STUTTERING

Prepared for the

American Speech & Hearing Association

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CHARLES VAN RIPER, Ph.D under the editorship of WENDELL JOHNSON, Ph.D.

Published and Distributed by

THE NATIONAL SOCIETY FOR CRIPPLED CHILDREN & ADULTS, INC.

Second Printing, 1954

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PREFACE TO THE SECOND PRINTING

The original edition of this book was published in the Spring of 1949. Since that time the National Society for Crippled Children and Adults has distributed approximately 25,000 copies and at the time of this writing has a large additional number of back orders. Charles Van Riper and his collaborators evidently have made an even larger contribution to the literature than was envisioned at the time of original publication. An interesting feature of this book's history is that its major distribution has been to college and university bookstores, although its primary purpose was public enlightenment.

This Second Printing contains no revisions whatsoever in the basic text, but we have taken this opportunity to revise and bring up to date the informational supplement at the end of the book which describes the American Speech and Hearing Association and the National Society for Crippled Children and Adults.

Grant Fairbanks
Editor, American Speech and Hearing Association
Urbana, Illinois
December, 1953

EDITOR'S FOREWORD

This book was prepared for the National Society for Crippled Children and Adults, Inc., by the American Speech and Hearing Association. It was originally suggested by Mr. Lawrence J. Linck, Executive Director, and Colonel E. W. Palmer, President, of the NSCCA. The Council of the American Speech and Hearing Association reacted to the suggestion by requesting the Editor of the Association's Journal of Speech and Hearing Disorders to supervise the preparation of a suitable manuscript.

Dr. Charles Van Riper, author of Speech Correction: Principles and Methods and an outstanding authority on stuttering, agreed to prepare a manuscript. The Editor then submitted Dr. Van Riper's manuscript to the following speech pathologists:

Stanley Ainsworth, M.A., Ohio State University
Herbert Koepp Baker, Ph.D., University of Illinois
Spencer T. Brown, Ph.D., M.D., University of Iowa
Bryng Bryngleson, Ph.D., University of Minnesota
Raymond Carhart, Ph.D., Northwestern University
Melba Hurd Duncan, Ph.D., Brooklyn College
Grant Fairbanks, Ph.D., University of Illinois
William G. Hardy, Ph.D., The Johns Hopkins Hospital
Sara Stinchfield Hawk, Ph.D., Scripps College
Ernest H. Henrikson, Ph.D., University of Minnesota
Mary Huber, Ph.D., Brooklyn College
Claude E. Kantner, Ph.D., Ohio University
George A. Kopp, Ph.D., Wayne University
Elvena Miller, M.A., Seattle, Washington, Public Schools
D. W. Morris, Ph.D., Ohio State University

Henry Moser, Ph.D., Ohio State University
Martin F. Palmer, D.Sc., University of Wichita
Miriam D. Pauls, M.A., Northwestern University
Clarence Simon, Ph.D., Northwestern University
George S. Stevenson, M.D., National Committee for Mental
Hygiene

Lee Edward Travis, Ph.D., University of Southern California

Robert W. West, Ph.D., University of Wisconsin Harold Westlake, Ph.D., Northwestern University

Comments and suggestions received from these consultants were turned over to Dr. Van Riper, who revised his original work accordingly. The Editor then sent copies of the revised manuscript to the members of the Council of the American Speech and Hearing Association and the members of the editorial staff of the *Journal of Speech and Hearing Disorders*, all of whom were included in the original group of consultants. They approved publication. Finally, the Editor, with the aid of Mrs. Louise Barchat, Editorial Assistant, prepared the final printer's copy, and this was approved, in turn, by Dr. Van Riper.

All concerned have attempted to achieve a statement concerning stuttering that would reflect substantial agreement among professional speech pathologists. They have succeeded to a remarkable degree. The agreement is not perfect, of course. No one would expect that. It is indeed gratifying and encouraging, however, that such a large group of prominent speech pathologists has acted together to waive individual preferences for this or that interpretation of various specific details and to give their general approval to the statement here presented. This is all the more significant in view of the intense and complicated controversy about this subject which

has continued until very recently and which still persists to some degree. The agreement achieved is impressive evidence of the value that has been gained from substantial scientific research on stuttering during the past twenty-five years. The problem has been clarified very considerably as a result of this scientific work. Stutterers, like all other handicapped children and adults, stand to gain most in the long run from the labors of the man in the laboratory.

This is a book for parents, first of all and above all. It is also intended for physicians, nurses, social workers, teachers, psychologists and all others who are necessarily concerned with the problems of those who stutter. The chief purpose of the book is public education and enlightenment. The pages that follow contain the bare minimum of information that should be clearly grasped by anyone concerned with a stuttering child or adult.

It goes without saying that those who presume to give advice or remedial training to stutterers will prepare themselves for this responsibility by going far beyond the reading of this modest volume. Prevailing standards of professional qualification have been defined by the American Speech and Hearing Association. Readers who are interested in these professional standards, in the Association's publications and functions, and in the speech correction facilities available throughout the United States may address their inquiries to Professor George A. Kopp, Secretary-Treasurer, American Speech and Hearing Association, whose address is Wayne University, Detroit, Michigan.

There are at least a million stutterers in this country. There are three to five million persons with other types of speech disorders. Taken all together, speech defectives make up our largest single group of handicapped persons. And speech handicaps are among the most frustrating and de-

moralizing known to man—particularly when they are misunderstood and neglected.

There is such a grave shortage of speech correction workers that scarcely more than ten per cent of our speech handicapped are receiving the attention and training they need. Moreover, there is a continuing need for more scientific research, in order that methods of prevention and correction might be made increasingly more economical and effective. The National Society for Crippled Children and Adults, Inc., is carrying on a vigorous program designed to make speech correction available to those who need it. The American Speech and Hearing Association in cooperation with the National Society for Crippled Children and Adults, Inc., is doing all it can to encourage the training of more trained workers and to stimulate increased scientific research.

This book is significant as a symbol of the spirit of cooperation and common cause that binds these two beneficent organizations together to their mutual advantage and to the greater benefit of the millions they serve in their respective but complementary ways.

Teamwork is the key to any effective program of special educational or clinical services. The teamwork that has made this book possible is a clear example of this principle. It is the earnest hope of the team that has produced it that all those for whom it is intended will be the richer and happier because of it.

WENDELL JOHNSON

Iowa City, Iowa December, 1948

STUTTERING

There is an old Finnish proverb which declares that Evil never wears the same face twice when he comes to dinner. Those of us who meet large numbers of children or adults in the course of our occupations might make the same observation about stuttering. Some stutterers hold their breaths or gasp; others repeat sounds; some of them come to a dead halt, flushing with inner upheaval; others give forth a mutilated word or syllable over and over again, with the compulsion found elsewhere only in a worn phonograph record. One old German investigator of stammering (the term is now generally used as a synonym of stuttering) painstakingly classified more than ninety major varieties, each with a name more botanical than psychological. Yet the forms of this behavior vary so widely that his task was an almost impossible one. If parents and teachers or casual observers find themselves puzzled by the faces which stuttering wears, they may be interested in this little book.

No less fascinating is the intermittent manner in which stuttering shows itself. One moment the stutterer is talking fluently and freely. The next he is engrossed in the effort to release himself from his "impediment." The suddenness of this Dr. Jekyll-Mr. Hyde shift is sometimes difficult for any



The child whose parents enjoy him and who enjoys his parents is not likely to develop stuttering.

normal human being to experience, or even to observe, with a reassuring sense of comprehension. Because periods of fluency vary in duration from a few minutes to several months, the stutterer suffers from self-doubt even during his fluent intervals. The sword always dangles by a hair.

When we examine the words and sounds on which stuttering occurs, we find another engaging maze of apparent inconsistency. Even under experimental conditions, stutterers can rarely predict all their "blocks." Yet words and sounds do seem to vary in their seeming ability to precipitate stut-

tering. One stutterer could always say the words "too" and "to" but had great difficulty on the word "two," which is uttered in exactly the same way. Some stutterers find little difficulty with words beginning with vowels; others find the consonants the easiest to say. In the speech clinic, some of these "stumble-sounds" prove contagious, and one stutterer will adopt the feared words of another. Words and sounds sometimes become bugaboos to the extent that one adult, unable to say his address without stuttering severely, sold his house at considerable loss and moved to a new street whose name he could pronounce, only to find that he was soon incapable of saying it, also.

Equally curious is the way in which stuttering varies with the communicative situation. Certain people become difficult to talk to. Some stutterers never have any difficulty when speaking to strangers until the latter become acquaintances, whereupon they, like the members of his family, become precipitants of stuttering. Most stutterers can talk to themselves, but a few stutter at least a little even when alone. We studied one young child stutterer who only stuttered in one chair of the house, the favorite chair of his step-father. A bride who had never heard her husband stutter during the two years of courtship found that his facial contortions, which reappeared within a month after the ceremony, were very difficult for her to observe with complete poise.

