THE INDIANS HAVE NO WORD FOR IT*

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I. STUTTERING IN CHILDREN

WILLIAM NUTTALL, an English stutterer, writing in the journal *Psyche*, in 1937, said, in effect, that whoever finds a cure for stuttering will have found a cure for all the ills of society. We should not permit his possible exaggeration to distract us from the peculiarly fundamental wisdom which he expressed. In a sense, what he said of stuttering might also be said of such other perplexing forms of behavior as thumb-sucking, or nervousness, worry, gossiping, etc. Mr. Nuttall elaborated his point by saying that he seldom if ever stuttered when alone (as is true of stutterers generally), but only when speaking to other people, so that whatever the causes of his disorder, they must lie in those other people quite as much as in himself. In his own way, Mr. Nuttall was pointing a finger in the direction of semantic environment—the environment of attitudes and evaluations, opinions and beliefs—as a source of his difficulties.

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1 The use of term 'semantic environment' is to emphasize more pointedly than is usually done that the aspects of environment most important in relation to stuttering are semantic, or evaluational, in a broad sense. To put it more roughly, semantic environment includes those aspects of the total environment that are least important to a dog or an oyster.

The significance of semantic environment in relation to stuttering is further suggested by certain experiences that the writer has had in attempting to investigate stuttering among North American Indians. A few years ago one of his students, Miss Harriett Hayes, became a teacher on an Indian reservation in Idaho. She carried with her a set of detailed instructions for making a study of the stutterers among the Bannock and Shoshone Indians, with whom she was to work. At the end of the school year, however, she returned with the highly interesting information that she had been unable to find any stuttering Indians. Moreover, the superintendent of the school and the other teachers, many of whom had been in close association with Indians for as long as 25 years, had reported to Miss Hayes that they had never seen any stuttering Indians. Since then we have received reports, from unknown original sources, of one stuttering Indian in the State of Maine and two in the Rocky Mountain area. It has not been possible, however, to verify these reports. Over a 25-year period there have come to the University of Iowa Speech Clinic one half-breed Indian from South Dakota, who had lived almost entirely among white men, and one strange case of a full-blooded Indian, also from South Dakota, who had been educated in a mission school.
This latter case is of special interest, for the reason that he did not appear to be either a typical Indian or a typical stutterer. When brought to the Iowa clinic he was about twenty years old. For the previous two years he had apparently been unable to speak at all, and it was for this reason that he was referred to us by the head of the mission school. There was a history of the boy's having 'stuttered' for an indefinite, but limited period immediately before his 'loss of voice.' A neurological and general physical examination revealed nothing of importance. It took about a month to obtain from the boy, in written form, the highly significant information that he had regarded his earlier stuttering as 'a sign from God,' which he had interpreted to mean that God intended for him not to talk at all. His 'loss of voice,' therefore, had been his way of expressing his obedience to God's will. He was convinced, however, of his utter inability to speak, that God had sealed his lips.

This presented a neat problem from a speech-correction point of view. With childlike simplicity, he had come to believe what he had been taught, and he had learned his lesson so well that it seemed both impractical and dangerous, particularly in view of the short time available, to attempt to undo the effects of his previous teachings. Dr. C. Esco Obermann, who was assigned to the case, finally hit upon an ingenious solution, however. He managed to convince the boy that he had misinterpreted 'God's sign.' Dr. Obermann re-interpreted the earlier stuttering as a test of faith, and asserted that God would be pleased only if the Indian lad would continue to speak and so to spread the gospel in spite of the stuttering. A day or so later the Indian boy came to Dr. Obermann in a state of high excitement. He could talk again! And he stuttered only slightly. Eventually arrangements were made for him to enter a monastery—which is probably not a practical solution for most stutterers!

The point of the story is simply that this stuttering Indian was far from being representative either of Indians or of stutterers—and it is the only case of a full-blooded Indian stutterer of whom the writer has been able to obtain any verified direct or indirect knowledge. For all practical purposes, then, it may be said, so far as the writer is aware, that there are no stutterers among North American Indians living under conditions comparatively free from the white man's influence.

