakfast table," she said, "when I was nine. I was reaching for a piece of toast when my sister Irma suddenly looked at my hand, shuddered, and cried, 'Oh take that horrible claw out of the food!' That was seven years ago and I've thought of what she said every time I've seen my hand. Every time of every day of my life." The girl thrust her crippled hand under her other arm and fled from the conference room but the wound had begun to heal from that

moment of the telling. Later we got her to tell the tale again and again, to examine the hand as we held it to loosen the muscles, to explore the possibilities of finger and wrist movement. Virginia became the baby sitter best liked by our own children. It was one of them who finally erased that ancient hurt forever by impulsively picking up that crippled hand and kissing it with a burst of childish affection. Yes, old wounds can be healed.

We have said that it is also possible to help children learn to handle and bear and tolerate those penalties and frustrations which cannot be eliminated. How can this be done? There are several ways of doing it. We hate to say it, but once again parents must present a model for the child. By verbalizing their frustrations and accepting them as temporary unpleasantnesses which will pass or which can be endured, they show their children a pattern of behavior which can be followed. They can tell their children of some of their own ancient wounds and how they survived them. The old soldier always points to his scars with some pride of survival. Most children are fascinated by such anecdotes. To discover that their father once bore the nickname of Fatso seems very reassuring.

We can also build tougher hides on our children's egos through a process the psychologists call desensitization. By introducing the frustrations a bit at a time and only to the degree that they can be tolerated, most children learn to endure them without going haywire. The important thing is to make sure that the frustrations do not overwhelm the child. Here is an account of how one mother helped do this desensitization.

"You remember how bad Hank's temper tantrums were. Well, they're just about gone now. He had only one all last week. After you explained how they probably come from our interrupting him and talking for him and finishing his sentences before he could, we first tried to cut it all out. But you know how he likes to talk even though he does stutter so bad. It got so none of us could say anything. We couldn't just let that go on. He was getting to be a regular little tyrant. He hogged all the conversation

all the time. So we figured he had to learn to take some interruptions even if they did make him stutter. So I told the two older girls and my husband that we each could have two free interruptions the first day and that we'd make them stick so we wouldn't spoil him forever. The girls have been so good about cooperating up to now and I felt they had a right to say their piece once in awhile too. Well, Hank seemed to take them all right so the next day each of us had a right to horn in three times a day, and the next day four times and so on. I'm afraid I didn't use all my quota because I was afraid he'd go back to that head pounding again. But the girls sure did! But he's learned that sometimes he's got to wait his turn and that sometimes we aren't always going to wait until he stops talking. It's funny too that he isn't stuttering so much either."

We have seen similar results when parents began a gradual process of good-natured teasing or nicknaming in the home to toughen the child to the penalties he was receiving in school. There also have been many parents of children with severe articulation disorders who put some unintelligible jabber into their own speech in increasing amounts with excellent effect in reducing frustration. This must be carefully handled but it can be done.

Still another way of preventing penalties and frustrations from creating anxieties, guilt and hostility is to provide opportunities for release of these pressures. All of us need safety valves when the steam builds up too high within us. The best safety valve is through talking it out, of course, but many of our children cannot talk easily enough. Sometimes we must provide other outlets, punching bags or plastic clowns to beat up, finger paints to smear with, clay figures to smash, a metal wastebasket to kick around, make-believe stories in which the child conquers all enemies, blown up paper bags to pop. Oh, there are thousands of ways to blow off steam. The important thing is to show the child that you understand his need for release and relief.

Many of the evils of Pfagh can be prevented by giving the child's associates the realization that he has other assets which

they will prize more than they despise the defective communication. One father solved a lot of his boy's rejections by building a jungle gym in the back yard. Another bought six five-foot-high plastic balloons, and Junior was king instead of slave for a time at least. One girl was taught by her mother how to give permanent waves to the hair of half the dolls in the block. Another was the first in the neighborhood to twirl a baton.

Often it is necessary to teach your child set responses to penalties. A mother of a cleft-palate child taught her to answer the question "Why do you talk so funny?" by saying that she had been to the hospital to get the back door to her nose fixed and that it wasn't very strong yet. The teasing always seemed to stop immediately. We taught one boy whose speech was very difficult to understand and who was being hazed unmercifully by his playmates to respond by saying, "I bet you can't tay dih (say this) 'poo-bee-mo-tee-koe.'" These syllables contained only his easy sounds and he mastered the sequence thoroughly. He always won. We taught one of our young secondary stutterers to say, "Yes, I stutter but I'm getting better." A calm admission seems to spoil the teaser's pleasure. There are many ways.

The Bible speaks of an Ephraim, a place where one can go to restore one's soul. All of us need an Ephraim. Some of us never find it; some of us possess it for a little while then lose it, a bitter loss. These troubled children who cannot talk the way others do need one most of all. It is difficult to create a happy home, an island of safety where a child can lick his wounds and heal himself for the morrow. Parents know *pfagh* too and in the constant battle merely to live a decent life they sometimes forget that a home must first and last of all be a haven. Have you forgotten?

And so we come to the end of our chapter on creating a favorable speech climate in the home. We have not beaten parents with the cudgels of Do's and Don'ts. We have tried not to belabor the obvious. Perhaps we should have advised making sure that the child gets enough sleep and the proper food and so on, but we feel that most of the parents who will read this book will know these things. We are sure they know the kind of home life such a

child should have. There are no perfect parents or perfect homes. We do the best we can as frail human beings because we love our children. We make mistakes and regret them but we try to give our children what they need. This chapter has been devoted to that need. It has tried to give you understanding.

CHAPTER 4

Helping the Child at Home

WE ONCE RECEIVED A LETTER which ran like this: "Dear Sir: I have a son who stutters bad. Write me how to cure him quick. Yours truly." We're afraid we were not able to satisfy the lady. Most parents understand that there are no do-it-yourself kits for speech therapy, that each child presents an individual problem which must be defined before it can be solved. There are many things which parents can do to help their child at home and we hope to provide much of this information but there are no trick techniques which work miraculously. Speech disorders are not diseases. There are no pills available which enable

a child with defective speech to acquire normal speech. Speech therapy is a learning process.

One of the sections in the code of ethics of the American Speech and Hearing Association, the professional organization of speech therapists, states that it is unethical and forbidden to offer treatment solely by correspondence. The reason behind this item, of course, is that each child is different, that each problem is different, and only by fitting the therapy to the needs of the case can hope of relief be legitimately expected. We once knew a stutterer who was cured by having a bushel basket of rotten smelt dumped over his head by his angry father yelling, "Don't ever do that again!" That child never did but we are sure that such treatment would make most stutterers much worse and probably never cure another child. This was a particular child with a particular kind of stuttering problem at a certain moment in time and the father's folly managed to inhibit the stuttering though at what cost in terms of hidden emotional scarring we do not know. There are always neighbors who know of such cases and such bizarre methods. They have caused much suffering. Parents must understand the nature of such back yard prescriptions.

How do you begin speech therapy at home? In most instances you begin by finding a speech therapist. Since there are about six thousand speech therapists in this country, there will be one within reach. Only in a few sections of a few states will you have to reach rather far. At the end of this book you will find the necessary information for locating a speech therapist. When you do, ask him to examine your child and tell you what should be done. This is where you should start—with a professional diagnosis. A great many parents have done it the other way, by trying first one thing and then another in the vain hope that something will work. Many of these procedures are not only useless but actually harmful. What usually happens when they fail is that the child becomes convinced that he cannot be helped, that his problem is a hopeless one. Once this occurs, it will be tough for anyone to help him.

So let us tell you a bit about speech therapists. Little more than thirty years ago they were almost impossible to find. Quacks were everywhere, preying upon those of the twisted tongues. Commercial "schools" bled the sufferers white. Elocution teachers taught them a Mumbo Jumbo set of drill exercises. Stage hypnotists played with their mouths. Traveling healers, armed with faked testimonials, milked a city until their victims rebelled, then moved to another and began over again. In one of the more infamous commercial stuttering schools of the Midwest, a cure was guaranteed or your money back, provided you followed instructions, and the first instruction was never to stutter again. You are fortunate that these vultures have just about disappeared from the scene, that you now have a new profession whose members are dedicated and well trained to serve you and your child.

Perhaps you should know how they are trained. They are graduates of colleges or universities. They majored in speech therapy and probably minored in psychology. They have intensively studied not only the disorders of speech and hearing but also the anatomy and physiology of the speech apparatus, phonetics, abnormal psychology, and many other related subjects. They have done casework under stringent supervision, a lot of it. Those who survive this demanding preparation are qualified when they have satisfied the requirements prescribed by state departments of special education or by the American Speech and Hearing Association. Many of them may have their master's degrees in this field. The American Speech and Hearing Association selects its members with care, constantly seeks to upgrade the training and professional skills of speech therapists, and sets the standards and ethics for this new profession. Following the list of books in the bibliography given on the final page of this book you will find the name and address of the executive secretary of this organization. He will be glad to answer your inquiries and to put you in touch with a qualified speech therapist. You might also contact the college speech clinic nearest you. We give this information so that you will understand why we ask you to start

helping your child by finding a speech therapist. Most speech therapists practice their profession in the public schools, the colleges, or medical centers. A few have a private practice only.