Most stutterers can sing without difficulty, but we have a three-minute recording of a stutterer singing "Auld Lang Syne" in which he was never able to get past the second word. Usually, speech in unison (as in choral reading) presents no obstacle to fluency, and yet a stuttering preacher with whom we worked claimed he could never lead his congregation in joint recitation of the Lord's Prayer. The situations in which stuttering most frequently occurs seldom remain static. They

shift continually. Often a customarily easy situation turns out to be a very difficult one, and the reverse also holds true. In view of these facts, it is not difficult to understand why stutterers and their associates often seem confused.

Again, when we attempt to find some logic in the psychologic background of stuttering occurrence, we meet apparent inconsistency. Some stutterers can speak perfectly when under threat of social penalty or under extreme communicative urgency, although they may falter badly in uttering a casual greeting. Canon Kingsley could preach from the pulpit but was markedly frustrated when talking to his parishioners individually. Some stutterers speak beautifully when angry; others become mute. Aggressive attitudes bring freedom of speech to some stutterers and increased contortions to others. Certain kinds of excitement and fear usually bring the blocks tumbling over themselves, yet one soldier under these conditions used a walkie-talkie for three hours without a bobble, although he had never been able to use a telephone for years. Can there be rhyme or reason in behavior that seems so strange?

As though to confound the problem further, much of the reading material available to parents and teachers is written by so many different authorities and from so many points of view that one hardly knows what to believe. These authorities disagree not only with regard to the causes of stuttering, but also with regard to its treatment. The situation is seen to be all the more unfortunate when it is realized that a great deal of solid agreement exists concerning the nature of stuttering and its proper treatment. At one time in the history of medicine the battle of authorities raged in similar fashion, but the years have brought greater wisdom. Even today physicians know little more about the nature, causes or treatment of arthritis, for example, than speech pathologists know of

HOW STUTTERING BEGINS AND DEVELOPS

Much of the mystery about stuttering disappears when we study its development. The full-grown and full-blown stutterer presents so complex a picture of perplexing behavior and attitudes that he has puzzled scholars for centuries. The child who stutters does so in a much less bewildering fashion. His behavior is much more consistent and understandable. If we are to hope to understand stuttering we must watch it grow.

Many a mother, suddenly conscious that her child is showing an unusual amount of broken rhythm and speech hesitancy, searches her memory of recent months for some dramatic shock or emotional crisis which could explain the onset of the dreaded stuttering. In spite of this almost universal search for an explanation in terms of shock or trauma, the majority of parents confess themselves at a loss. They just do not seem to know when it started or how or why. The stuttering seemed to occur intermittently and to increase gradually in frequency and severity. As one mother phrased it, "Now that I think of it, Bobby must have been stuttering off and on for over a year, but I didn't think of it that way. He just seemed to be mixed up or in too much of a hurry, and most of the time he talked as well as most three year olds. But he began to get tangled up in his talking more and more often, especially last summer at the lake, and by the time he went to nursery school everybody was speaking about his stuttering."

Most of the parental reports are of this vague nature, but even careful investigations of the onset of stuttering, done shortly after its appearance was reported, bear out the general finding that stuttering is first discovered in what appears to be an ordinary, run-of-the-mill life situation. The child may be asking for the butter or telling what he saw in the machine shop or protesting against going to bed. It might be very convenient for the parent or the speech correctionist to be able to pin the blame on some dramatic occurrence, but unfortunately, in the majority of cases, none exists. The very human need which parents feel for finding a traumatic cause for stuttering is paralleled by their fondness for imitation as a causal explanation. If there is a stuttering child within five blocks of the home, he may be selected as the scape-goat. We have investigated many instances of imitation, only to find no resemblance between the stuttering of the model and that of his professed victim. It stuttering were contagious, we would probably all stutter, since at least one child in a hundred seems to possess the disorder.

What we have just said about the gradual and commonplace onset of stuttering holds true for the majority of stutterers, but we should be dogmatic indeed were we to ignore the inevitable exceptions to this or any other generalization about human nature. The literature on stuttering or any speech correctionist's files can provide instances in which stuttering apparently followed sudden shock or profound emotional strain. Parachutists have exhibited prolonged periods of it following their initial jumps. A child was knocked down by a large dog; another fell from a moving automobile; another was tortured by his step-mother; another reacted to his father's desertion; another was the victim of an unjust demand for public confession. Each of these reported incidents was followed by the onset of stuttering, or, at any rate, the person's associates first noticed it then.

We must also recognize that some of the so-called commonplace situations in which stuttering first occurs may not truly be commonplace at all. A little child first stuttered when calling to his mother, who was in the kitchen at the time. He was telling her he could not find a certain book. A fairly normal situation, perhaps. But questioning revealed that the kitchen door was closed and that the mother had constantly used isolation and the threat of leaving home as a means of discipline. A series of interviews finally demonstrated very vividly to the mother her rejection of the child. She began to understand how talking through a closed door could become a very emotional situation. The boy who stuttered only when sitting in his step-father's favorite chair was also sitting symbolically in the very middle of a highly ambivalent situation, and his speech very naturally reflected his basic uncertainty.

Besides their symbolic value, ordinary situations may be traumatic in a cumulative way. As the lady murderer said at the trial, "It sounds crazy, but he criticized my oatmeal as well as everything else, and that morning he criticized my oatmeal once again." The additional straw has broken much more than the camel's back. Many children are able to resist environmental influences tending to make their speech hesitant, until finally the breaking point appears, and then the overt symptoms of stuttering appear. One of the children we studied had been forced to master not only English, but French and Italian as well. She was four years old when her speech broke down completely in the uttering of a memorized grace spoken in German at the dinner table. Some of the ordinary situations in which stuttering appears may be traumatic in this cumulative sense. Yet even when we search for



Through parent conferences the speech specialist gains insight into some of the causes of stuttering.

evidence of these more subtle precipitants of stuttering, we are forced to recognize that the majority of children who begin to stutter do so in the usual, routine situations of ordinary life.

Most speech correctionists very naturally examine the life

history of the stutterer in order to determine whether or not other causes seem to have significance. They are interested in knowing how many other members of the family have stuttered. They inquire concerning birth injuries, early diseases with prolonged high fever, developmental irregularities, shifts of handedness, neurotic background, mastery of coordination, speech standards in the home, parental attitudes, rivalries, rejections, penalties, and many other similar items. So comprehensive is the usual interview that at times the parent feels that she (or he) is getting examined, rather than the child, and this, indeed, might very well be the case.

This curiosity concerning the background and development of the stutterer seems to be more than justified when we realize that there may be predisposing or underlying causal factors every bit as important as those which precipitated the first symptoms. Every student of human nature has been forced to face the fact that our behavior is determined not only by the forces playing upon us in our immediate environment, but also by those which have affected us in our past. We must not confine ourselves to a study of the "geography" of our problem child; we must examine his history as well.

Essentially, our task is to discover why this particular child has begun to halt and hesitate in his speech, or to show an excessive amount of broken fluency in the form of repetitions and prolongations and pauses. We hunt through the unknown forests of his history and his present environment for signs of fluency-disrupters, for evidence of those forces which tend to make a child stutter. First of all, we look for things which might indicate that this child may belong to that fraction of humanity which has been termed arhythmic, or "dysphemic." These are strange words from the jargon of logopedics, and their meanings are difficult to translate except by

some such example as this: suppose you examined a thousand children selected at random, all of whom were about five years old. A small fraction of those children would be superlative athletes, another fraction, at the other extreme, would be distressingly awkward and clumsy. Similar fractions would be found if we tested the group for singing ability, for intelligence, or for any one of a hundred other attributes. The speaking of a word or phrase requires some of the most complicated timing of muscular movements known to man. A high degree of precision in simultaneous and successive coordination of the paired speech muscles is demanded of us if we are to speak fluently. Fortunately, most of us have an adequate amount of this ability. A certain fraction of our thousand children would be extremely proficient. They seldom stumble or bobble or hesitate. Their fluency is unusually good. But we must not forget their opposite fraction, those of the faltering tongue, those whose timing gears or distributors, to use an automotive analogy, may not be set quite right. The vocal engine can idle without missing and can even travel down a smooth road, but the smallest hill calls forth a burst of jerky explosions. Many authorities in the field of speech correction believe that some stutterers belong to this "dysphemic" or arhythmic fraction of the normal population. They believe that it takes less environmental pressure or shock or speech conflict to make a member of this group stutter than it would the majority of children. They do not attribute all stuttering to this source, but they attempt to find out if this particular child shows indications of belonging to that fraction of the human population which finds the timing of speech coordination relatively difficult. If he does, it is still essential, of course, to demonstrate that this fact is provocative of stuttering, as such. We are merely saying that some speech pathologists tend to think in these terms.