A year or so after Miss Hayes had made her preliminary study of the Indians in Idaho, the writer arranged with another of his students, John Snidecor, who was then located in that region, to continue the investigation. Professor Snidecor was to make special note of two things: the language of the Indians, and their policies and standards concerning the care and training of their children. He made a thorough investigation, interviewing several hundred Indians. He was also granted permission to appear before the chiefs and members of the tribal councils.

He learned in the main two things. First, these Indians had no word for stuttering in their language. In fact, when he asked whether there were any stutterers in the tribes, he had to demonstrate stuttering for the chiefs and the council members before they could understand what he was talking about. They were intensely amused by his demonstrations. Second, their standards of child care and training appeared to be
extraordinarily lax in comparison with our own. With respect to speech in particular, it seemed to be the case that every Indian child was regarded as a satisfactory or normal speaker, regardless of the manner in which the child spoke. Speech defects were simply not recognized. The Indian children were not criticized or evaluated on the basis of their speech, no comments were made about it, no issue was made of it. In their semantic environment there appeared to be no speech anxieties or tensions for the Indian children to interiorize, to adopt as their own. This, together with the absence of a word for stuttering in the Indians’ language, constitutes the only basis on which the writer can at this time suggest an explanation for the fact that there were no stutterers among these Indians.

II

One need not go to the North American Indians, however, in order to glimpse the importance of semantic environment in relation to stuttering. There is a very large group of persons belonging to the white race who apparently do not stutter: namely, very young children in our own culture. Through George D. Stoddard, then Director of the Iowa Child Welfare Research Station, the writer obtained funds in 1935 from the Laura Spelman Rockefeller Foundation with which to conduct a study of the onset of stuttering. Up to that time it appeared to be more or less generally taken for granted that stuttering at its onset was essentially the same as stuttering in adults, that stuttering children were generally retarded or constitutionally defective, and that stuttering ordinarily begins as a result of illness, injury, shock, or some other more or less serious and dramatic event. From the research to be described it seemed quite impossible to support any of these commonly accepted views.

In the first place, it was discovered that when the attempt is made to find stutterers shortly after they have begun to stutter, so that relatively detailed and accurate information might be secured, the cases obtained are practically all young children. Three out of four of the children investigated had begun to stutter at or before the age of three years and two months. However—and this is extremely important—all the children encountered in this study had talked without stuttering for from six months to several years before the onset of stuttering.

In this research 46 stuttering children were involved, and for each stuttering child investigation was made of a non-stuttering child of like age, sex, and intelligence level. Relatively thorough observations and case-history studies were made; two or more interviewers examined independently the case of each stuttering child, and in large measure the investigations were carried out in the homes of the children. On the average each stuttering child was kept under observation for a period of two and one-half years. Over a period of approximately five years the writer had the assistance of seventeen workers trained in speech pathology, chief among whom were Charles Van Riper, Dorothy Davis Tuthill, Hartwell Scarbrough, and Susan Dwyer.

Without going into elaborate detail, it is to be reported that:

8 A preliminary report of this investigation has been published. See W. Johnson, ‘A Study of the Onset and Development of Stuttering,’ Journal of Speech Disorders, VII (1942), 251-257.
ETC.: A REVIEW OF GENERAL SEMANTICS

1. Practically every case of stuttering was originally diagnosed as such, not by a speech expert, but by a layman—usually one, or both, of the child's parents.

2. What these laymen had diagnosed as stuttering was, by and large, indistinguishable from the hesitations and repetitions known to be characteristic of the normal speech of young children. Under the writer's direction investigations have been made of the fluency of children between the ages of two and six years. These studies have been done at the Iowa Child Welfare Research Station by Dorothy Davis Tuthill, George Egland, Margaret Branscom, Jeannette Hughes, and Eloise Tupper. They have well established the fact that young children speak in such a manner that from 15 to 25 per cent of their words figure in some kind of repetition. The initial sound or syllable of the word is repeated, or the whole word is repeated, or the word is part of a repeated phrase. In addition, there are frequent hesitations other than repetitions.