After your speech therapist has examined and has decided upon a plan for helping your child, he would welcome an opportunity to discuss this plan with you. Oddly, many parents do not seek this meeting. Indeed many parents put obstacles in its way perhaps because of an unfounded fear that the therapist will blame them in some way for the child's problem. In many such conferences with parents we have often found them defensive at first and full of guilt feelings which are unwarranted. Evidently our society does not blame parents if the child has a hard time in reading or in arithmetic. We use the teacher as the scapegoat then. But children first learn to talk at home and perhaps this is why parents find the prospect of a conference with the speech therapist somewhat disturbing. Most of this anxiety disappears once the parents realize how interested the therapist is in the child and how much their aid and understanding are welcomed.

A description of such a conference may allay any anxiety you might have. Today we examined Timothy. The boy was six years old and his speech was almost unintelligible. For example, when playing with one of our toys, he said, "Duh ehpay pohpchyuh ahdah!" We agreed that the "airplane's propeller was all gone." Speech therapists become pretty skillful at translation. While he amused himself in another room, we talked with his mother. At first she was stiff with tension, so we talked a bit about the many different reasons for failing to master the standard speech sounds of English.

Then we talked about Timothy. "He's a fine boy," we said. "His vocabulary is as good as most children of his age, both in comprehension and in usage. The words are difficult to understand but they are being used. He is certainly of normal intelligence. He did well on the Peabody picture identification test and on the form boards. There are no organic abnormalities of the speech organs. The hearing is excellent. Among the possible reasons for his speech problem are these: Timothy finds it very

difficult to move the tongue independently of the jaw or lips, especially at fast speeds. Also, the boy is not at all aware of his errors. This makes it difficult for him to correct them. On our tests of phonetic discrimination, we find too that he does not seem to perceive the difference between such sounds as *fff*, *th* or *sss*. However, it was easy, in trial therapy, to get him to make each of these sounds in isolation."

There was much more in our calm presentation of Timothy's speech problem and we could see the mother first relax and then become almost fascinated as the picture unfolded. Then, and only then, were we able to ask her some questions about the boy's history. When had he begun to say his first words, his first sentences? Could the boy carry a tune? Did he talk aloud to himself when alone? Could the other members of the family usually understand him? How did Timothy react when they couldn't? How had the mother tried to help him?

There were many of these questions and answers and explanations. As the complex pattern of the problem came into focus, the mother's relief was very apparent. You could almost see her picture of her son's speech change from that of a mysterious curse to that of an objective problem for which solutions were available. But then, once again, she posed the old question which speech therapists often hear. "What have I done wrong?" she asked. We wondered whether we should answer or wait for another day. There are always things which parents are doing that do not help the child and usually some things that are preventing him from making headway. We would have preferred the other question: "What can I do to help?" We sized her up. "Let's not look backward," we said. "You probably did the best you could with what you knew. Why ask yourself what you did wrong yesterday? All parents make mistakes, and you've probably made fewer than most because you love that boy. What you probably mean to ask is 'Aren't there some things that I ought to stop doing today and tomorrow and aren't there some other things that I should be doing?'" She smiled her acceptance of our revision and we went on to answer both questions. This then is

the sort of thing you will experience when you have your conference with the speech therapist. Surely it is nothing to dread or avoid.

As we have said, these are old familiar questions to all speech therapists. The answers vary with each set of parents and each child so we cannot here counsel you as your own speech therapist will be able to do. However, you may find in these examples some principles that bear upon your own situation. Let's go back to Timothy. "One of the things we suspect you ought to change," we said to his mother, "is the way you are emphasizing display speech rather than tool speech. For example, you have told us about how you often ask Timothy to say this and say that. When he fails to say it correctly, you give him the word or sentence again and again ask him to repeat it. While this shows the boy that you are interested in his speech and that you want him to improve it, it does little to solve the problem. It does not show him *what* he is doing wrong or why."

"Sometimes he can repeat the word after me perfectly when I do that," objected the mother.

"But doesn't he still mispronounce that same word when he's really talking to you?" we asked.

The mother nodded. "Yes," she said, "that's the curious thing about it. I can correct him and correct him and once in awhile he will do fine when he's repeating after me but then the next moment there he is again making the same mistake. Sometimes I think he's just being stubborn."

We disagreed and explained that there was a big difference between echo speech and communicative speech, that when Timothy was making statements or asking questions he was also formulating thoughts, considering his listener's reaction, organizing what he would be saying next, anticipating the listener's next words, and many other things. The sounds in such communicative speech would be hidden in words buried in sentences which in turn seem less important than the communicative situation as a whole. We hunted for an analogy. "It's sort of like the difference between tracing and freehand drawing," we said.

"Timothy can probably trace the outline of a face or figure and still be unable to draw one without such a model." The mother got the point.

"There are other objections to this kind of correction," we continued. "Children don't like being treated as though they were parakeets. Oh, they'll repeat after you for a time. At least they will if they have enough success to gain your approval—something which we doubt happens too often—but usually they only get bored or frustrated. It's hard for them to see any sense in repeating stuff which has no communicative value at that moment. They're human beings, not myna birds. Surely we must not try to convince them that they cannot possibly speak correctly."

When speech therapists softly say "don't" they usually follow by saying "do." It is always wiser to replace than to inhibit. "Why don't you try this instead," we suggested. "Try to remember some of the words which Timothy said incorrectly and practice them to yourself until you can duplicate his errors almost exactly. Then, at some appropriate time when you and the boy are alone together and he wants something to do, play this guessing game. Tell him that you noticed earlier that he had made a mistake in saying something to you. Tell him you are going to say it the right way and the wrong way and see if he can guess which is which. Make it obvious enough so that he wins more than he loses but be sure that you imitate his own errors pretty closely. If possible, use only one error in a sentence and use his own sentence, reminding him of the situation in which he used it. See if he can pick out the word and the part of the word which was wrongly articulated. And give Timothy some enthusiastic approval when he's successful."

We went on to explain that it was obviously unwise to do this discrimination training on the spot by interrupting the child's thought and communication when he was in the act of talking. She asked us how often this should be done and we told her to experiment and to report back to us. We tried hard to show her how important her role was in attaining this basic goal of therapy. "No child," we told her, "will ever be able to correct his de-

fective speech sounds unless he knows what is wrong and where the errors are located. A parent has the ideal opportunity to do this training, a much better opportunity even than that of the speech therapist who must see the child in a somewhat artificial situation and only a few times a week. Without your help in this, success will be delayed and perhaps prevented. We must have motivation for any learning to take place. You've got to help us get this learning started." We meant every word of this. If parents do not help, if they continue doing the wrong things, the child will have a hard time.

The therapist's gentle suggestions vary from child to child and parent to parent. One father had to be convinced that shouting "If you can't talk right, shut up!" was not helpful and that it might be wise to reward the child occasionally for the good speech that he did have. This man, as his former policy of correction showed, was characteristically blunt and direct. He listened to his boy, hunting for one good sentence which was spoken perfectly. Every three days at the dinner table he pulled out a dime, gave it to his son, and said, "Here, I heard you say this sentence right. . . ." Then he repeated the sentence, gave the boy the dime, and said, "Now I want you to talk better and better all the time and I'll be listening. No good talking, no dime."

It worked too, though it might not have done so for another child. The basic policy, however, is excellent. If the only attention a child gets for his speech is the noticing or penalizing of his errors, he'll not have much hope of improving. We must always build upon whatever good speech the child already possesses. How many times we have procured a spurt of progress as soon as the parents began to notice and reward the bits of good speech which were already present! Many children are under the impression that all of their speech is defective because parents bring only their errors to their attention.

Unwittingly many parents reinforce the defeatist attitudes of their children by their own behavior. They wince or shake their heads hopelessly. They throw up their hands in helplessness. They

hurriedly cover up the errors by translating the child's speech to visitors or by quickly changing the subject. Or they studiously ignore the defective speech and pretend that it isn't there. When the speech therapist sees these responses, he calmly tries to help the parents to become aware of them and to substitute more positive ways of reacting. He may ask you to keep a list of words on which the child has trouble. He may desire a description of the speech situations in which the speech seems to be especially distorted. He may ask you to study the relationship between speed of talking and the number of errors or to judge whether or not the child has better speech when he talks to himself or to other children than when he speaks to adults. This information will help him in therapy but it also assists the parent to become interested in the child's speech as an objective problem. Such assignments enable the parents to change their attitudes to ones which help instead of hindering.

One mother of another child with many defective speech sounds had helped her daughter considerably before she came to us. "I've been able to correct Dorothy's poor *f* and *v* sounds, and her *k*'s and *g*'s but all of a sudden she's balked. I just can't get her to try any more and she's even slipped back a little." When we investigated, we found that this mother had been making another common mistake. She was naturally an excellent teacher and Dorothy was a very bright and willing pupil. But the mother had been working on all the defective sounds at once. If Dorothy misspoke an *s* word such as "sing" the mother would work on that word. Then, if the girl said "yady" she worked on "lady." We suggested first that the mother give up all correction for at least a month, and then that she help us by concentrating all her teaching efforts on only one or two sounds until Dorothy had mastered them. We would work first, we said, on only those words which had *s*'s and *z*'s in them. A little at a time. Too many targets make for poor shooting. Moreover, instead of focusing our efforts on single words, we preferred to concentrate them upon sounds or syllables. "If we can teach Dorothy to make a good *s* sound, she can use it in thousands of words," we told that

mother. "Since you have been teaching single words as units, each new one must be learned separately. There are better ways than that." Some children seem to be able to make the transfer from one word correctly spoken to other similar words, but it has been our experience that this is not the usual thing. Generally, it is wiser at first to teach sounds rather than words and to concentrate on a few rather than many.