Speech correctionists also study the history and present condition of the stuttering child for signs of emotional conflicts which reflect themselves in broken speech. We must understand at the outset that speech is the great revealer of our inner selves. The rhythm of our words can reflect our inner agitation, even when the words themselves are calm. Certain people develop "poker" voices, as well as faces, in the effort to prevent their inflections and expressions from betraying their hidden feelings. The intensity and quality of our voices tell much about our moods. Is it strange, then, that the fluency aspect of our speech can be affected by emotional strife?

We have all experienced moments in which we were beset by simultaneous and opposite desires to speak and not to speak. Perhaps we were confessing, begging, narrating something which was bound to have unpleasant consequences, asking for a raise in salary, or proposing marriage. When the two desires to speak and remain silent approximate equal strengths, our speech usually becomes hesitant, broken, repetitive, and full of ill-placed pauses. It might even be called stuttering, if you wanted to use the word in that way. But the moments soon pass, at most they are infrequent, and so we accept them as part of the normal hazards to communication in a world of stress. However, some children are trapped in environments, in homes or schools or playground situations, in which the opposing needs to speak and remain silent tend to dominate most communication. To cite an extreme example: one of the children we studied was forced to serve as a verbal go-between. Her parents refused to speak to each other, save through her. "Tell your mother I'm sick of her lying in bed every cockeyed morning while I get your breakfast." Back and forth for months went the exchange, and the little girl loved them both. She began to stutter.

Few of the children who begin to stutter live in such vivid

trap situations, but there seems to be in some cases a greater than average amount of tug-of-war in their histories. A rejected child tries desperately to gain acceptance. Verbal expressions of love are required of a child who hates. Desire and guilt, unpleasantness and inevitability—they all wage their internal wars and reflect themselves in hesitant speech. Occasionally the stuttering—or at least a type of hesitant speech that sounds like stuttering-becomes a purely hysterical symptom, useful to its possessor. Cases of combat fatigue in the recent war often showed this symptom. Many an adult stutterer develops an anxiety neurosis, or at least a condition resembling an anxiety neurosis, as a reaction to his speech disorder, but there seem to be certain beginning stutterers, also, for whom a similar diagnosis seems most plausible. At any rate, most speech correctionists do some probing in this direction.

Child stutterers, however, are not all child neurotics, any more than they are child "dysphemics." There are many who are apparently normal children. Their life situations are excellent. Their coordinations and timing and rhythm may even be exceptional. Search and probe and pry as we will, we can find only a normal child with very ordinary reactions, behavioral or psychological. Nevertheless, there may be causal factors at work just as potent as any that we have mentioned, and the speech correctionist attempts to discover them and to evaluate their significance.

He begins by assuming that the child's stuttering might possibly have developed from the very normal and natural moments of speech hesitation which a large majority of children manifest. He points out that even adults (who have had a long training in mastering their speech skills) show many of the same breaks and interruptions to speech flow which are



Fortunate is the stuttering child whose school provides speech correction.

characteristic of the beginning stutterer. He suggests that more of these symptoms should be expected of young children, in the age range of from two to six, who are still in the process of speech development. At this age level the average child repeats 40 to 50 times every thousand words; that is, he repeats a sound, s-s-s-such as this, or a word, such such such as this, or a phrase, such as such as this. It is normal for a child to do this sort of thing 40 to 50 times, on the average, for every thousand words he speaks. It is during these years, moreover, that the majority of stuttering begins. If these natural and normal fluency breaks, those characteristic repetitions and prolongations and hesitations, are penalized by the

child's associates or labeled as "stuttering," the child may begin to develop reactions of struggle or avoidance sufficient to deserve the label. Such a situation is termed a semantic source of stuttering.

Thus, the speech correctionist is very much interested in the speech standards which exist in the home. He remembers the former dramatics teacher who brought her two-year-old to the speech clinic, complaining of his stuttering and anxiously and volubly pointing out as such the little confusions and hesitancies which nearly every child of that age possesses. He remembers the same child a year later, truly handicapped by a real speech disorder.

The speech correctionist is always very interested in observing the actual speech situations in which the stuttering occurs. He attempts to discover those daily features of the home routine which precipitate fluency breaks. The lives of some stuttering children are filled with disruptive forces focused on speech. The speech correctionist therefore attempts to estimate the amount of interruption, penalized speech, frustrated attempts to communicate, competition for attention, compulsory confession of hurt or guilt, penalty on the content of the child's communication, verbal taboos, and unreasonable demands for speech exhibitionism—any or all of which might create the fertile soil from which speech hesitation may spring. Again, may we repeat that not all stutterers are the victims of such a malevolent speech environment, but some of them are, and so it behooves us to evaluate the child's life situation from this point of view.

Stuttering at its inception does not show the remarkable variety of symptoms exhibited by the chronic or adult stutterer. The breaks in fluency are usually repetitions of sounds, syllables and words, prolongations of sounds, inappropriate pauses and hesitations, much like those characteristic of nor-



Wise parents provide conversational situations that will encourage the child to express herself, have fun with words, and develop interest and confidence in talking.

mal speakers under ordinary conditions and especially under stress. When these symptoms occur so frequently, last so long, or appear under so little apparent provocation as to seem unusual, the parents may diagnose them as stuttering and label them as such. At times the label is not merited, and, as we have explained before, undue parental anxiety or ignorance of speech development can turn the normal hesitations of childhood into a real speech disorder. Nevertheless, we live in a culture which penalizes and rejects more than a certain amount of non-fluency and labels it stuttering. Whatever the source, "dysphemic," neurotic, or semantic, once the child begins to show an excessive amount of repetition and hesitation, he tends to become the victim of powerful social forces. He is likely to be called a stutterer, with all the frustrations and social penalties which such a label entails.

The stuttering which we have been describing is usually termed *primary* stuttering, in order to distinguish it from the more unusual and complicated symptoms of the advanced, or *secondary* stutterer. Some speech correctionists dislike to use the term "primary stuttering" because of its connotation of abnormality, and they reserve the term "stuttering" for the disorder in its developed state. Nevertheless, when a child is showing enough non-fluency to call forth penalties or anxiety on the part of his associates, even though they may be wrong, they use the word "stuttering," and the speech correctionist is called upon for help.

HELPING THE YOUNG STUTTERER

The first thing he will probably do after investigating the child's history and life situation is to tell the parents of a primary stutterer that direct speech therapy should not be used.

He will then give them a series of negative suggestions. Speech itself is so highly complex an activity that it must be manipulated with caution. He will tell the parents that much of the success of treatment will be determined by how well they can change their own behavior and attitude. They must not ask the child to talk more slowly, even if this caution apparently brings temporary relief. They must not ask him to try harder to talk without stuttering. They must not reward him for his fluent periods or penalize him for his difficult moments. They must not help him with his attempts to speak when he is repeating or hesitating. They must not discuss in his presence the trouble he is having with his speech. They must not mawkishly sympathize with what they call his travail. They must not show their anxiety or concern. In fact, they should not even feel anxiety. They must not try the thousand and one home remedies so freely offered by every casual acquaintance.

At about this point the average parent begins to feel like a repentant sinner confronted with a new set of ten commandments, multiplied by ten. And so the speech correctionist hastens to outline his reasons for these prohibitions. He begins by sketching the development of *secondary* stuttering.

Primary stutterers seem to be entirely unaware of their speech difficulty, if it can be called a difficulty at all. They can bubble along repetitively without a sign of awareness of its being something called stuttering. When breathing records are made, no disturbance is evident, even when the speech flow is very broken. Such children do not force or struggle or contort their features. As soon as the interruption is over they proceed without concern. Their volleys of so-called stuttering may plague their parents, but the children themselves are not bothered. Their effortless prolongations or automatic

repetitions seem to occur without conscious awareness. Very often, long periods of uninterrupted fluency may ensue for days or weeks. Primary stuttering may be expected to come in waves. In many, perhaps in the majority of cases, the disorder will disappear entirely if the corresponding waves of fluency become longer or more frequent.

Secondary stuttering also varies from day to day in frequency and severity, but it is very rarely absent for as long as an entire day. People seldom "outgrow" secondary stuttering. Thus, a good share of the speech correctionist's efforts will be directed at preventing stuttering from entering the secondary stage. Hence the many prohibitions we have mentioned.