These repetitions and hesitations are not accompanied by any apparent tension or anxiety on the part of the child. They seem to occur somewhat more frequently when the child is 'talking over his head,' when he lacks sufficient knowledge of what he is talking about, when the listener does not respond readily to what the child says, or his vocabulary does not contain the seemingly necessary words. Such conditions appear to occur often in the speaking experience of very young children. It is what you would experience if asked to speak for ten minutes about Einstein's theories, or any other subject concerning which you lack both information and vocabulary. After all, it takes a child a few years to acquire the experience, the words and the language skills necessary for the smooth handling of ordinary conversation. Also, nonfluency seems to occur more frequently when the child is talking in the face of competition, as at the family table, when others are talking a great deal and are paying slight attention to the child's own attempts at expression. There is a tendency for more nonfluency to occur under conditions of shame, sense of guilt, etc., occasioned by parental scolding, rebuff, or disapproval, particularly when these serve to create negative evaluation by the child of his own speaking rights or ability. There is probably increased nonfluency, also, during 'language spurts,' as during the transition from the speaking of single words to the speaking of short sentences, or from the speaking of simple sentences to the use of complex sentences, or when the child is discontinuing the pronoun me in favor of I, etc.

There are doubtless other conditions that tend to increase hesitations and repetitions in the child's speech. The point is that these conditions are very common and while they may occur more frequently in some environments than in others they occur sufficiently often for all children so that the speech of early childhood is in general quite nonfluent. What is important is that the so-called stuttering children were found to have been apparently normal, even with respect to speech, at the time when someone, usually the parents, first regarded them as stutterers. And, as has been mentioned, they had all talked for considerable periods.

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3 D. Davis, 'The Relation of Repetitions in the Speech of Young Children to Certain Measures of Language Maturity and Situational Factors,' *Journal of Speech Disorders*, IV (1939) 303-318, and V (1940), 238-246. The studies of Egland, Branscom, Hughes, and Tupper have not yet been published. They were all done as M.A. theses in the Iowa Child Welfare Research Station.
without being regarded as defective before they had come to be diagnosed as stutterers.

3. Stuttering at its onset was found, then, to be remarkably different from stuttering in the adult. Stuttering as a clinical problem, as a definite disorder, was found to occur, not before being diagnosed, but after being diagnosed. In order to emphasize this finding, the writer has coined the term diagnosogenic; stuttering is a diagnosogenic disorder in the sense that the diagnosis of stuttering is one of the causes of the disorder. The evaluations made by the parents (usually), which they express, overtly or implicitly, by diagnosing their child's speech as 'stuttering' or as 'defective,' or 'abnormal,' are a very important part of the child's semantic environment. Insofar as the child interiorizes this aspect of his semantic environment, he, too, evaluates his speech as 'defective,' 'difficult,' 'not acceptable,' etc., and his manner of speaking is consequently made more hesitant, cautious, labored and the like. In this way normal speech hesitations and repetitions are transformed into the exaggerated pausing, effort, and reluctance to speak which are so conspicuous and frustrating in the speech of adult stutterers.

Thus we see certain interrelationships among the child's semantic environment, his own evaluations, and his overt behavior. The more anxious the parents become, the more they bound the child to 'go slowly,' to 'stop and start over,' to 'make up his mind,' to 'breathe more deeply,' etc., the more fearful and disheartened the child becomes, and the more hesitantly, frantically and laboriously he speaks—so that the parents, teachers and others become more worried, appeal more insistently to the child to 'talk better,' with the result that the child's own evaluation become still more disturbed, and his outward speech behavior becomes more and more disordered. It is a vicious spiral, and all the factors involved in it are closely interrelated.

4. The stuttering children were found not to be retarded in development. They were compared in several ways with the nonstuttering children who were also investigated. The stuttering children were not more retarded in speech, in walking, teething and other common indexes of development. The only child who had suffered a definitely serious birth injury was a stutterer who was no longer stuttering at the close of the investigation. The stutterers had not had more diseases and injuries, and those they had had did not appear to have been related to the 'onset of stuttering' (this term is now put in quotes because it appears to be misleading—it refers merely to the original diagnosis of stuttering).