The suggestions you will receive from the speech therapist for helping the child at home will change as therapy progresses. Perhaps some selections from a typical case file may illustrate. Wendy, at nine, was a delightful little fourth grader but her sloppy lateral lisp spoiled the picture. Her parents were most cooperative. Although they had been very aware of the defective *s*, *z*, *ch* and *j* sounds, the subject had never been mentioned in the home. They had been told that Wendy would outgrow it. However, the lisp persisted and when the girl was mocked on the playground and in the school bus on her way home, her distress became theirs. Finally, when she returned sobbing out her story of cruelty, the parents decided something had to be done. Our first assignment to them was to pay us a visit as we worked with the child. This broke the conspiracy of silence about the girl's speech problem and brought everything into the open. We asked them to have her tell them each day everything we had done in speech therapy. Once Wendy saw that her parents were interested, and not ashamed of her speech, things began to move.

Our next assignment asked the mother to help the child make a scrapbook of pictures in which the *s* sound was used at the beginning, in the middle, and at the end of the words. This was done and we used it in our sessions to help the child locate her errors. Since Wendy liked arithmetic, we asked the mother to give the child simple play problems using series of isolated *s* sounds instead of numbers, such problems as "How much are *sss*, *sss*, *sss* times *sss*, *sss*?" The answer was of course *sss*, *sss*, *sss*, *sss*, *sss*, *sss* or six prolonged *s* sounds. No number names were used. They did addition, subtraction, and division in the same way. This assignment was given shortly after we had finally

managed to teach her to make a correct *s* in isolation. In these games, the mother's stimulation helped Wendy to perceive the target sound correctly, and her answer helped to make the new sound, which is always weak and unstable at first, much stronger.

The next pertinent entry in the case file is dated two weeks later. In it we find we had asked the parents to help Wendy incorporate the new sound into familiar words. They were to do this by omitting the *s* or *z* in certain words of their own speech when they spoke to her and it was up to her to correct them. The mother reported that Wendy noticed and corrected each one in the sentence: "Plea pa the . . . alt . . . ellar" at the dinner table one evening. We also asked them occasionally to hold and prolong the *s* sound at the beginning of a word until the girl could guess what they were about to say, as in "Wendy, do you think you'll have to stay after sssssssssss. . . . ?" We also provided the mother with diagrams of words in which the child was to trace the pattern as she said the sounds which composed the word in which she was incorporating the new sound. Thus "soup"

was diagramed as
$$\begin{array}{c} \text{oo} \\ \text{sss} \left| \begin{array}{|c|} \hline \text{ } \\ \hline \end{array} \right| \text{p} \end{array}$$
. She would then use it in a meaningful sentence such as "I don't like tomato ssssoooooop" tracing it on the diagram as she said the word. Wendy learned fast and each day she brought us some new "word pictures" that she could say correctly. We also showed her mother how to help the girl learn new *s* words by pretending to pull with her fingers the *s* sound through her closed teeth and then to finish the word as she touched the object or picture which began with the sound. In our file is a list of nineteen words which the girl learned in one day by doing this.

The final entry concerned ways of making the new correct sound habitual. "Ask parents to use nucleus situations, negative practice, and to encourage cancellation," was the recommendation. Let us tell you what these terms mean and how they were carried out. By this time Wendy was able to say almost any *s* word correctly when she thought about it and really tried. She could repeat any of them after her parents. However, when she

was interested in what she was saying or excited or emotional, the lisp was apparent as ever, almost as though she had never had any therapy. This is always a bad time for parents. "What's wrong with the child?" they ask. "Why doesn't she talk as well as we know she can?" "Why won't she watch her speech?" "Why does she have to be so stubborn or careless?"

This is a time for more information and more understanding. We must remember that the child has been using defective sounds thousands upon thousands of times, the correct sounds only a few hundred times. Only by special attention can the weight of these old errors be prevented from tipping the scales. Moreover, speech is automatic when communication is hot. The child thinks aloud. Out of his mouth come thoughts. He is not sending words or sounds; he is sending messages. So it's hard to remember to watch your mouth when you are excited or emotional or anxious to be understood. Not Wendy's mother, but another parent just could not understand this. "I just lose my patience," she said. "Why that boy of mine won't talk as good as I know very well he can talk, is more than I can figure out. I've told him and told him. Yesterday I got so upset I just shook him. Didn't do a bit of good, except maybe it relieved me a little. But it sure is exasperating!" We changed that mother's attitude by asking her to raise her little finger every time she said a word containing an *r* sound as she talked to us. She was terrible. The moment she got wound up she utterly forgot to move her finger. And then when the difficulty dawned upon her, she wailed, "He'll never be able to talk right. How can anybody ever watch himself closely enough?"

There are ways. Speech therapists know this problem well. They call it the "carry-over" problem. We find it in working with every type of disorder, in stuttering, in voice disorders as well as in articulation. We expect this period of occasional regression because newly acquired skills are unstable at first. It almost seems as though progress must stop for a time so that the person can consolidate his gains. The stutterer who for a time speaks well soon finds himself in what he calls a relapse. The course of successful therapy is never a smooth nor straight line. There are

spurts and fallings back. Parents, like speech therapists, must learn to keep their eyes on the maximum performance, on the crests rather than the troughs of the waves. In articulation therapy, the successful use of the new sound indeed resembles the incoming ocean tide. The waves of good speech ebb and flow but they keep spreading to cover more territory. A small conquest of one speech situation may be followed by a poor performance in another previously conquered, but the movement as a whole is forward until eventually the new sound occurs consistently in all communication.

We do not wish to leave the impression that this spread is inevitable. It can be aided or prevented. If the parents punish the child for his occasional errors so that he becomes emotional or doubtful of his ability to speak better, he may regress still further or give up any attempt to help himself. We had one benighted father who spoiled three months of speech therapy by saying to his son, "Good! Now you know you can talk right and we all know it. So I'm putting all these dimes, five dollars worth, on the fireplace mantel. They'll be here for a week. But every time I hear you make a mistake, I'm going to take one of those dimes away." It sounded like a good idea but all the dimes were gone after two days and that child's speech went to pot. Two years later he was still making more errors than correct sounds and we suspect he is making them still. That father just didn't understand what happens in speech therapy.

Now let's return to our final assignment for Wendy's parents. They were to use nucleus situations, negative practice and to encourage cancellation. Perhaps a report of some nucleus situations will help you understand why these help a child to remember to use the new good speech. Here is the report we received from Wendy's mother:

Wednesday: We followed your suggestion and this morning at breakfast, we told Wendy that she would have to be careful to watch her *s* sounds at mealtimes. I told her that only at her meals would I watch for mistakes and that I was going to count them, and that if she didn't make more than ten, she would get a surprise after supper.

I had a spoon and a pan beside my chair and whenever she did lisp, I rattled the spoon in the pan and all of us hollered and counted. We got two mistakes at breakfast, three at lunch but only one at supper, so I gave her the gift and a lot of praise. She really tried hard and I was pretty good too. Didn't nag her once during the day about her lisp though I heard her do it a good many times.

Thursday: Today instead of a certain time as a nucleus situation, we picked a certain place, the kitchen. I told Wendy she could lisp all she wanted to any other place but not in the kitchen. To help her remember I put up a picture of a girl's face with a tongue sticking out between the teeth. I placed it above the sink where she would be sure to see it. Again I set a quota of ten mistakes as par for the course. You should have seen her be careful. I only caught her three times, and we really celebrated just before she went to bed. She loves these little games. And I noticed she was much more careful at the mealtimes even though she didn't need to be. It's working.

Friday: Today we picked a person instead of a time or place. It was her daddy. Unfortunately he didn't come home for lunch and Wendy was actually disappointed, for she was ready for him. I noticed her practicing by herself just before noon. But when he came home after work he and Wendy had quite a time. He was always trying to catch her lisping, and she was bound he wouldn't. He'd tease her and try to distract her but she was waiting for him. Only caught her three times.

These reports show how much better these nucleus situations do the job of getting a child to carry over his newly learned sound into his life in the world about him. There is no nagging by the parents, no irritation, no unpleasantness. Indeed there is no burden. Children who need to watch themselves only in nucleus situations find it fun. No guilt or anxiety is built up. What is even more important, by changing the nucleus situations and the quotas each day, the new controls can be spread throughout the child's life. No one can be careful about his speech all the time but anyone can concentrate for a little while. Nucleus situations are useful in therapy with all types of speech problems.

Now for negative practice. By this we mean the deliberate use of the error. We ask the secondary stutterer to stutter on purpose

at times. We have the cleft-palate speaker snort his *s* sounds through his nose. We have the child with pitch breaks learn to flop his voice around willfully. At first glance, this would seem to be foolish. Why practice what is wrong?

We do this negative practice to bring the errors to consciousness. We want the child to notice his mistakes, since only by noticing them will he be able to correct them. Having found that a few deliberate mistakes will make the errors more vivid than a hundred reminders, we always recommend it toward the end of treatment. With an articulation case, we never feel confident that the child should be dismissed from therapy until he can alternate the correct and incorrect forms of the words on which he tends to have trouble. Wendy had a tough time saying "thoup-soup" or "see-thee" or "Thaturday-Saturday" at first, but once she gained some skill in this alternating correct and incorrect words, her speech improved markedly. It's often wise to use body movements or gestures to the right or left in teaching this alternation. Wendy's mother would say, "Here's a hard word for you: 'Bus.' I've often heard you say 'Buth,' Wendy. So let's say it right and wrong or wrong and right." So the mother would chant "right, wrong" and Wendy would chime in with "bus-buth." At first this should be done slowly and carefully but gradually the child will be able to do it at greater speeds. Be sure not to overpace. Don't end in failure; finish with success. After single tough words have been worked on in this way, we often teach the child to use them in whole meaningful sentences. Wendy's mother would show the girl a picture and say, "Tell me what that dog's doing, but say it wrong like you used to," and the child would enter into the game enthusiastically. "The dog is chaything the kitty," she'd say. "Now say it the right way." And Wendy would say, "The dog is chasing the kitty," and then there would be laughter and praise. This negative practice, when used in this way, pays big dividends in good speech.