The first step toward secondary stuttering is taken when the child senses his speech interruptions as unpleasant. This initial unpleasantness may be merely the reflection of his parents' or playmates' attitudes, or it may come from the irritation produced by a frustrated desire to communicate. Most of us have experienced the discomfort of being heckled at one time or another. Of all the conversational pests, the chronic interrupter is the worst. He intercepts our thoughts, finishes our sentences for us (usually incorrectly), rejects our expressed beliefs, does not seem to pay attention to what we are saying, and shows his tense impatience to have us stop talking. Magnify the subsequent frustration ten-fold and you may approximate the verbal atmosphere in which the primary stutterer too often exists. Parents bedevil their children, with the very best of motives, we are certain, but bedevil they do. The primary stutterer wants to tell his mother that he has just witnessed a bird taking a dust bath. She is busy and does not attend to his first few "Mom-mom-mmm-mommy" calls. Shall he continue or make sure she is listening? The conflicting urges render him more hesitant. Finally she tosses him a

more or less impatient, "What do you want, Jimmy?" Shaken by the mild penalty in her tone, or having momentarily lost the content of his communication in the effort to gain attention, he stumbles again. "Mom-mmm-mommy, I-I-I, Mommy, I see birdy tuh-tuh-ah-um, I-I . . ." He finds it difficult to formulate just what had happened. He can visualize the bird fluttering in the dust. Was it hurt? Or was it sweeping the ground? Before he can decide, his mother steps in. "Now, Jimmy, let's calm down and talk more slowly." "Stop stuttering like that. What do you want to tell me?" "Don't talk like that, Jimmy. Stop and take a deep breath first." "You saw a birdy. Now isn't that nice. Go out and play with the birdy, Jimmy." There is not a single one of these responses which would not increase the child's frustration. Picture a child beset by such experiences every hour of every day, and you can readily see that he will begin to react to his speech as though it contained something unpleasant. He will begin to think of words as being difficult. He will begin to struggle, to avoid, to fear, to be ashamed. And, as these reactions become habitual, he will become a secondary stutterer.

Few people realize how widespread and well organized is the social prejudice against stuttering. The nicknames for stutterers, "stutter-box," "stutter-cat," are used in every section of the country, almost as universally as "balbus blaesus" was in the days of ancient Rome. From the comic book antics of P-p-porky the Pig to adult radio and movie programs, the stutterer is displayed as a fit object for ridicule. From the snickers in the schoolroom to the grins in the employment office, the stutterer seldom passes a day without actually, or at least in his imagination, running the gauntlet of social rejection.

The penalty for stuttering is not confined to amused ridicule. Impatience and discomfort and irritation are the reac-



Playmates are quick to recognize deviations from normal speech, and often unthinkingly torment the stutterer.

tions of some listeners. Hesitant speaking causes hesitant listening, an unpleasant experience to many people. Utter strangers will on occasion inquire testily, "What's the matter, boy? Has the cat got your tongue?" The busy grocer to whom the primary stutterer has been sent on an errand may bark, "Spit it out, son, spit it out. I'm in a hurry. Quick, now." A querulous grandparent with ideas of her own on child raising, may attempt to "break" the child of stuttering by even more severe penalties. Primary stutterers have been sent to bed, mocked viciously, shamed before their friends, and in rare cases even slapped in the face for their symptoms.

Equally evil in its effect on the primary stutterer is parental anxiety. Some of these bewildered children are dragged from physician to physician, from psychological clinic to faith healer. Stuttering therapy and causes are a frequent conversational topic. The state of the child's stuttering from day to day is discussed. Some mothers wring their hands, avert their eyes, hold their breath, and become rigid with tension the moment the child stumbles in his speech. Their sighs are almost audible when fluency again takes over. Children are little mirrors and will faithfully reflect such parental concern.

We have tried to show how primary stutterers first begin to evaluate their symptoms as frustrating, socially unacceptable, and distressing. Now let us attempt to understand how the child reacts to this awareness of speech abnormality.

The first response is usually bewilderment. The child may stop uncertainly and put his hand over his mouth. He may look to his mother for help. A surprised doubtful expression creeps over his face. He stops trying to talk for a few seconds. He may comment on the experience: "I-I-I can't say that." The wise parent will react by casual reassurance and distraction, but many parents are not wise.

When these moments of bewilderment and vague distress happen too often, new reactions begin to appear. Tension and struggle accompany the primary symptoms. The child may increase the pitch or intensity until he is singing or shouting the words. Repetitions may turn into tight stoppage or prolongations of a sound or mouth posture. Sensing the now unpleasant interruption as an obstacle, he strives to overcome it by sheer force. He presses harder with his abdominal muscles to shove the air stream past his tense tongue or lips, but all that happens is that he squeezes the latter more tightly. Accessory movements of struggle come into the picture. He may stamp his foot or beat his side or toss his head. He tries to jerk the word out by sudden movements. Much of this behavior is relatively unintentional. Since the word does finally emerge from all this struggle (usually in spite of

the struggle), he makes a fatal mistake. He attributes the release to the effort, to the jaw jerk, or whatever he has been doing. He makes the old error of assuming that correlation is the same as causation. From this time onward, he feels that if he is to be able to say the word on which he feels blocked, he must use the effort, use the jaw jerk. But there comes a time when, struggle as he will, the speech will not proceed, and then he either has to adopt new forms of forcing, new abnormality, or else he must give up and try again, and again, and again.

Among the most marked characteristics of the adult stutterer are word fears and situation fears. The necessity to utter certain words or enter a certain speech situation may all but terrify him. The pulse rate may increase incredibly, and all the other signs of great fear and panic are frequently exhibited. Many practitioners, unacquainted with the development of stuttering or with beginning stutterers, have been so struck by the stutterer's fears that they have considered the disorder merely a logophobia, a fear of words. Nevertheless, beginning stutterers do not experience these fears until they have begun to struggle with or avoid their speech difficulty.

Although most young stutterers go through a prior stage of struggling when they first sense their symptoms as unpleasant, others begin immediately to retreat and avoid speaking situations. The moment repetition or prolongations or hesitations occur, they cease speech attempt. Usually they merely pause and then start over, but the new attempt is often tentative and half-hearted. The instant they sense difficulty, they retreat into a tense, frustrated silence. This ambivalence (the urge to speak versus the dread of abnormality) merely increases the tendency to stutter. Since there are times when one cannot remain silent nor postpone indefinitely the

speech attempt, the stutterer has not diminished his problem, but has accentuated it.

The effect of this retrial and surrender behavior on the development of fear and frustration can hardly be overestimated. The more one runs away from anticipated unpleasantness, the more one dreads it. Bugaboos, avoided, become gigantic. Of all the forces which tend to disintegrate personal confidence, there is none more potent than procrastination or weak attempt. The child becomes afraid to try to talk. The telephone may cause him to quake. Certain people become feared objects because of the memories of past speech failure. Certain places, a room, a store, a chair, may call up the tensions of previous stuttering experiences. They become tarred by the brush of past frustration. It is so difficult for normal speakers to understand the intensity of these fears that stutterers often feel themselves a race apart. a tribe of verbal pariahs.

The stutterer soon fears not only speech situations, but also words and types of communication. Narration, explanation, questioning, and answering unexpected demands for specific information may be proper causes for unreasoning states of panic. One stutterer may find no difficulty in questioning but great difficulty in answering; a second may exhibit just the reverse. This disparity in stuttering behavior merely reflects the disparity in past memories of speech failure. No two stutterers get penalized for the same words or types of communication or in the same situations.

Words and sounds become objectified as well. In almost all sections of the country, stutterers speak about their "Jonah" or "stumble" words. Perhaps they envy the whale his ability in ejection, but more plausibly the terms refer to the unluckiness with which the words are colored. One adult stut-

terer had his name legally changed so that he could utter it. He found only temporary relief. Another carried a pad and pencil to write out all feared words. Still another pretended to be deaf and dumb when he was forced to communicate certain necessary but greatly dreaded words. In their agonized desire to escape the real or imagined penalties upon stuttering, stutterers soon learn to use synonyms. Some parents even suggest this technique. Unfortunately, each avoidance merely objectifies the word as a thing to be feared. The more words the child tries to avoid, the greater becomes his anxiety and concern. Speech becomes filled with dangers. He finds he must scrutinize his words before he utters them, and, quite naturally, this process produces more bugaboos than ever. He who suspects an ambush sees enemies behind every shrub.

Sounds themselves become feared. A child remembers his brother laughing at his stuttering on the word "potatoes." He gets a similar penalty on "paper." What is he to deduce but that words beginning with p are more likely to bring stuttering than a word beginning with s on which he has never remembered having difficulty? These feared sounds spread. Not only p words but b words soon look difficult. Both of the sounds require tight lip contacts. Then the fear spreads to include the m and the w consonants. One stutterer who felt he could never say f words without stuttering was able to pronounce "physical" until he suddenly realized that it really began with an f sound. Another, whose memories of stuttering unpleasantness on vowel words were especially vivid never feared the word "hour" until he realized that the h was silent. Many parents, observing these phenomena, conclude that stuttering "is all in the head" and instruct their children to "forget it, stop thinking about it!" Such a behest is at best a waste of breath.