With respect to handedness and changes in handedness, the two groups of children could not be differentiated. In fact, there were 14 nonstutterers as against 12 stutterers who had undergone some handedness change, and this difference between 14 and 12 is not significant. Moreover, conditions of handedness seemed not to be related to the degree of speech improvement achieved by the stuttering children during the course of the investigation.

In brief, no evidence was found that there are stutterers, in the sense that the stutterers investigated were a different kind of children, that they differed from the non-stutterers in any basic anatomical or physiological respects.

5. In this investigation of young stutterers it was found that practically all of the children, after being diagnosed, developed overt speech behavior that was
in some degree unusual and of clinical importance. At the end of the study about three out of four had regained normal speech, so far as the parents, teachers and investigators could judge. In general, this result was obtained by conveying to the parents and teachers essentially the explanation of stuttering that is here being presented. For all practical purposes the children were neither talked to about their speech nor were they given any instructions as to how they should speak. Moreover, nothing was done from a physiological point of view, except that general principles of physical hygiene were recommended, but in very few cases was there any unusual need for such a recommendation. Insofar as anything was done directly about the problem in any case, it was done entirely or mostly with reference to the semantic environment.

That is to say, an attempt was made to change the attitudes and policies—the evaluations—of the parents and teachers concerning the child as a person and as a speaker. An attempt was made to create a semantic environment for the child in which there would be a minimum of anxiety, tension and disapproval for him to interiorize. In this way, we undertook to produce in the child such evaluations of his own speech as would permit him to speak spontaneously, with pleasure, and with confidence, not confidence in his ability to speak perfectly but in his ability to speak acceptably. It was essential, therefore, although it should be stressed that it was not possible in all cases, to get the parents and teachers to evaluate the child’s speech and to react to it—regardless of how he spoke—in ways that would convince the child that his speech was approved. As the child appeared to sense that his speech was being thoroughly approved, his reluctance to speak, his exaggerated hesitancy and caution and effort in speaking all decreased. The eventual result tended to be speech that was free, spontaneous, a source of evident enjoyment to the child and speech that was normally fluent—not perfectly fluent, for perfect fluency is abnormal, or unusual, as very severe stuttering.

In order to enable the child to speak with normal fluency, it was also necessary in some instances to bring about certain changes in the home or school. We have remarked that children—and this holds for adults as well—tend to speak more fluently under some conditions than under others. We are not now talking about stuttering. We are referring simply to the essentially effortless and apparently unconscious hesitations and repetitions in the normal speech of children and adults. Whenever a home or school was found in which there seemed to be an excess of conditions that tended to make for non-fluency, an attempt was made to reduce or eliminate these conditions.

In some cases, for example, the attempt was made to expand the child’s vocabulary or to give him a wider range of experience. In other instances, the parents were urged to be more responsive to the child’s remarks. On the whole, however, certain other considerations were of greater importance. It was rather commonly observed, for instance, that not only the standards of speech to which the child was being held were too high, but that also the parents were inclined to be perfectionists generally. For example, the child was being held to abnormally high standards with regard to table man-

4 For a detailed account of the treatment of one case see Nell Will, 'The Personality Development of a Stuttering Boy,' ETC., I (Spring, 1944), pp. 165-173.
ners, cleanliness, toilet habits and obedience; or certain words, innocent to the child but profane or vulgar to the parents, were vigorously, almost frighteningly, forbidden; the child was being constantly requested to be quiet or to sit still, etc.—the full list is truly impressive. (One sees here very vividly the difference between the semantic environments of Indian children and those of some of our own children.) Whenever such standards were discovered, an attempt was made to get the parents to adjust their ideals to the actual level of development and ability of the child. The effect of this was generally calming and appeared to be in some measure reflected in the child's speech.