Now for cancellation. This consists simply of saying the word again, or the sentence again, when an error has occurred and been noticed. Parents should set a model by putting some of the

errors in their own speech, then pausing, and then calmly correcting them before going on. They can challenge the child to see if she can correct them before they can. Once this model has been presented, the situation can be reversed and the child can play the game, even perhaps by putting a deliberate error into her speech and canceling it before the parent can correct it. Children get a bang out of this. They also will begin to correct themselves almost as unconsciously as we ourselves correct a slip of the tongue.

One final caution. There comes a time when parents should cease their efforts and turn the responsibility over to the child. Newly acquired sounds or speech skills will remain unstable for many months. In excitement or emotion, the child will slip occasionally into the old errors. We need not worry. Time and the constant demand of society that all its members speak the same language will insure that the child will talk normally. Many parents and teachers do not realize this state of affairs. We had one father whose ears were so long that he heard every slip for five years after we dismissed his daughter from therapy, and he phoned to tell us every time. The last year we heard from him on Christmas Eve, when he told us she had lisped again on "Merry Christmas." We wished him a happy new year.

Speech therapists sometimes are criticized because they seem to dismiss a case prematurely but they know when the child is over the hump. Time and society's demands for good speech will take care of the rest of the problem. Sometimes it seems as though parents have been anxious for so long that they miss the anxiety. In these instances, we suspect that the parents have been projecting their own insecurities and fears onto their children. At any rate it is important to know when to leave well enough alone. There is a time to stop speech therapy.

Thus far we have been using the child with an articulation disorder to illustrate the parent's role in speech therapy. Now let us sketch parental speech therapy with the child who stutters. Many of the same principles which we have described are the same; some are new. Certainly the basic attitudes needed by the parents of the stutterer are no different from those needed by the

parent of a child with any other speech disorder. They must train themselves to view the stuttering as a problem rather than a social blemish. Of course, stuttering can become a major handicap both economically and socially, but the quickest way to make a stutterer feel helpless is to have his parents consider his stuttering only in terms of the handicap. It is a problem, a difficult problem, but like most problems it has a solution. Of all the possible ways of helping parents to get this basic insight, the best way is to have them participate in the therapy. We have seen parents whose anxieties and guilt were being mirrored so faithfully by their children that the stuttering was constantly being reinforced. And we have seen those same parents, once they began to help, change into influences for good instead of ill.

We remember especially a Mrs. Peters. Her son Henry was in kindergarten when we first met him and he said his name was "Huh-Huh-Ha-Ha-Hank juh-juh-juust llllllike my duh-duh-daddy's." Hank was an outgoing, active bean bag of a child, full of noise and banging and motion. He wasn't a bit bothered by his stuttering. Didn't seem to notice it at all. He talked every chance he got and he took every opportunity that came along. A very happy little boy and completely unconcerned about his way of talking. Not so his mother! Every time Hank got to sputtering or bouncing out his syllables, which was often, she froze like an arctic hare. You could see her petrify before your eyes the moment her boy began to repeat syllables and sounds. At times Hank would run on freely for a sentence or two and the mother would thaw a bit, relaxing, but soon the red flare of anxiety would rise in her in expectation of the next volley of bubbled syllables. We took one glance and knew that this boy was in danger. Even the young of wild animals soon learn alarm when the mother signals so vividly. Mrs. Peters asked us shakily to start therapy at once with Hank. We did. We put him in the playroom and took Mrs. Peters into our office.

First of all we verbalized her concern and let her pour out her feelings, all the fears and doubts and self-reproach that had her so close to spillover. She wept a bit and begged for reassurance.

Her father had stuttered. Should she have had children? Would he outgrow it? What had she done wrong? Finally most of the evil was vented and she grew peaceful. Then we began to talk a bit. We asked for her help, for essential information. When had she first noticed the stuttering and what exactly was it like when it first appeared? Under what sort of conditions had it appeared? In what types of speaking situations? Had anyone else noticed it at the same time? Was it the same sort of stuttering that her father had? Had it changed at all in the two years since it started? In what situations did Hank speak freely? Was it consistently present or did it seem to come in waves? How long did the periods of speech free from stuttering last?

As Mrs. Peters began to confront these challenges and to explore her memories, something began to happen. It always does. She became interested. Most parents are so full of their own and their child's suffering that they seldom are able to view the speech objectively. We didn't hurry this exploration. Objectivity works like osmosis. It seeps in. We interrupted our session to peek at Hank. He was having a whale of a time exploring the innards of a jack-in-a-box. Mrs. Peters had more information when we returned and her hands at last were quiet in her lap. What she told us was important in our understanding of the boy's problem but what her quiet hands now said was that there was hope for him.

And then we asked her to confront the present instead of scanning the past. We asked her to tell us in what speaking situations the stuttering seemed to be especially severe. "It gets terrible as soon as he comes home from school," she said. "Just an innocent question of ours about how things went in school today brings on a burst of it. He gets so excited trying to tell everything at once. And the more I tell him to stop and relax the worse he gets. Why yesterday he got to stammering so hard he just had to stop and cry. And so did I. Then suddenly he was all right again. I just can't understand it."

We waited and she wiped her eyes. "Then at the dinner table at night and at breakfast in the morning Hank has a bad time too. We're all talking, I suppose all of us at once, and pretty soon we

notice that Hank is sputtering or jamming up. So we quit talking and then there's a painful silence until someone says something silly or trivial. I know something's wrong in what we're doing but I don't know what it is." Mrs. Peters paused. "I think . . . I think I know what's wrong at breakfast time. We're all hurrying to get Hank's dad fed and off to work and the boy ready for school and there's a lot of commotion. I suppose I ought to set the alarm half an hour earlier but it's so hard to face the day. . . ."

Most parents, once they begin to think about the conditions which make a child's stuttering worse, seem to find the right answers. All they need is the opportunity to think aloud. One of our favorite ways of providing this opportunity is to give a parent this letter from the mother of a child who had begun to stutter severely and to ask that both parents read it and discuss it some evening after the child is in bed.

Dear Sir: You asked me to put down in a letter some of the things I told you we had done, and are still doing, at home to help Bill overcome his stuttering. As I said, he now seems to have stopped it completely. Oh, once in awhile he hesitates but no more than I do. You know how you hesitate when you aren't sure of what you're going to say but nothing unusual. I mean he talks fine and straight now just like anybody else. I've been waiting for another siege of it to come but it's been over three months now since any showed up so I really think it's gone. You asked me to tell you about our family talks after Bill went to bed. Well, they had to do with some of the things you mentioned when you told me that afternoon that your waiting list was so long and you couldn't promise us an appointment for a long time. I just couldn't bear to wait the way Billy was stuttering so I sat my husband down every night and we took a look at ourselves. It was kind of hard at first but it got interesting after we broke the ice. Every night we would ask ourselves ten questions. Here they are:

1. Are we irritated or sore at each other or with Billy. How and why?
2. Are we talking too complicated, too much, too fast or too long so he thinks he has to talk like that too?
3. Are we putting the pressure on him to talk, asking him too many questions, wanting him to tell us too much? Lord, we were always

doing this, we found. Over and over again in spite of good intentions.

4. Were we breaking up his speech by interrupting, nodding our heads before he'd finished, not paying attention, leaving him to do something else while he was talking? There was plenty of this that we had to stop.

5. Were we making sure he knew we loved him, that he was awfully important to us? I guess we hadn't done enough along this line.

6. Had we been criticizing him too much, punishing him too much or making him feel he wasn't good enough? Every day we found some of this at first.

7. Did we let him blow off steam enough, get mad, or even be a baby? We found we'd been bottling up that poor kid more than we knew.

8. Had we cut out the excitement or anyway cut it down? We discovered that unplugging the TV helped and there were plenty of other ways to get a calmer house.

9. Had we been expecting too much of the kid? We had, every day, almost every hour.

10. Could the boy see that we were upset when he stuttered? This was the hardest of all to change but we changed it.

These were the questions we asked ourselves every night and I think this was the most important thing we did. Oh, I guess we also began to talk more slowly and quietly ourselves. I know I didn't talk as much or as fast and that was hard to change too. And we started listening, like you told us, to his good speech. At first there wasn't much of it but it kept growing and soon that's all there was. Funny thing too, we're all a lot calmer and happier. Anyway he's stopped so you can take his name off your waiting list.

This letter summarizes better than we can the important things which parents of a *beginning* stutterer should do at home. We have found that one of the practices most difficult for some parents to change is their policy of demanding speech from the child. They sometimes require the child to confess his guilt and to state his regrets when he has done something wrong. A swat on the bottom works better than hurting the mouth. Parents correct the child too much in word usage or grammar and set adult standards too soon. They force him to show off before strangers. "Tell Mrs. Smith what a fine time you had at Johnny's

party," they'll demand. They finish his sentences when he falters. They hurry him when he gropes for a word. These are pressures which some children cannot take.