As these words and sounds become feared, they gather unto

themselves certain symptoms. The child who recalls the tight lips and compressed abdomen and sudden jaw jerk which accompanied his previous attempt to say the word "paper" will tend to rehearse these reactions as the word approaches. Gradually the perception of p as a feared sound automatically produces a "mental preparation" to initiate the word in this abnormal fashion. Even as the golfer eyes the water hole over which he must drive his ball and promptly proceeds to wallop it directly into the pool, so the stutterer, having focused his attention on the approaching speech abnormality, promptly proceeds to demonstrate it. Hundreds of such experiences contrive to make the stutterer feel as though he had lost all control over his speech organs. He complains that something "sticks" in his throat or "locks" his lips and tongue. He feels unable to cope with his verbal brakings. He feels hopeless and alone.

We have sketched the development of stuttering in detail so that parents and teachers may understand the reasons for discouraging direct therapy for young children. We must at all costs keep the primary stutterer from becoming aware of his symptoms as unpleasant and frustrating, if we are to nip in the bud those reactions of struggle and avoidance which bring the truly handicapping behavior of secondary stuttering. Therapy for the primary stutterer must be preventive and indirect.

However, this is not to say that we can ignore these primary symptoms and let them go at that. Much can be done to increase the periods of fluency. We can simplify the child's speech environment, decrease the disturbing influences, increase his security, improve his speech rhythms, solve his speech conflicts, cancel his unpleasant speech experiences, improve his vocal coordinations and build up his tolerance of verbal interruption.

SPECIFIC CORRECTIVE PROCEDURES

One of the simplest and yet most effective things which parents can do to help the primary stutterer is to speak differently themselves. They should speak more slowly, more calmly, more simply, and more rhythmically. Sentences should be shortened so that the child will not feel he has to use the complicated compounding of complex sentences so



"One of the simplest and yet most effective things which parents can do to help the primary stutterer is to speak differently themselves. They should speak more slowly, more calmly, more simply, and more rhythmically."

prevalent in adult conversation. The tempo of parental speech is often far too fast for children to compete with or imitate. By selecting certain nucleus situations, such as a mealtime or a certain room in the house, and endeavoring in them to adopt these suggestions, the parents can soon surround the child with a speech environment in which fluency will be easy, rather than difficult, to achieve. By checking on a sheet of paper the number of times they have failed to speak calmly and slowly, even parents can modify their behavior for the good of the child—and of themselves. It is so much easier for parents to correct the child than to correct themselves, but the latter treatment is often more effective.

Disturbing influences and speech conflicts may best be determined by a similarly organized approach. The parents should observe the conditions existing during or antecedent to the volleys of stuttering. They should record on a sheet of paper the times in which the child began to stutter after a short period of fluency or silence and should then make a guess as to what features of the situation seemed to precipitate the stuttering. One mother found to her utter amazement that in 83 out of 100 instances, the child was under threat of interruption at the time the stuttering occurred. Often the insight gained by this technique is productive of important changes in the home routine, and the child's hesitancies disappear. Once identified, the disturbing influences or speech conflicts can readily be eliminated. Family conferences or reports to the speech correctionist can help to motivate the work.

It is also possible to build up the primary stutterer's feeling of speech fluency by providing directed play periods in which the games are partly verbal. One parent of an imaginative child turned a card table into Mr. Lazyman's House and developed a daily series of adventures revolving about Mr. Lazyman, who characteristically spoke in a slow relaxed

drawl. The child never thought of his daily drama in terms of speech therapy, but his experience of fluency in the role seemed to carry over into his other speech. Echo games, speech in unison, and talking in time to rhythms of all types are useful, provided the child thinks of them as play and not as treatment. Any parent can modify almost any favorite activity of the stuttering child to instill the sense of uninterrupted speech. The more fluent he feels, the less likely he will be to react to his hesitancies by struggle or avoidance.

It is also necessary for the parents to help erase the momentary frustrations which occasionally occur. A quiet redirection of the child's attention after he has completed his hesitant communication is usually all that is necessary. If the child does show the bewilderment or distress which marks awareness of his repetitions, it is usually wise to manipulate the conversation so that he can use the same words again under less communicative pressure. If he comments that he "cannot talk right," his mother should tell him that everybody gets tangled up in speaking once in a while when excited or talking too fast. The faking of a casual repetition or two on the parent's part allays most of the anxiety when the child observes it. If he is being teased unmercifully by some playmate and being given the label of "stutter-cat," he should be taught to make some such response as this: "I know, I get tangled up in my talking sometimes. My Dad says it isn't anything to worry about."

At times, a complete change in environment will work wonders in breaking up the stuttering symptoms, if they seem to be occurring with unusual frequency. The child can be helped, through successful achievement, more sleep, better health, and relief from upsetting excitement, conflicts or fears, to resist the disturbing influences which precipitate his speech difficulty.



Sufficient rest and reasonably calm, pleasant home life are as good for the stuttering child as for other children.

The prognosis for the primary stutterer is excellent if his problem can be analyzed before it develops into secondary stuttering, and if parents will make an intelligent effort to carry out the suggestions of the speech correctionist. The new regime may not be an altogether easy one to follow. It will require patience and intelligence and application, but the alternative is dangerous in its promise of increased difficulty.

HELPING THE OLDER STUTTERER

The secondary stutterer presents a much more complicated picture, from the point of view of both symptoms and therapy. The primary stutterer has simple repetitions, prolongations and pauses; the secondary stutterer has not only these, but a hundred other forms of tense and anxious behavior as well. The treatment of the primary stutterer is indirect, preventive; that of the secondary stutterer is direct and remedial. Primary stutterers yield rapidly to careful systematic therapy; the secondary stutterer proves very resistant in many cases.

As with the primary stutterer, it is difficult for us to understand the secondary stutterer's disorder unless we analyze the development of symptoms and psychological reactions. Formerly, everything the stutterer did during his speech interruptions was considered stuttering. If he grunted or gasped or hemmed and hawed or jumped around, each of these items of behavior was considered an integral part of the stuttering block. Breathing disturbances, so prevalent in secondary stuttering, were felt to be of the essence of the stuttering act.

We now know that much of this behavior consists of habitual reactions to the fear of words or of speech situations. Stutterers develop habits of postponement, rituals of getting started on the speech attempt, patterns of interrupting fixed vocal postures, and routines of tension increase, all of which may become so well learned as to appear uncontrollable. The moment the stutterer feels "stuck" in the uttering of a word, he sets in motion a complicated pattern of struggle or avoidance. He may jerk his jaw, expel all his breath, beat his side with his fist, or have any of a thousand other reactions. He may merely stop, hesitate, repeat four or five preceding words in order to get momentum, or utter a sound which has no relation to the word he is attempting to speak. One of our stutterers began every re-attempt on a difficult word by voicing a prolonged z sound. Much of this behavior fails to facilitate the uttering of the word in question. Indeed, as in the case of the man who always attempted to utter p, b, and m sounds with his mouth agape, it often seems expressly designed to prevent the sound production. We have known several stutterers who tried to speak words beginning with an f while protruding their tongues as far as possible. Vowel words have been attempted with the lips tightly closed. Some students of stuttering have felt that these symptoms indicate a basic unwillingness to speak. If we study the origins of these habits, however, we can understand that such an explanation is far too naive to fit the facts.

Secondary stutterers differ from each other in their speech characteristics, because they employ different methods of struggle and avoidance. The devices they use become incorporated into their stuttering. One individual who had been instructed to take a deep breath whenever he felt he was going to stutter soon found himself incapable of uttering a feared word without a preliminary gasp. Another who by chance had discovered that speaking through clenched teeth seemed to afford a measure of relief built for himself a reaction so intense that he never stuttered without grinding his teeth. Another deliberately adopted a jaw jerk as a release device. Very soon it became almost involuntary and an integral part of his speech pattern. Another stutterer had only one symptom, an apparently uncontrollable clearing of the throat. Before badly feared words he might clear his throat fourteen or fifteen times. The moment he would blunder into an unforeseen sticking or repetition, he would demonstrate a paroxysm of coughing and throat clearing. He hated the symptom, but he felt unable to speak without it. Another stutterer fell into the habit of licking her lips in order to hide the fact that she was postponing the speech attempt. Before a month had passed, she was unable to speak a difficult word without an uncontrollable tongue protrusion so unsightly

that she would cover it with a handkerchief and sometimes weep helplessly. We could cite hundreds of similar examples to show that the bizarre behavior of secondary stuttering has a developmental history of this sort. The devices the stutterer originally used to avoid stuttering or to release himself from it become the worst part of his stuttering. The implications for therapy are obvious: we must prevent the adoption of these pernicious devices and train the stutterer to speak without using them. Every speech correctionist aims his therapy directly at these handicapping symptoms.