Another measure that was found to be advisable and helpful in certain cases was that of bringing about a more affectionate and friendly relationship between the parents and their child. Their tendency to be critical and disapproving, as evidenced, for example, by their regarding his normally hesitant speech as defective, tended to make for generally strained relations and for apparent feelings of insecurity on the part of the child. Just as you might speak hesitantly in a situation in which you feel that you are not welcome and that what you say is not being well received, so a child tends to be less fluent when too much criticism and too little affection raise doubts for the child as to whether his parents like him and will stand ready to give needed help and encouragement.

On one occasion in this study of young stutterers, the writer spent several hours with a stuttering boy's father, a conservative and very busy merchant who spent almost no time with his son. In the mornings the little fellow would tag at his father's heels, trying to visit with him as he bustled about the house and out the door lost in a fog of business cares. The boy was nonfluent in his attempts to speak with the father, who scarcely listened, and seldom replied, to what the boy said. The father was not harsh to the boy; he just paid no attention to him, with the result that the child was frequently under considerable strain in his efforts to get an amount of attention and recognition that seemed altogether reasonable. Finally, the writer actually showed the father how to get down on his hands and knees and play with the boy. He got him to play catch with the child out in the yard, to take him riding with him, to read to him and in other ways to be companionable. This was one of the cases in which the stuttering was very definitely eliminated.

In other cases it was a matter of getting the parents to use less severe methods of discipline, to refrain from scolding the child or making derogatory remarks about him in the presence of his friends, to play games with the child, or just to hold the youngster and cuddle him enough to establish some feeling of warmth and affection. Some parents are so doggedly set on making little ladies and gentlemen of their youngsters that they seldom look on them as little children.

In general, then, and in the respects indicated, the treatment of stuttering in young children is to be directed, not toward the child, but toward the relevant evaluations—the attitudes, assumptions, beliefs, etc.—and the resulting policies and reactions, of the child’s parents and teachers and the other persons who affect his own evaluations and reactions. It is a matter of changing the child's speech responses by changing the pertinent features of the conditions under which they occur.
II. STUTTERING IN ADULTS*

In adults the problem is quite different, but in both children and adults certain general principles are fundamental. To begin with, a clear distinction must be made between nonfluency and stuttering. Most young children and many adults speak quite nonfluently, repeating frequently, pausing conspicuously, saying *ab* or *uh*, etc. They speak very differently from stutterers, however, who may be even quite fluent by ordinary standards but who exhibit considerable strain, embarrassment, and apprehensiveness with regard to such nonfluency as they do have. It is the stutterer's anxiety and strain, the fear and the effort with which he pauses or says *uh*, repeats sounds or prolongs them, that serve to distinguish him from the so-called normal speaker.

It is commonly supposed that what ails the stutterer is that he cannot speak fluently. The degree to which such misconceptions as this can come to be widely accepted is, indeed, fascinating. The fact of the matter is that the stutterer cannot talk nonfluently. He can speak fluently all right; so long as his speech is fluent, as it is 80 per cent or more of the time in the majority of cases, his speech cannot very well be distinguished from that of a normal speaker. To say that stutterers cannot talk nonfluently is to commit a fantastic misrepresentation of the facts. If they talked nonfluently as well as they talk fluently they could only be regarded as normal speakers. Their peculiarity lies in the fact that whenever they do hesitate or repeat they make a great show of fear and effort, instead of proceeding to stumble along calmly as normal speakers do.

In a fundamental sense, stuttering is not a speech defect at all, although excessive nonfluency might sometimes be so regarded. Stuttering is an evaluational disorder. It is what results when normal nonfluency is evaluated as something to be feared and avoided; it is, outwardly, what the stutterer does in an attempt to avoid nonfluency. On such a basis his reluctance to speak at all, his shyness, his excessive caution in speaking, his great effort to speak perfectly, which shows up in his facial grimaces, bodily contortions and strained vocalizations—all this, which is what we call stuttering, becomes understandable when viewed as avoidance reactions, reactions designed to avoid the nonfluency which the individual has learned to fear and dread and expect.