Some parents call attention to the beginning stuttering. "Stop that stuttering!" they command. "Stop now and think what you're going to say!" "Talk slowly!" "Stop and start over now!" Even when such cautions seem to help they unfortunately also make the child feel that there is something terribly wrong. If there is one thing upon which all speech therapists agree it is that parents should not do anything to make the beginning stut-terer feel that his repetitions are evil. Some speech therapists refuse to give the name of stuttering to this repetitive speech even when it is very conspicuous. They feel that the use of such a label will in itself have a bad effect upon the child. Certainly, all speech therapists would refrain from asking the child to stop stuttering, or to command him to relax, to take a deep breath or to try the word again. It is better to work upon beginning stuttering indirectly, by removing the pressures which trigger it. If we can prevent the child from reacting to his broken fluency by struggling or fearing, it will subside and disappear. It comes in waves. There will be periods of free and easy speech as well as those of hesitant speech and the good speech will win out in the long run if the child does not react to it or to his parent's anxieties about it.

There are several positive things which parents can do to help. They should take advantage of the fluent periods, getting the child to do a lot of talking at these times, and, at the times when he is having trouble, arrange conditions so that he does not need to talk so much. And they can make talking fun. There are many games and activities which feature speech play rather than speech as communication. Here is a parent's report of her attempts to create a nucleus of pleasant speech play:

Today Jimmy was stuttering pretty badly when he got up. I thought he'd never be able to get the word juice out when he asked for orange juice. It was just juh-juh-juh-juh for ever so long and the other words were almost as bad. I waited for him patiently though.

And today his repeating wasn't as easy like it has been but sort of jerky and hard at times. It scared me but I hid my feelings. I remembered that you said when speech was hard we had to make it fun so this is what I did. First of all I began to hum loudly as I was cleaning off the breakfast dishes and sing a snatch or two of his favorite tunes. Then I went over to him and said "buggabugga" in each ear as I ruffled his hair. And then I said I was an Indian and I was going to talk Indian talk. So I used gestures and said nonsense stuff but my motions helped him figure out what I was saying. Well, he caught on and began to talk Indian too and we had a wonderful time and he didn't stutter a bit. Then I pretended that I was talking with my fingers or that they were talking for me. I would make them walk across the table as I said one word with each finger movement. He began the same thing and, oh, I forgot to say that now we were talking English, and his finger talk was fine and without any stuttering. We held quite a conversation. And then I told him I was sleepy and I was going to talk in my sleep, so I lay down down on the davenport and snored and then began to talk slowly and lazily as I told him where he could find a cookie. He got it and then he came back and snuggled beside me and he talked in his pretend sleep too, and that was good too. Well, we did lots of other things similar and you know what, he hardly stuttered at all all the rest of the day. Oh, maybe a little but nothing real bad ever. I was so relieved I had to go up and cry in the bathroom when finally he went out to play. For the first time in a long while I don't feel helpless.

Jimmy's stuttering did not last long. Within a few months it was entirely gone, never to return. If only more parents could know more about how to react to beginning stuttering, this ancient affliction would disappear from the human race. Without parental cooperation, speech therapists are almost helpless; with it, the disorder is not too hard to conquer. Unfortunately, most parents do not know what to do and the disorder begins to change into a more difficult form.

This change comes when the child notices his speech interruptions and repetitions and reacts to them by *frustration* and *struggle*. These are the essential characteristics of what we prefer to call *transitional stuttering*. Instead of the easy effortless repeti-

tions, the child's speech now becomes jerky, forced. He may stick on a sound with his lips or tongue pressed so tightly that little fine vibrations are seen. These are called tremors and they are the result of the tension and forcing which the child's frustration has created. At this stage he knows that there is something wrong with his talking. Sometimes you can see the scared or hurt look in his eyes. He may say, "Mummy, I I I c . . . an't alk." He may cry. He may even strike or spit at his listener. He may stop talking and give up communication. And there are the times when a vowel will be prolonged and forced so that it goes up in pitch like a siren. Facial contortions appear. Stuck in his blocks, he may gasp and jerk or writhe as he fights the mysterious power which has frozen his jaws or has set his tongue oscillating. It isn't a pretty picture, this transitional stuttering when it is severe. And it is immeasurably more dangerous than the easy repetitive "primary" stuttering out of which it came. Yet parents should know that even the most severe forms of transitional stuttering will fade away and disappear if they can find ways of reducing the frustration and the struggle. We have seen this miracle happen many times but we have never seen it except in a home where some parent faced up to the problem.

Once a child knows that he is having serious trouble or asks for help or tells you that he is stuttering, there is no longer any need to work indirectly. To pretend that there is no speech difficulty when it is obvious to the child and to everyone else is folly, since this pretense will only make him feel that he is doing something unclean as well as unspeakable. It is better to confront it. In such instances we would not use the word stuttering unless he is using it but we would mention quite objectively and frankly that we have noticed that he is having some trouble talking and that he should learn what to do about it. This is what we instructed one mother to tell her son when she brought the problem up:

"Tell him," we advised, "that when he gets stuck, he must learn how to ease the word out rather than fight it. Tell him it's like learning how to swim. When a person first gets into the deeper water he is likely to do everything wrong at first. He gets

stiff; he fights the water; he flings his arms out every which way; and when he does so, he sinks. The way to swim is to do just the opposite of what comes naturally, to lie down in the water, to take it easy, to cup your hands and to pull the water back slowly. Then you're swimming. You've got to learn to swim with your mouth when you get stuck. You've got to learn to say the word slowly and easily, without fighting it."

And then we told and showed the mother how to stutter in this new way and how to teach her son to do it. We asked her to share the boy's initial struggle at the same time that he was doing it and then to provide him a model of how to ease out of his blocking. We told her she should stutter easily in unison with her boy, to do it good-naturedly and as a good teacher would. We mentioned that there would be times when the boy would not be able to follow her but that there would also be times when he would do so. We even suggested that occasionally she should put a bit of pretended stuttering into her own speech—a few times each day—and smooth it out before going on. We have found that nothing reassures a stuttering child so much as this calm sharing of his problem by his mother. Usually, it takes some time before this sharing begins to have an effect but gradually you will notice that the struggle will begin to lessen, the blocks decrease, and the fluent periods become longer. Often we find that stuttering leaves by the same route it came in. The struggle and frustration decrease; then some of the easy repetitions of beginning stuttering appear, and finally, the waves of fluent speech predominate.

It is also essential at this time of transitional stuttering that the parents be more tolerant of emotional outbursts and behavior problems. It is a trying time for all concerned and extra patience is needed. The child's frustration needs to be drained off. He needs a lot of release therapy. He needs to hit things and bang things and kick things around. . . . We have suggested earlier some of the ways in which this release can be effected. Parents must find the outlets through which the heavy pressure of communicative frustration can escape.

We face the toughest problem when the child has progressed through the transitional stage and has developed the fears and avoidances of *secondary stuttering*. Oddly enough at first the child may seem to be improving; he may not stutter so frequently because he is learning to hide and disguise his difficulty. He begins to fear the act of speaking to certain people or in certain situations. We knew one seven-year-old who absolutely refused to make any attempt to talk in the kitchen. He had probably experienced some very unpleasant frustration in communication in that room or had felt some shame or embarrassment there. These fears of situations, however, seldom stay fixed; they grow, sometimes like wildfire. It is heartbreak time for the parents. To see their child grow fearful before their eyes, to see him withdraw from human contact and become secretive, morose, and badgered by hidden hurt is terribly distressing. A happy little child can suddenly seem to change completely in personality. It is a bad time.

In secondary stuttering the fears are not only of situations. Words themselves may cause terror; certain consonants may suddenly become signals of approaching danger. This seems almost to be the point of no return. When language itself becomes infected by anxiety, the disorder becomes self-sustaining. A vicious spiral gets started: the more the child stutters, the more he fears; the more he fears, the more he avoids; the more he avoids, the more he stutters. One evil begets another. Stuttering becomes a circular trap. It becomes almost a way of living.

"But what can I do when all this happens?" cried one mother. This is what we told her. "First of all, you must enlist the services of a professional speech therapist and put your child under his care. And you must expect that therapy will not be short-term but rather a matter of years. Occasionally we have had a young secondary stutterer become fluent in a few months under our care, but not often. Usually it takes one or two years or more for real fluency to become stabilized. Oh, it is easy to get temporary relief. Any speech therapist worth his salt can get almost

any such child to stop stuttering and speak freely in less than an hour of treatment by using a few professional tricks, but the freedom will not last. Indeed, most of us avoid the use of these techniques—except when a child desperately needs a small ray of hope to illuminate his dark world of helplessness—because we know that the inevitable relapse will hurt more than the relief will help. Instead, most speech therapists settle down to a long, tough battle. They know they must desensitize the child to his fears of speaking, that they must get him to give up his tricks of avoidances and disguise. There must be built a foundation of mutual understanding and respect so that the child will feel safe even when he is stuttering. He must be taught ever so carefully that he can touch and bear these moments when he seems to lose control. He must learn that he can regain control when it is lost; that he can determine the course of his own speaking behavior; that he can wrestle with his stuttering and change it to an easier, more fluent form.

We cannot describe here all the things which the professional speech therapist will do in helping such a stuttering child since we do not know the specific problems involved. But we can describe how you, as a parent, can help. First of all, you must find ways of communicating to your child that you have faith that he will eventually be able to conquer his stuttering, that you are not ashamed or disturbed when he stutters, and, most of all, that you are interested in his speech therapy. Strangely enough, you should not praise him for speaking normally and without stuttering. Why? Because if you do, he will probably feel that your approval might be withdrawn whenever he does stutter, as he is certain to do for some time. Instead you should praise him for working with his blockings, for gallantry attempting a stuttered word over again even if he fails again. You should notice and give praise when he tackles a feared word or situation from which previously he has fled. And when he wrestles with a stuttering block and calms himself and works out of it slowly and with control, let the angels sing! For he has touched the untouch-

able, borne the unbearable, looked fear in the face and won! This is the crucial experience for the secondary stutterer. Help him to have it.