Many different methods are used by speech correctionists to eliminate such stuttering symptoms, or habitual reactions to stuttering. Let us illustrate by selecting the forcing and struggling symptoms so characteristic of a typical secondary stutterer and by observing the variety of techniques which might be used to eliminate one of them. This particular stutterer habitually presses his lips so tightly that tremors are set up. Against the closure formed by these tense lips, he valiantly but ineffectually forces the air stream. The harder he compresses his chest and abdomen to force open his lips with a blast of air, the tighter he presses his lips. The word "people," for example, just will not come out. He tries again and again, each time sabotaging with his mouth the efforts of his hardworking breathing apparatus. In order to train this stutterer to give up this patently useless behavior, various instructions may be given him. He may be trained to speak while in a highly relaxed condition. This will prevent his lips from forming the tense block to the expelled air. He may be taught to utter the word with loose lips. He may be taught to use an easy repetition of the first sound or syllable, thus substituting a voluntary, less complex form of stuttering for his compulsive struggling type. He may be given powerful suggestion to the effect that his habitual struggle is not necessary to the

production of the word. He may be taught to start the word with a slow opening movement of loose lips. Each of these methods is aimed at eliminating the unnecessary forcing which so greatly interferes with his communication. Once the stutterer learns that he can voluntarily produce his difficult words without employing the interfering contortions, a great deal of fluency results.

Every speech correctionist apportions a good share of his therapy to diminishing the fears and emotional reactions which beset the secondary stutterer. We have sketched the manner of growth of these fears, but we have not described their full bloom. No one can understand the stutterer's problem without knowing something of his psychology. His behavior turns out to be fairly logical when the inner state of the stutterer is appreciated. One of our stutterers, when asked a question, would stare steadily and with glazed eyes into space for as long as a minute and then suddenly jerk out his answer. As he said, "I used to shut my eyes and screw up my face when I stuttered, until I looked like a gargoyle. Since my contortions just kept getting worse every year, I decided not to move a muscle until I knew I could say the word." Though badly handicapped by long interruptions, he had at least changed the form of his stuttering to something less obviously distressing.

The dominant features of the average stutterer's psychology are these: prior to speech attempt he experiences fears, both of words and communicative situations; during his stuttering he has a feeling of verbal impotence; and, afterward, he has a sense of social inadequacy and embarrassment. Almost all secondary stutterers possess each of these three major reactions, but much variation in intensity may occur. A mild stutterer may have intense and specific word fears, while a very severe stutterer may feel that all words are

equally troublesome and base his expectations of speech difficulty on his judgment of the approaching speech situation. The intensity of these fears can vary in the same stutterer from day to day. The stutterer approaches the act of speaking much as you would the crossing of a narrow plank. When the board is on the ground, you can walk it without difficulty or dread. Put that same plank between two buildings, forty stories up in the air, and you find yourself hesitating and impotent, consumed with panic and fear. While alone, the stutterer can contemplate the speaking of a given sentence without fear or faltering. In front of a large audience, he may be petrified with fear, his coordination shaky, and his verbal steps uncertain and insecure.

The situation fears of stutterers are concerned with social penalties. The stutterer suffers in advance the taboo our culture puts upon his symptoms. He dreads the anticipated rejection, the shunning, the impatience, the embarrassment, or the laughter-all real or imaginary-of his listeners. He scrutinizes his prospective auditors for any signs of these penalties; he looks with preoccupied intensity for indications of resemblance to past situations in which he has suffered hurt. Even when the listener shows no reaction whatever, he imagines hidden rejections. He thinks of himself as a "verbal leper." He expects from all listeners the unpleasant responses he has received from a few. He interprets even acceptance as pity. It is difficult for the non-stutterer to appreciate the extent or intensity of these malevolent evaluations. In many cases, they color practically all of the stutterer's communication.

The word fears of stutterers are not so much concerned with social penalties as they are with the expectation of actual speech difficulty. They consist of miniature rehearsals of the overt reactions, of the struggling, the tension, the tight con-

tact, the gasping and painful re-trials. The stutterer anticipates, and, in anticipating, gives himself a dress rehearsal for the peculiar behavior he is certain will occur. These word fears are associated with the dominant features of the word: how long it is, with which letter it begins, its position in a sentence, its meaning. With each new experience of difficulty, they increase in intensity. On the other hand, when they are feared and none of the expected difficulty results, fears decrease. At times the word fears are so weak that the stutterer hardly recognizes them, or he senses their presence only at the very last moment. Other words may be so dreaded as to seem unutterable. One of our stutterers could not bring himself to attempt the word "stuttering" even when he was alone. A veteran related how, told during basic training that he would have to say his name when he boarded the army transport for home, he had carried the situation and word fears with him for two years of service in the South Pacific. He said, "I kept visualizing the scene: all the company milling around near the gangplank; the tough old sergeant calling my last name; the necessity for giving my first name and initial; the sounds sticking in my throat; my being unable to say it; the sergeant marking me A.W.O.L.; the boat pulling out, with me still gasping on the shore. I dreamed of it even under mortar fire." The sequel is amusing. "When the day and scene finally came, a pretty Wac officer did the checking. 'Johnson,' she called, with a lilt in her voice. 'William I.,' I echoed automatically, in the same sweet tone. Somehow I stumbled on board before I collapsed." Not all feared words are stuttered upon. Distractions, a sudden shift in the communicative situation, a restructuring of the word—any of these may bring surcease and unexpected fluency.

The stutterer tries a great many techniques to keep these word and situation fears from entering his consciousness. He tries to adopt general attitudes of confidence or aggressiveness or humor or antagonism which, if sustained, can overwhelm and replace the fear. He practices speaking words and sentences when alone or in "easy" situations to prove to himself that he can talk. He tries to convince himself that there is nothing to be afraid of and that he can summon forth enough will power to talk without stuttering.

The stutterer also tries to diminish his word fears by using some form of speech, such as a sing-song or measured beat in which all words are subordinated to the rhythm, and no one word can intrude itself enough to enter awareness as a feared object. He may speak very rapidly for the same reason, running his words together until they have no separate identities. He may react to the perception of an approaching stumbleword by a sudden shift of attention, an erratic gesture, or a sudden change of features. By so doing, he is able to decrease the word fear by filling his attention (and that of the listener) with some other action. In a word, he is employing a distraction to keep the word fears or situation fears from setting off their usual response, the struggle and avoidance reactions of stuttering. The more successfully he can distract himself, the more temporary fluency he acquires. Almost all secondary stutterers have used one or more of these devices to eliminate fears, and all of them have had partial relief from their symptoms as a consequence. Unfortunately, however, once a distraction is used repeatedly, its novelty and value disappear. The habitual distraction no longer distracts, and back creep the fear and the symptoms, often augmented by the device itself in an automatic and semi-involuntary form. One stutterer adopted a pattern of using three abdominal thrusts of approach to the speech attempt on a difficult word. He trained himself to make each thrust in perfect rhythm and to attempt the word at the very end of the third thrust. At first the technique worked perfectly, in that his shift of attention to the timing dominated his attention and kept out his fear. Soon, however, the sequence was so well practiced that he needed no conscious control in order to use the ritual, and then back came the fear. The stuttering formerly had been without breathing disturbances; now it was full of abdominal thrusts, attempts to speak on residual air, and gasps. He paid a high price for a little temporary fluency. Few modern speech correctionists employ distractive tricks of this sort.

All speech correctionists do attempt, however, to decrease the stutterer's situation and word fears. Many different methods are used, but they are all directed at precisely the same goal. Like all fears, those of stuttering can be diminished by decreasing or eliminating the threatened unpleasantness. You cannot be afraid of something which you discover does not hurt you. Therefore, in treating secondary stuttering, most clinicians provide a clinic or class or conference situation in which stuttering is not penalized. The teachers and clinicians do not laugh or show impatience. Stuttering becomes permissive, and, as it does, the situation fears decrease. In certain speech clinics, this environmental therapy is the dominant feature. The stutterer no longer feels abnormal. He becomes a member of a group, and his speech defect is no longer a difference.

It is possible to decrease the penalties and therefore the situation fears in other ways besides providing a controlled environment. Most speech correctionists attempt to change the stutterer's basic attitude toward stuttering. They teach "the objective attitude"; they endeavor to get the stutterer to accept his disorder as a problem rather than a curse. They teach him to discuss stuttering unemotionally, to react to his symptoms without obvious distress, to correct his verbal stumbling as though it were entirely natural for him to do

so. He learns to use a casual comment or a stuttering joke in order to relieve his listener's tension. He learns to react to a social penalty such as laughter as a challenge for him to attempt to change that attitude. He tries to determine and control the attitude of the audience by his own attitude. He knows that if he interprets his stuttering as a disgrace, his listeners will accept his evaluation, and he is shown by the speech correctionist that his own attitude of calm tolerance during his moments of stuttering will be reflected by similar attitudes in his auditor. Training of this sort is bound to decrease the stutterer's vulnerability to social penalties, and so the situation fears are diminished.