In the normal speaker nonfluency is simply a response, occasioned by some external stimulus or, perhaps, by a lack of vocabulary or preparation. As a response, in this sense, nonfluency is, indeed, normal. For the stutterer, on the other hand, nonfluency has become a stimulus, to which he reacts with anxiety and with an effort to avoid it and its supposed social consequences. Nonfluency as a response is hardly a problem; nonfluency as a stimulus is something else again. The child's repetitions of sounds, words, and phrases are of no consequence, until they come to serve as a stimulus for his parents or teachers. When that happens, they tend to become for the child

the same sort of stimulus they are for his parents and teachers, who, in large measure, create his semantic environment. As they react with worry and disapproval and with an effort to get the child not to repeat, so the child in time adopts their worry and disapproval of his own speech, and consequently he makes a great effort to talk without repeating. These attitudes and this effort are, in the main, what constitute stuttering. Simple hesitancy in speech is normal and harmless. But to hesitate to hesitate is relatively serious in its consequences.

It is these attitudes of fear and embarrassment, and this second-order hesitating to hesitate, these anxious exertions of effort to speak perfectly and without nonfluency—these are the symptoms of stuttering that stand out in the adult. They may be present in rather young children, of course, since in some semantic environments it does not take very long for the child's own evaluative behavior to become seriously affected. The essential point is that before the child has interiorized his semantic environment to a very considerable degree, the problem can be dealt with effectively for the most part by changing the semantic environment itself, without any direct attempt to change the child's own evaluative behavior so far as his speech is concerned. Besides, a child's semantic environment tends to be fairly largely confined to the home and is created by very few individuals, so that it can be changed effectively in a great many cases.

II

In the case of older children and adults, on the other hand, a more direct attack on the problem is usually necessary. The individual's semantic environment extends eventually beyond the home or the school; it becomes too big to be easily manipulated. Besides (and this is more important) the individual has interiorized it. His nonfluency has become a stimulus, not only for the people around him, but also for him. He reacts to it in his own right, so to speak. It is his own evaluations that now largely determine his overt behavior, and so those evaluations must be attacked directly. All the relevant factors are interrelated, however, and it is generally more effective to work on all of them than to limit attention to one only. Anything that can be done to change the semantic environment, to modify attitudes and policies in the home, school, neighborhood or community, or to educate 'public opinion' in the larger sense, helps to promote favorable changes in the individual's own evaluative behavior. Likewise, any changes that can be brought about more or less directly in the stutterer's manner of stuttering in order to make it more bearable, may make it easier for him to evaluate it differently. Moreover, a program of physical hygiene will sometimes help to keep the individual 'feeling good,' so that he will have the energy for an enthusiastic and sustained attempt to overcome his difficulties.

From this point of view, then, the problem of stuttering is not to be regarded elementalistically as being either 'physical' or 'mental,' either 'organic' or 'emotional.' It is neither 'all in the mind' nor 'all in the tongue.' The approach throughout is nonelementalistic and relativistic. Nor is it to be missed that within this frame of reference, no two stutterers are to be regarded as exactly alike. The specific procedures that appear to be most helpful in one case may not be helpful in another. We must go further and say that the specific measures that are advisable for a particular stutterer at one time, or in one
situation, are not necessarily advisable at another time and under other circumstances. There is no single method of treating stuttering from the point of view here presented. Any particular stutterer is to be examined, evaluated, and treated extensionally with reference to the specific alterations advisable and feasible in his own case. It is even possible that for some stutterers the factor of physical constitution would be more important than any other, although in the general run of cases other factors would appear to be of definitely greater significance.

III

On the basis of this general statement, it is possible to discuss in more specific terms the treatment of stuttering in well-developed or adult cases:

Semantic environment. As a general rule, it is advisable to see to it that the stutterer’s family, teachers, employer, friends, and associates are made acquainted with the nature of his problem. An explanation, in simplified terms if necessary, along the lines presented here, will often go far to weaken the taboo against nonfluency which the stutterer usually feels whenever he speaks at home, in school, or elsewhere.