This is what we told one mother. "Now is the time to show your calm acceptance of the stuttering as a problem to be solved. Look at him when he stutters. Watch what he does. Help him to recognize that you would rather have him stutter openly than use tricks to hide it. Don't let him inveigle you into doing his talking for him. Insist that he speak up for himself and say what he has to say whether he stutters or not. Show him that he is not fooling you when he avoids or tries to disguise his blockings, that you know he is afraid but that you would rather have him stutter than run away from the challenge. Discuss it calmly and casually so he knows you are not afraid of it or ashamed of it. He's going to need a lot of courage of his own and a bit of yours too."

The mother's chin went up. "I took care of him when he had rheumatic fever," she said, "and I guess I can handle this now that I know what to do. That's been the hard thing, not knowing. If the first thing he's got to do is to overcome his fear, all right. We'll do it together. I can help on that. But aren't there some other things I can do too?"

We told her all the things we've previously suggested as being helpful in the treatment of primary and transitional stuttering for in secondary stuttering we have all the other features of the earlier stages plus the fear and avoidance and shame. It is always astonishing to discover again and again the strength possessed by parents when their young are threatened. This mother was no exception. "Tell me how I will know when he is improving," she demanded.

We reached into a drawer and handed her a sheet of paper. "That's a fair request," we answered, "and a hopeful one. You sound as though we'll make a pretty good therapy team. We'll have to work up here with the boy several times a week and there may be many home assignments for you. You'll have to report to us frequently on how well things are going in the home. But

you asked for the signs of improvement. Here is a sort of checklist which can serve the purpose." This is what we gave her.

THE WAY OUT

The child will be speaking more. (He may, as a consequence, even be stuttering more, but the output is what is important since it shows that the fear is going.)

The refusals to speak will decrease.

He will not postpone the attempts on feared words as often.

His disguise and hiding reactions will decrease.

He will seem less embarrassed when he does stutter.

The blockings will become easier. There will be less struggle.

More repetitions will appear in his speech as opposed to hard, silent blockings.

He will openly attempt a stuttered word again and again until it comes out easily.

He will begin to have more periods of free speech and they will grow longer.

The hard blockings will only occur under extreme excitement or emotion.

Miniature facsimiles of the severe stuttering will appear only occasionally.

Speech will be free from stuttering but a bit jerky and uneven.

He will be speaking normally.

Caution: You must not expect the course of successful therapy to be smooth or swift. He will make progress and then slip back and make new headway. Be patient, have faith, and do your job as well as you can. Continue, even after he has become fluent, to create an environment favorable for fluent speaking.

Stuttering is one of the more dramatic of the speech disorders and those who stutter severely are greatly handicapped in many

ways. But we are compelled to say that the child with cleft-palate speech needs a pair of understanding parents quite as much as any stuttering child. We must also say that parents of any child with a speech disorder can learn much from considering the problems encountered by such a child. For the impact of our social attitudes toward the "speech defective," often hidden though present for the other disorders, become revealed when a child speaks through his nose rather than his mouth. We have had to heal the hurts of many of these children. It has been hard going often. But we have come to respect, and to honor, and to expect much of parents because we have seen how much some of them have done for these cleft-palate children who were afflicted even before they were born.

When a child is born with a cleft palate the whole family is immediately confronted with a terrific challenge. We almost said "emergency" but the situation is one of a series of emergencies and difficulties. We have seen families break up under the stress. We have seen conflict, guilt, and bitterness welling up beneath the surface of family relationships. We have watched the resentment of brothers and sisters of the cleft-palate child grow into hate and jealousy because of his need for special care and because of their own deprivation. One father, who had held two jobs for ten years to pay the necessary bills, lashed out: "I have poured twelve thousand dollars into his ugly little mouth and it still asks for more. Will there be no end?" And then he felt terrible. Parents of cleft-palate children often even become afraid to have normal sex relations. Evil suspicion of family weakness in heredity may never be expressed by either parent but the hidden blame festers unseen. There are, at the very least, the many extra burdens. The infant must be fed more slowly, burped interminably, watched to see that food does not get up into the cavity of the nasal chambers. The child must have special diets and there are often feeding problems. The danger of serious ear infection is always present. Then there are the trips to the hospital for surgery, for checkups. There are dental problems requiring special care and perhaps the jaws must be correctly positioned by

the orthodontist's appliances. Visits to the prosthodontist may also be necessary to have a false soft palate built and fitted. Then there will be the sessions with the speech therapist. This is not a pleasant picture and it may be that we have painted it with blackest colors. Some children need little extra help after surgery. Many need the whole routine. All we can say is that when each of our three babies was born, the first thing we did was to look in its mouth.

A black picture, yet we have often witnessed the sunrise. We have seen parents rise to the need, whole families become close and strong as they met the problem. We have watched the incredible growth in character which follows the acceptance of challenge with courage and determination. Some of the finest parents we have ever met were the parents of cleft-palate children. They have a special shine to them. They have been through the fire. Their homes are happier ones by far than those of most of the people we meet. And their cleft-palate children are not handicapped.

Our respect for parents such as these has been so great that we have tried to discover their secret. Why do some parents rise to the challenge while others fail? It does not seem at all to be merely a matter of personality structure. We have seen neurotic mothers, complainers, change into mature, strong individuals. We have seen fathers who seemed to need more babying than their own children gradually grow to become responsible, tolerant, and wise. Where was the difference? We cannot answer completely but we do know that part of the answer lies in the willingness of such parents to look at the *problem* of cleft palate and to learn everything they can about it. These parents do not recoil; they seek. They ask us so many questions we sometimes flinch when we see them coming. They study up on cleft palate. We have known parents who had not completed high school who knew more about cleft-palate surgery than we did. As they learn, they somehow become more objective about the whole matter. And better parents.

This book is not the place to include all the essential information needed by parents of a cleft-palate child since the problem has so

many aspects other than speech and they are all interrelated. You will find some excellent references in the list of books at the end of this one. Here we must concentrate on what the parent of a cleft-palate child can do to help him speak better. Perhaps the best way we can do it is to let you read a letter we wrote to a mother yesterday:

Dear Mrs. Jones:

Your phone call this morning is what inspires this letter. You sounded pretty frantic when we told you we could not accept your child for intensive speech therapy immediately because of our present case load. No doubt by now you have regretted your outburst of irritation with speech therapists who "will not help when they are needed, who will not tell what they do or why they do it, and who do not realize how much a mother could do if she had the information." So far as we could gather, your only contact with a speech therapist was at the hospital four years ago when your boy had his surgery, and she was probably wise at that time in refusing to give you some token therapeutic suggestion. You might have tried too much too soon. We can understand your anger of desperation and your need to express it. Yes, it is hard work to be a good mother of a cleft-palate child, to have fought the battles of survival, of feeding difficulties, of surgery and hospitalization, of ear infections, and the cruel or stupid attitudes of strangers, only to finally have to face the fact that your boy cannot talk like other children. We can still hear your voice saying, "But must I merely ache at the sound of my child's voice? Must I merely endure it? Why can't you at least tell me what you will do or what I will do if finally you do accept my son for therapy? Why can't I study and learn more so that when you do begin to work with him I can help at home?"

I presume we are taking a risk in accepting your challenge. You sounded almost too emotional to be a good teacher or an assistant therapist but that may have been due to your disappointment. You may plunge into half-understood home therapy and make it difficult for us to help your child next semester when we can enroll him. But you have only six weeks to wait so we'll take the chance. These suggestions will spell out what you will be doing to help your son at home. Our question is this: Do you think you'll be able to carry them out?

The basic goals for speech therapy for the cleft-palate child are three: to reduce the amount of nasal emission (the amount of air escaping through the nose); to reduce the amount of nasality in the voice (the "talking-through-your-nose *tone*"); and to improve the precision of his articulation (to learn to speak the consonants more clearly). Any improvement in any of these three aspects of his speech will improve all of his speech. These are the goals that we must shoot for. You must see them not as final goals for the road to good speech is through improvement. What we've got to do is to start the process of changing, to start moving from the abnormal speech which your son has now, to the better speech which may be his in the future. His present way of talking, without therapy, will stay fixed. We must prevent that fixation. We must help him to vary it and see that it takes the proper direction.

One of the things you'll probably find hard to learn is that your job is not, as you put it, "to correct" his speech or to "drill it into him." We just don't learn to talk in that way. Speech therapy must be fun; it must never be unpleasant. Even a parakeet must hear love and happiness in the tones of its teacher's voice before it will try to change its chirp into something resembling human speech. Your son must *want* to change his speech. Changing must never be painful. To change his way of speaking, your son must enjoy speech play, must have fun experimenting with it, varying it. And you'll have to enjoy it too. You may be so full of anxiety and pressure that you may not be able to create this favorable climate for exploration of new and better ways of talking. We hope this will not be the case.