Closely related to the above techniques are those devoted to building barriers against the penalties. These range all the way from exhortations to ignore what other people think about you if you stutter to reassurances and demonstrations that most people tolerate a good deal of stuttering. Probably the most effective barriers are those erected by entering situations in which the penalties are sure to occur, and gradually acquiring the ability to resist their disrupting influence. Occasionally the speech correctionist, after previous discussion, will deliberately give the penalties, laugh at the stutterer, show impatience, while the stutterer toughens himself and inhibits his old response. Stutterers are often taught to do some pseudo-stuttering on words they do not fear in order to build a callousness against audience reactions. Such training can decrease situation fears.

All speech correctionists try to increase the other assets of the stutterer so that society will not judge him on his speech alone. Some cases have demonstrated that it is possible to stutter severely without experiencing social rejection. They get married, have good jobs, and enter all the social activities of their community, despite their speech defect. By improving the other social skills and assets, it is possible to make a large gain in fluency through the elimination of the penalties which give rise to situation fears. By building up the self-assurance of the individual through any type of successful achievement, it is possible to raise his resistance to social penalties.

Many of the anticipated penalties never occur, save in the mind of the stutterer. They are echoes from his past—often a mythical, misinterpreted past. He seldom evaluates an approaching speech situation realistically. Instead, he imputes to his listener rejections which exist only in his imagination, even though they may have been established there in the first place through actual experience. It is possible to help a stutterer lose some of this oversuspicion by having him recount over and over again the tragic occurrences of his life. He will do it anyway, so most speech correctionists give him permission to use them as "receptacles." The catharsis does help. It also is wise to make the stutterer check his suspicions of disguised penalty against the actual reactions of his listeners. Much of his hypersensitivity disappears when systematic therapy is applied in this direction.

Finally, all speech correctionists attempt to show the stutterer that he can speak successfully in the situations he dreads. No better way of conquering fear exists. Whenever fear is followed by pleasantness, its intensity is decreased. Every time the stutterer can communicate without penalty in a situation loaded with lurking rejections, he makes great strides in mastering his difficulty. Many techniques are used to accomplish this end. In some cases, the stutterer is led up a graduated series of speaking situations increasing in difficulty, mastering each in turn, until finally he is able to meet any necessity without panic. He starts by talking to himself in a mirror; he ends by lecturing to a Society for the Prevention of Cruelty

to Animals. In other cases, the speech correctionist insists that the stutterer be thrown into very difficult speech situations immediately, since even though he fails repeatedly, some success is inevitable. One stutterer, for instance, was given no technique for handling or preventing his stuttering whatsoever, and yet he was required to enter thirty very difficult speaking situations each day for a month. At the end of the month, he had no fear of ordinary situations, since the whole scale of fear intensity had been shifted upward. Different cases require different approaches. No two secondary stutterers can be treated alike, since their symptoms and attitudes and histories are so varied. Nevertheless, by properly controlling the speaking situations to which the stutterer is exposed, it is possible to whittle the situation fears down to a low degree of intensity.

Every gain made in decreasing the stutterer's fears of speaking situations brings a gain in fluency, but unless the specific word fears are weakened, the symptoms are still precipitated. Even in situations where the stutterer knows his stuttering will not be penalized, he may demonstrate the contortions or avoidance which frustrate his desire to communicate. Some stutterers have much difficulty even when reading aloud to themselves. When certain words or sounds have been the vehicle for speech unpleasantness for years, they themselves become omens of approaching stuttering. They come to possess cues or features which, to the stutterer, mean danger ahead. One of our stutterers had this to say about his fear of words beginning with the m sound:

"I don't always notice words starting with m sounds, but when I do, I immediately find myself forming the word so that the m is magnified. I vaguely remember all those m sounds on which my lips have been squeezed shut into an unsightly protrusion. I know that I'm going to get stuck on

just that part of the word. I feel in advance the tension, the jamming-shut, the useless efforts to jerk my lips open and the word out. I even find myself practicing the stuff long before I have to say it. I knew I'd have to introduce my girl to a friend the other night, and I'm sure I rehearsed forty or fifty times the afternoon before."

This clearly illustrates the two dominant aspects of word fears: first, the perception of the word or sound as an unpleasant stimulus-object, or sign of approaching stuttering; and, second, the assumption of a preparatory set to react with tension, struggle or avoidance. As that stutterer put it, "The same moment I see the m in the word, I also see my mouth jumping around." If we are to help the stutterer, we must (1) keep him from seeing the m in the word, or (2) keep him from seeing it as a sure indication of stuttering. In other words, we must weaken the cue, break up the expected response, and destroy the close relationship between the cue and the response.

All speech correctionists devote much of their therapy to the attack on fears of words and sounds. They use many varied methods and often argue among themselves as to the proper methods to use, yet they all aim at this very same point. Somehow, the stutterer must come to perceive his approaching words normally and without objectifying them as dreaded omens of speech difficulty. The very fact that all speech correctionists get results though using widely differing approaches is proof enough that therapy may vary with respect to form if it is unified with respect to focus.

First of all, in this connection, speech correctionists attempt to weaken the cue-value of words and sounds. They try to get the stutterer to stop magnifying the difficulty value of the m, or r, or other consonants, or vowels, or the plosives, or the word "stuttering," to cite but a few of the characteristic cate-

gories of anticipation employed by stutterers. Clinicians employ exhortation, suggestion and demonstration in this endeavor. "Let the consonants be but chips floating down the stream of your speech." "Pay no attention to your feared words." "Words are elephants coming out of your mouth, each holding his predecessor's tail, and they are all alike. Keep them going." Stutterers who fear certain consonants are sometimes trained to slight them voluntarily and to accent the vowel of the words. This training involves a new perception of the sound or word in question. The word is perceived not so much as "MMMan," with a bugaboo M, but as "m-AN," or "m-m-man," or "mmman," or better yet as "man." They are taught fluency patterns, rate control devices, phrasing, and continuous voluntary stuttering in a repetitive way. Each of these tends to diminish the compulsion to isolate certain sounds and words as stimulus objects.

In order to teach stutterers that word fears are not necessarily reliable signs of the certain occurrence of stuttering, stutterers are sometimes asked to check not only the number of times they stutter on m words (or whatever the cue seems to be), but also to check the number of times they say these words without difficulty. The results are often surprising, with very high success-failure ratios. It is also possible to weaken these word fears by having the stutterer read passages or speak sentences loaded with these words in speech situations of increasing difficulty so that he has continuous success. By controlling morale and environmental pressures, it is not difficult to give the stutterer success in uttering his feared words, even in voice recording, large audience, or radio experiences. Each time the stutterer has intense word fear and no unpleasant symptoms, his surprise will reflect the diminishing of those fears. Some clinicians prefer to give the stutterer one success under great fear to many lesser successes under conditions of little anticipation. All speech correctionists attempt to teach the stutterer that he may have word fear and yet be fluent.

Another common method of attacking word fears is the attempt to associate new preparatory sets with the word or sound cue dreaded by the stutterer. So long as the m always means lip-protrusion and sets off little rehearsals of this symptom, it will remain potent in determining the stutterer's behavior. By training the stutterer to rehearse a new response, we weaken the old reaction. Most speech correctionists apply this form of therapy in one way or another. Sometimes the stutterer is trained to relax completely the moment he perceives a feared word. He also may be taught to assume a different posture, an overt reaction of confidence, an inner attitude of assertion, or behavior indicative of his willingness to work on his problem openly and aggressively. Besides these general attitudes which are attached to the perception of a feared sound or word, certain specific reactions are also taught. The stutterer may be instructed to get set for his speech attempt on a feared word by planning to attempt it as normally as possible, by making a very strong speech attempt (even shouting has been used occasionally), by starting with a sigh, by bouncing it out with effortless repetitions, by prolonging the first sound easily, or by beginning the word as a movement sequence with loose tongue and lip contacts. There are many other reactions taught to stutterers as alternatives to the old compulsive behavior. It may be that as much of their value is due to their effect on word fears as to their direct prevention of stuttering.

Finally, all speech correctionists try to train the stutterer to stop reinforcing his word fears. Like Tam O'Shanter's wife who hugged her wrath to keep it warm, stutterers nurse their word fears. After stuttering on a word, they may suffer in-

tensely, reliving the struggle and the frustration. They brood over their speech failures in a fashion similar to that of a normal speaker who has just made a horrible faux pas. The words and sounds become symbols of their social incompetence, the badges of their shame. They give themselves such a barrage of negative suggestion as to resemble self-hypnosis: "I can't say s words. I never can get them out. Why can't I say that sound without sticking? If only there weren't any s sounds! Something keeps me from saying the s. It sticks in my throat." By bringing to consciousness and verbalizing this constant nagging negative suggestion, it can be rejected. By developing attitudes of humor or absurdity, or by giving the person insight into the undesirable influence of negative suggestion, much can be accomplished. Direct and positive suggestion is also employed.