So do not do your teaching in a "Don't talk like that! Talk like this!" fashion. When the child is trying to tell you something important, do not feel that such a situation is an appropriate time for speech learning. You'll only frustrate him and make speech unpleasant. If you feel you must relieve yourself of your own tensions when he is again speaking so nasally, put a little nasality into your own speech and then correct it casually and without comment. He may start to imitate you. You cannot correct his speech; only he can do it. But you can help him to know the difference between nasal and non-nasal speech by your own behavior and without preaching at him. He must not, of course, feel that you are mocking him, but merely correcting your own poor speech. If you also have some poor speech occasionally, he may not feel so different. If he hears you react calmly to

some nasally snorted *s* or to a phrase spoken through the nose or to some slurred and poorly pronounced sentence by saying it again more normally, he will be more willing to do the same thing. Sprinkle these moments of self-correction throughout your speech, perhaps having only two or three of them the first day, and finally building up to a daily quota of about ten or fifteen by the end of the week.

The actual speech teaching should be concentrated in one or two little speech periods of speech play. Each day should have several, and they should not last very long.

In these, you should play with the different speech sounds, having the child imitate you as you make them alone by themselves—*puh* and *sss* and *kuh* and *dub-da-dee-doh*—teaching the child to feel the air coming out of his mouth on a cold, wet finger or by the flicker of a candle flame or by watching in a mirror the flutter of a little tissue paper mustache stuck above his mouth and under his nose. Do not use words because he has said these incorrectly too long. We can use them later, when he has learned to use the mouth channel instead of the nose. Reward the child with some approval or token for every performance which comes *closer* to the sound you desire. For a long time, ignore all failures. Use nonsense syllables or nonsense words (which do not have *m* or *n* in them.) Give nonsense names to your fingers, to the windows, to the chairs (pipp, teetee, veeb, etc.). Have him say them with wider mouth movements. Share everything with him; do the thing in unison and alternately. Play echo from different corners of the room. Help him know the sound you are desiring. Contrast his sounds with the ones you are shooting for. Imitate him and then change gradually to the desired sound.

Whenever he seems to be getting tired, shift to some other activity, often a large physical activity with which you can fasten a sound. Change *before* he grows bored. All of the activity should be interesting, surprising, and fun. Have him wobble his tongue as he blows air or voice. Have him speak on the way in (as he inhales) as well as on the way out, as in the Hee-Haw of donkey breathing. If he sucks air in through his mouth as he is speaking, the soft palate will likely be more active. Use singing and then shift to speaking. Have him speak breathily, pouring out the air through a paper tube. Imitate the voice of a person with a bad cold in the head or adenoidal speech. Have him act out little plays in which he uses different voices. Make faces and have him make different sounds as he does so. Have him talk

without squeezing his nose or flaring his nostrils. Watch this in the mirror. Speak while yawning or sighing. Speak through tubes which have a little feather fastened across the outlet so it will flutter if the air goes out there. Have him sing through tissue paper over a comb and then speak through it.

Help him to hear his own voice. Have him talk through a tube from his mouth to his ear. An old paper milk carton can be cut open and curved so that it can be used in this way. Make a hole in the upper end so that you can join him in what he is saying or sounding. Imitate him first and then shift to the non-nasal sound you want. He will often follow suit.

Have him blow a lot of things: paper boats across a pan of water, Ping-pong balls on a smooth table, feathers on a string, a piece of tissue paper against a mirror or a windowpane, holding it there for a moment with his breath. Blow with voice, making breathy vowels. Blow through tubes of different sizes, or the new plastic horns. Have an orchestra. Talk through them.

Cut out an opening in a big cardboard box for a television screen, and have him say things both nasally and normally, turning up the volume or tuning it down. You get in it too. Have him turn on your nasal voice, then shut it off.

Do some tongue clicking or trilling to free the tongue. Have him talk with his chin on the edge of a table, and do it with him, so that his tongue tip will have to move alone. Have him speak with two fingers between his teeth, or a spoon held on edge, so that the tongue will have to lift higher and learn to do its share of the work. Have him pretend to be a dog and lap up milk or pop from a saucer. Do what he does and change the performance in the direction you desire him to follow. And make it all enjoyable.

Tell him a story with places in it for him to blow, to say something with a lot of mouth air, or to snort a sound wrong and then correct. Occasionally, as you become successful, have him imitate the old way of talking and follow it with the new way. In a large mirror, do mouth gymnastics while giving voice or air-flow, lifting tongue, lowering it, wiggling it, lifting the palate so he can see it lift. Yawning the "ah" sound may lift it.

Have him alternate "maybe" and "baby" so that the latter has a bigger puff of mouth air. Do the same for "no" and "doh," for "ing" and "igg." Snort a ssss sound and then make it come out between the

teeth. Have him hold a straw between his teeth and make the *sss* sound into it. Do the same for *zzz*. Make sound sandwiches, using his best non-nasal vowels as the two slices of bread, and some consonant as the meat in the middle: *abbah*, *oo-doo*, etc. Give him a tiny inch-wide sandwich as a reward. Or a single peanut. Or one lick at a lollipop. Or a smile of approval. Sometimes have him do his speech play lying down on his back on the bed with you. Hug him for an especially good performance. By the way, your bedroom is a good place to work on speech. It's different and you can be teacher there instead of Mother, and the whole speech period can be something special. Besides the palate seems to close more easily if the child is lying down on his back.

Play Indian, doing some whooping if tension or frustration builds up too fast, having both of you hold your hands over your mouths and rhythmically interrupting the sound. But do this in a special place or a different room. Do some talking between your fingers so that you can feel the air coming out between them, but keep your mouth open. And have him talk back to you the same way. Play you are birds and chirp, peep, and make bird-like sounds: perhaps even a little whistle may come out. Have him do it too. He will probably be blocking the air with the back of the tongue in some of these activities but he may also be closing off the palate, and in any event he will feel air and sound coming out of his mouth. Have him fill his cheeks with air and close his eyes. Kiss his cheek as a signal to let the air leak out and say "I love you." You do it first to set him a model.

Do some whispering. Many sounds tend to come out of the mouth better when the cleft-palate child whispers than when he talks aloud. In all your speech training try many of the hardest sounds softly first, and at a low pitch. Warm up for the speech session by some easy babbling of soft nonsense stuff, just playing softly with the sounds: *aboheeyakeeo*, *buddabuddagoopubteeto* and so on. Call it Scamboolian. Let the sounds wander where they will. Chew them and move your mouth around. Fewer nasal sounds will come in if you finger the child's mouth, tapping it affectionately even as he also does to yours during this babbling. His mouth has been hurt a lot. Help it to be a pleasant place too or speech may not want to enter it.

Try talking with your tongue outside your mouth, like a dog panting. It won't sound very good but it won't be as nasal, especially

if you will open your mouth wide when speaking. It will bring your tongue forward and help to open up a wider passage outward from the back of the mouth. Try saying "a big hug!" with your tongue way out. You may have a lot of trouble but your son may say it very clearly and with little nasality. Anyway, it should be fun. Find some other sentences, but stay away from words having *m* and *n* sounds in them. Make vowels with your tongue flapping in the mouth breeze.

Try sniffing in and out of the nose with lips closed, then panting in and out of the opened mouth. Do this first just with air, then with sound too. Get down on all fours and pretend you are dogs, hot dogs, who have to pant. Raise your heads high while you pant and then howl, softly at first, and then more loudly if little nasality comes.

The plosive sounds (*p, b, t, d, k, g*), often give trouble because the mouth passageway is blocked for an instant by the lips or tongue. When the air is dammed up like this it wants to back up and come out of the nose. Try getting the child to imitate you as you say these sounds with a slow leak. Don't pop them. Use loose contacts. Make them friction noises rather than explosions. Prolong the *pppppppp* so it becomes just air, and try it in syllables, then in simple words. Marked improvements may result.

With the continuant sounds like *fff* or *ssss*, try making them as the mouth opens wide. This too will keep the child from feeling the pressure building up inside the mouth and detouring the airstream up his nose. The sounds may be weaker at first, but they will be much better in quality.

There are ways that we can use the nose too, though we must remember that our main job is to close the back door rather than the front door. But many a child will be able to speak his difficult consonants correctly through the mouth if you begin by holding the nostrils closed with thumb and forefinger. Have him repeat a series of them such as da-da, da-da-da, or spoken in different rhythmic patterns. Occasionally in the middle of a series let go the nose. Often the correct sound will still be made. But you will have to surprise him at first. Once they come, try to get him to repeat it in the same way, voluntarily. It is unwise to use this nose holding on the vowels.

Your child must come to hear nasality as something different from the normal tones so you must make your own voice nasal at times during the day. If he can catch you doing it, he gets a tiny reward of some kind, or you must do something funny like putting your foot

in a waste basket or wearing a paper bag on your head for a moment. Find some words or sounds that he can say with little or no nasality and have him try to use the nasality on purpose so you can catch him. Then he'll have to wear the paper bag hat! It should be a game with the hidden point that there is a difference between a nasal and non-nasal voice. You can also give him commands which, if they are spoken in a nasal voice, he can refuse. If you can say them normally, he must do them. Perhaps he can use two voices in the same way. It will be worth trying. We must remember that there are many routes to good speech. If one doesn't seem to be acceptable, invent another. You may feel at times that you have tried everything and the child still is talking through his nose. A good teacher has patience beyond belief and more faith than patience. Cleft-palate speech is a tough problem but once a child comes to know good speech and has a chance to experiment and has a loved companion helping him, great improvement can occur. We knew a sixteen-year-old boy with a wide-open cleft in the hard and soft palates who spoke normally. He had learned somehow on his own to talk the way others do in spite of the fact that his mouth and nose were one big cavity. Your child has a much better chance but he needs help to fulfill his potential.

We hope that this incomplete picture of the ways in which you can help us improve your child's speech will help to ease some of your anxiety. We will be working with you and your child soon.

It was a long letter and, we fear, a bit overwhelming. After reading it, the mother decided to wait until her boy was enrolled in the speech clinic before beginning to do all the work herself. The letter must have done some good because she turned out to be a fine helper and the boy made more rapid improvement than most cleft-palate children. We have presented the letter here only so that you as a parent will see how much more there is to speech therapy than the simple command to say it again and say it better.

Now we'd like to say something about *delayed speech*. When a child has failed to acquire understandable speech by the age of three, the parents should go into action. This is not to say that the speech should be adult in form or that there should be no errors. Few children master all the speech sounds completely until

they are seven or eight years old. The voice does not mature until much later. But your child should speak well enough by the age of three so that strangers can understand most of his speech.

Parents get pretty worried when a child is still not talking understandably at four. They should be worried! In a year he will be entering kindergarten. Many school systems will not accept a child whose speech is markedly retarded. Parents then seek the help they should have procured at least a year earlier. Children don't outgrow their speech disorders. They *learn* to talk. The first thing the speech therapist will do for such children is to attempt to find out why the child is delayed in this most important of all skills. He will want to know the early history of the child, whether he babbled a lot in infancy, whether he showed a similar delay in other areas. Bring your baby book if you have one, for he will ask about such things as the age at which your child walked or crawled, how early he got his first teeth, his illnesses and accidents, how soon he was toilet trained or began to feed himself. The therapist will be interested in ear infections, in your honest estimate of the child's intelligence. He will wonder whether you have learned to understand your child's jargon or gesture language. He will pry a bit into the emotional climate of the home. Tell him the truth even though it hurts for he must devise a therapy to fit the child's problem. Often, if the causes of speech delay can be determined, they can be removed and then great progress will take place. The therapist may even ask you to take your child to a specialist to determine the possibility of brain injury resulting from difficult birth or high fevers or accidents.

Many of these children with delayed speech, however, are perfectly normal children who just have not learned to talk. Perhaps they did not feel any need to do so. Learning to talk is harder than it seems, as you perhaps can believe if you remember your own difficulties in trying to master a foreign language. Why do it if you don't have to? Moreover, there seems to be a certain period in which the readiness to speak is at its height, usually between the first and third birthdays. If the child was ill during

this time, or if there was a lot of conflict in the home then which reflected itself in the speech of adults, this speech readiness period may be bypassed. The child may learn to understand English but may prefer to think and communicate through gesture or jargon. We have seen such children whose symbols for "up" and "down" were the lifting and lowering of the head, who *thought* with such gestures. It is very difficult to think without words and so such children may appear duller than they really are. Speech is also a safety valve for the emotions. We express the squirting of our glands through the words of our mouths. These children cannot do this, for they have no usable speech. As a result, they know so much frustration that they often are irritable and irritating. We have seen almost unbearable children become sweet and calm once they acquired understandable speech. So, if you have such a child, for your own peace of mind and disposition, you should concentrate on teaching him to talk.

Let us tell you about some of the children we have taught to talk. There was Willy for one. He came to us when he was five. Two shoe-button eyes and a tightly closed mouth in a poker face, that was Willy. For the first three sessions he never opened that mouth except occasionally to put his thumb in it and his eyes never left our face. He showed no interest in any of the toys or pictures; he just sat. Perhaps he was waiting for us to ask him to talk, to put the pressure on him for display speech as his parents so often had done. Perhaps he enjoyed denying their demands and hoped that he could deny ours. If so, we thwarted him. We did not ask him any questions or give him any commands. Instead we used pantomime only. We assembled a toy tractor before his eyes. We spun a top. We hunted for the jack-in-a-box and showed our silent joy when we found out how to spring it. Willy watched. Willy sat.

On the third day we began to talk a little but not to him. Single words only and always accompanied by gestures. "Clay?" We hunted for it, all over the room. When at last we found it in a drawer, we picked it up and said "Clay!" with satisfaction. Then we made a ball of it and said "Ball," smashed it down and said

“Bang” when we did so. We looked puzzled. “Oh!” Then smilingly we made a bird. “Bird!” We said it and made bird sounds; made a cat and meowed, put it in our pocket, and said, “All gone!” There was more silence than speech but always there was interesting activity. Willy watched us and the poker face began to crack. When the toy car ran into the pile of blocks and toppled them, he laughed. We did it again and said “Bang! Bang!” to the blocks, not to Willy. He felt no demand; but we could see his lips form the word as the car crashed again and we knew he was ours.

The next week we added sounds to our activity. The car went *oooooooooooo* as it raced across to its target. The toy airplane's bomb went *zzzzzzzzzz* before it went “boom” as it hit the toy dog who barked and said “No, No.” The cow mooed in the barn before we let it out and said “Out!” We put it back and mooed again. Five moos it took before Willy said “Out!” We gave him the cow and took him back to his mother. Three weeks more and he was speaking in short sentences. And we had never asked him to say a single word.

Then there were the twins: Hector and Rector. Those were their actual names. They too were five years old but they weren't silent like Willy. They talked all the time but no one could understand Hector but Rector, or Rector but Hector. They didn't care; they were sufficient unto themselves. Their idioglossia, to use the professional name for their jargon, was beguiling. Full of inflections and meanings, their speech came in paragraphs, not simple sentences. The parents were helpless; they couldn't understand a word of it. Nor could we at first. Unlike Willy, Hector and Rector sat not; neither did they watch us. They swarmed over the playroom and over us and under the chairs and on top of each other in continuous activity, jabbering at each other all the while. Thanks to the gestures which accompanied their talk, we gradually began to assemble a Hector-Rector vocabulary. Car was Ahtah. Light was Wheeeee when Hector turned it on and something like Bugadamadobee when Rector turned it off. The bean bags each had a different name according to color. We

forget all of them now but remember that the blue one was *oobuh* because we once got oobuh squarely in the ear.

After we had learned a bit of their language, we separated the twins. Hector was the one we took for therapy because he was usually the leader. They raised some Cain when separated but that passed and since Hector needed someone to talk to, he talked to us. At first we spoke only in his language, the little we had learned, and in gestures. Again, we made no formal attempt to teach him to speak English, but we used English ourselves as we commented on what Hector was doing. "Where's Oobuh?" we'd ask and search for it. "Oh, here's Oobuh. Oobuh up! Oobuh down!" and we threw it into the air and caught it. Such activities went on for a good many sessions and then we began to pretend to misunderstand. Hector would say, "Ahtah! Ahtah!" He wanted us to get the car down from the high shelf. We looked puzzled. "Ahtah? Ahtah? Oh, yes, car. . . . Ahtah, car. Sure, here car!" and we got it down for him. Over and over again we repeated this routine, always translating his utterance into English before he got what he wanted. We're sure he often thought us very stupid. We would pretend to try so hard to understand and it took so long. Finally, in self-defense, Hector began to speak English to spare himself the frustration. It took almost a year before he was speaking English consistently to us, and longer than that before he stopped talking Twinlingua to Rector at home. But gradually English words began to creep spontaneously into his speech and Rector picked them up almost as fast as Hector mastered them, though he had received no speech therapy at all. We have always found that it is better to work with one twin rather than with two. They cannot bear to be different and, if we pick the dominant twin as the one to receive speech therapy, the other, through his need to identify, will always follow any gains.

Without parental cooperation, no child with delayed speech can escape being severely handicapped. We have sketched, in these two case studies, how we created the necessary conditions for the necessary learning to take place. There are many other ways of doing it but, once under way, the hoop must be kept

rolling by the parents. The child must need to talk English and want to talk English. He must be given models which are simple enough and important enough to be within his reach. Parents who alter their own speech and their own communicative practices find their children make real progress. When they emphasize simple commentary instead of demand, statements of what is occurring rather than questions, the child has a chance to learn how to talk. The words and sentences must be simple. There must be strong rewards placed upon all attempts, no matter how primitive at first, to speak as others do. And we must prevent the child from profiting from his gesture or jargon speech.

A child who is retarded in speech development needs help in the gigantic job of learning this new means of communication even as the student of foreign languages needs help. Like the child with a severe articulation problem, he needs to hear sounds by themselves, to play with them in isolation, to know his sound alphabet. Like the child with an articulatory problem, he needs experience in taking words apart, in recognizing their sequences, their heads and tails. Like the stutterer, he needs release from his frustration. Other parents have done these things and so can you. But most of all, these children need the vivid realization that they *can* talk as big people do. The early collection of all "good words" or "good talk" sentences is vitally important. One of our children, a girl, had only two utterances which were recognizable: "No" and "Fa' down!" Every time she said either of them her parents showed their joy and celebrated much as most parents do instinctively when their babies say their first recognizable words. These served as the core of a basic vocabulary around which the later speech developed. These few "good words" are the seeds of speech. Nurse them well! Children have been learning to talk for thousands of years. Your child will too if you can clear away some of the obstacles.

It is time we brought this little book to a close. Necessarily, we have had to concentrate upon those disorders which occur most frequently. There are things we should like to say about children with cerebral palsy, with pitch breaks, with odd voices,

with aphasia. Yet, in a sense, we have said them, though perhaps obliquely. The child with cerebral palsy often has delayed speech, bad articulation, nasality, broken rhythms and we have talked about each of these. We have stressed the need for building a home climate favorable for speech development and given examples of how other parents have set the proper models of stimulation and correction. We have featured the good things that some parents have done so that you too will have examples to follow. And we hope that we have given absolution for your mistakes of the past and those yet to come. Children can learn to talk if the parents will help them.

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For information regarding the locating of professional speech therapists near you, write the Executive Secretary, American Speech and Hearing Association, 1001 Connecticut Ave., N. W., Washington, D. C.

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