Word fears are also maintained at a peak of their power by the stutterer's habitual practice of avoiding or postponing utterance of his stumble-words or sounds. The more he avoids these words, the more he fears them in the future. Avoidance is always the parent of fear. By strong clinical command, reasoning, or penalties, the speech correctionist attempts to build up a conscience against avoidance, whether it be the substitution of a synonym or the disguised postponement of the speech attempt. Word fears are like the legendary hoop snakes. If you chase them, they will slither away; if you run, they will chase you. An aggressive facing of word fears decreases the bugaboo. Many speech correctionists ask their stutterers to hunt for word fears so that they may destroy them and their influence. As one clinician said, "The more the hares are hunted, the fewer there are to be hunted."

The post-stuttering emotional upheaval plays a vital role in reinforcing the stutterer's fears. The revulsion, frustration, or distress which dominates the stutterer's attention

during and immediately following his symptoms often determines how much he will fear the same word he has spoken when it must be spoken again. Several techniques are used to counteract this tendency, but only one illustration will be given, that of cancellation. As soon as the stutterer has a moment of severe speech difficulty he is asked to cease all speech attempt. Then, during the pause, he should analyze the contortions or other reactions in terms of their true contribution to the production of the word and then attempt the word again in a different way, with less tension and complication. In mastering this cancellation technique, he has wiped out some of the unpleasantness, varied his stereotyped response to the word fear, and prevented the undesirable consequences of hiding emotional upheaval. He has also told his audience that he is facing his problem courageously and intelligently. Other speech correctionists train the stutterer merely to proceed slowly and calmly, reacting to the symptoms without emotion.

CONCLUDING REMARKS

We have briefly sketched the treatment of secondary stuttering in terms of the speech correctionist's attack on the symptoms. We have outlined a few of the ways in which he tries to weaken and eliminate the struggle and avoidance reactions and to diminish the situation and word fears which precipitate the symptoms. We have tried to show that a great deal of agreement exists in the actual practices of speech correction. And yet it is well known that marked differences seem to exist among speech therapists with regard to the treatment of secondary stuttering.

The differences, however, are more apparent than real. They exist because stuttering is a very complex disorder, because its development has not been well understood, and because various theories of causation have competed for acceptance. There are many theories concerning the nature and causes of stuttering, just as there were many opinions concerning the nature of the elephant among the legendary blind men. In each there is probably some truth, but it is a partial truth. Unfortunately, there is a strong tendency among certain of the adherents of any particular theory to state it as a gospel and to battle the disbelievers. Contrasts in concept have disguised agreement in practice. Primary stuttering is treated by all speech correctionists in much the same way. The symptoms and fears of secondary stuttering are the common target of all speech therapists, and many of the arrows are in universal use. Most of the differences are those of omission. Some speech correctionists confine their therapy to only a few of the possible methods at their disposal.

Perhaps the greatest apparent difference in the treatment of stuttering arises from the desire of all speech correctionists to put their pet theories into practice. They add, therefore, to the basic therapy we have outlined certain other techniques designed to eliminate the causal foundation of the disorder. Thus, in certain speech clinics, handedness may be stressed, and the stutterers are trained to associate speech attempt with coordinated movements of the neurologically dominant, or supposedly dominant, side of the body. Simultaneous talking and writing exercises are often used in this connection. These same exercises are used by clinicians believing in other theories to teach the stutterer to make strong direct speech attempts from a state of rest, or by still other clinicians as a form of psychological suggestion. Speaking while confronting oneself in a mirror is a common technique in many speech



Some speech clinicians recommend that confirmed stutterers—not young children—make various uses of speaking before a mirror as part of the remedial program.

clinics, yet different reasons for its use are cited. Some speech correctionists require the stutterer to imitate stuttering, for "mental hygiene" reasons; others use the same device in order to "break the habits through negative practice"; still others

want to help the stutterer analyze his symptoms in terms of their relation to word production. Again, the differences are more apparent than real.

Most speech correctionists have a sufficient regard for the individuality of each case to vary the treatment according to individual needs. If the stutterer's rhythmic coordinations



Given a re-training program adapted to his particular speech problem, personality and total situation, the stutterer of elementary or high school age, and even the adult stutterer, can as a rule hope for rewarding improvement.

(speech involves both rhythm and coordination) are faulty, he is given remedial help in this direction. If he is basically hesitant as a result of an emotional conflict, confused sidedness, or too high fluency standards, we seek to remove the condition which makes him that way. In many of our cases it is almost impossible to determine the exact cause or causes for basic hesitancy. They are lost, if they ever did exist, in the vague mists of the person's history. In many cases, the original provocation for speech interruption is no longer present, and stuttering has become self-perpetuating, through the vicious circle of fear-struggle-avoidance-fear. We then work on the symptoms and also on the fears and evaluations which precipitate them.

By and large, all speech correctionists attempt to treat secondary stuttering not as a general disorder, but as a problem specific to its possessor. We eliminate the causes, so far as we are able, and alleviate the symptoms. The treatment demands much of the speech correctionist and even more of the stutterer, but stuttering is no longer an insoluble problem. Systematic therapy plus a cooperative learner can equal excellent results. We are able to do a great deal for the stutterer. Let us try!

Recently Published Books for Further Study

1. Ainsworth, Stanley.

Speech Correction Methods. New York: Prentice-Hall. 1948. Chapter 6.

2. Johnson, W., Brown, S. F., Curtis, J. F., Edney, C. W., Keaster, J. Speech Handicapped School Children. New York: Harper and Brothers. 1948. Chapters 1, 2 and 5 and "An Open Letter to the Mother or a Stuttering Child" in Appendix.

3. Van Riper, Charles.

Speech Correction: Principles and Methods. New York: Prentice-Hall. Revised edition, 1947. Chapters 10, 11. 4. West, Robert, Kennedy, Lou and Carr, Anna. The Rehabilitation of Speech. New York: Harper and Brothers. Revised edition, 1947. Chapters 4, 20.

An Educational Film on Stuttering

A Report on Donald. This film may be ordered from the Bureau of Visual Instruction, University of Minnesota, Minneapolis 14, Minnesota.

The American Speech and Hearing Association

The American Speech and Hearing Association is a national professional and learned association originally established in 1925, the purposes of which are 'to encourage basic scientific study of the processes of individual human speech and hearing, promote investigation of speech and hearing disorders, and foster improvement of therapeutic procedures with such disorders; to stimulate exchange of information among persons thus engaged, and to disseminate such information.' Members are required to hold at least a Bachelors degree in the general area of the Association's interest; there are no requirements for Associates.

The Association carries on a program of clinical certification for Members who desire it. A Basic Certificate in either Speech or Hearing indicates that the holder thereof is capable of performing general clinical duties under supervision and guidance of an individual holding the Advanced Certificate; an Advanced Certificate indicates that he has demonstrated ability to conduct clinics, train others in the arts and skills of the profession and is a fully trained professional worker. Clinical certification held by Members is recorded in the Annual Directory, published in September, which is available for purchase at cost.

The Association publishes quarterly the *Journal of Speech* and *Hearing Disorders*, occasional Monograph Supplements, and other publications in the area of speech and hearing. In cooperation with the National Society for Crippled Children and Adults, Inc., it has established the Speech Correction Fund for conducting research and professional training.

The National Society for Crippled Children and Adults

The National Society for Crippled Children and Adults is a nationwide federation of more than 2,000 state and local member societies. These societies provide needed services in the fields of health, welfare, education, recreation, employment and rehabilitation. Program policies within this scope permit development of varied services as determined by unmet needs, existing facilities, resources of the society, and availability of trained personnel. The three-point program of the Society is:

- 1. Education of the public, professional workers and parents.
- 2. Research to provide increased knowledge of the causes of handicapping conditions and their prevention, and to improve methods of care, education and treatment of those afflicted.
- 3. Direct Services to the handicapped, including case finding, diagnostic clinics, medical care, physical therapy, occupational therapy, speech and hearing therapy, treatment and training centers and clinics, special schools and classes, homebound teaching, psychological services, vocational training, curative and sheltered workshops, employment service, camps, recreational services, social services and provision of braces, appliances and equipment.

The National Society publishes a bi-monthly magazine for parents, *The Crippled Child Magazine*, the monthly *Bulletin* of the National Society, the monthly *Bulletin of Current Literature*, and other booklets and leaflets pertaining to various phases of care and treatment of crippling conditions.

Since the officers of both organizations change periodically, persons who desire to address them are advised to write to the permanent office of the National Society for Crippled Children and Adults, Inc., 11 S. La Salle Street, Chicago 3, Illinois, and inquiries will be forwarded.