For example, most people are inclined to praise a stutterer when he speaks fluently. The practical effect of this is to strengthen the stutterer’s conviction that he should never speak nonfluently; as a consequence, he tends to become a bit more anxious and to exhibit more tension in his attempts to avoid nonfluency. In other words, he tends to stutter more severely when praised for speaking fluently. It is better to praise the stutterer whenever he handles his nonfluency calmly and without undue strain. This notion may sound odd to those who are unfamiliar with the problem, but there are very few parents, teachers, or other persons who will not do what they can to help a stutterer, once they see clearly what there is to do. In general, what there is to do is to adopt the attitude—and mean it—that the stutterer is under no obligation whatever to speak fluently, that, in fact, he is to be complimented for speaking nonfluently in an unworried, unhurried, effortless and forthright manner.

It is also generally advisable to create in the stutterer’s semantic environment the attitude that he is a worthy individual. He should be able to feel sure of his parents’ affection and reasonable moral support without having to struggle for it. He should not be given reason to suppose that his teachers pity him, or look down on him as a person. His employer should make clear to him the respects in which his speech is and is not the basis for any criticisms of his work, and he should help him to see those aspects of his work in which his efficiency is not affected by his speech difficulty. It will pay the employer in the long run to follow such a policy, and it will help the stutterer considerably to achieve an adequate re-evaluation of himself and of his speech.

It is well to encourage a stutterer to develop his talents along various lines, and to provide opportunities for him to do so. One of the marks of a healthful semantic environment is that it provides the individual with stimulation for possible self-development. It should not, however, stimulate him beyond the reasonable limits of his ability, for to do that is to invite failure, and nothing fails like failure. Experiences of success, on the other hand, are healthful in their effects. In order to experience successes, one’s goals must be reasonably specific
and recognizable, and they must be practically attainable. But there must be goals; one must be provided with something at which to shoot, so to speak, and with the opportunity to shoot at it. If a stutterer has athletic ability, or can serve as school cheer-leader, or shows promise of becoming a writer or trombone player, then he should be provided with the necessary opportunities to experience success accordingly. It is definitely beneficial to have a good opinion of oneself—based on performance, properly evaluated. If a stutterer can have positive evaluations of himself as a person, he is correspondingly more likely to evaluate his speech nonfluency with less dread and trepidation.

Finally, it should be said that most stutterers should be encouraged to speak as much as possible. In this respect, however, parents and teachers need to be realistically alert. For a stutterer, speaking can be extremely gruelling and demoralizing, and any stutterer varies considerably from time to time in his ability to 'take it.' In general, it is advisable for him to do most of his speaking, and as much speaking as he can, in such situations as he can manage with the greatest poise and satisfaction. But he should be encouraged and helped to extend the range of such situations. Most stutterers will benefit from speaking in those situations in which no premium is placed on fluency. As the stutterer loses his dread of nonfluency he speaks with less anxiety, and with less hesitation and strain—that is to say, with less stuttering. This general principle should guide the stutterer's parents and teachers in providing him with speaking experience.

So far as oral recitation in school is concerned, it is best for the teacher to discuss the matter frankly with the pupil, making clear to him that he may recite if he wants to, and that in doing so he need feel no obligation to talk perfectly. He may prefer to recite only when he volunteers to do so. It may be advisable to excuse him from the wear and tear of longer recitations, such as book reports. It may even be advisable to excuse him from all oral work, to arrange matters so that he need not even answer roll call. In such a case extra written work might well be assigned. In other cases, no special consideration whatever need be given so far as oral work is concerned. Every case must be handled on its own merits. There are no rules of thumb. The main thing is to see to it that the child does not become demoralized, and that he develops such evaluations of himself and his speech that he will want to speak and that he will enjoy speaking to the greatest possible degree.

One more point: As far as possible, the stutterer himself should undertake the task of changing his semantic environment. In this way the job will be done more thoroughly, and the stutterer will be developing a frankness about his own problem in talking about it to others, and he will be acquiring valuable experience in dealing directly with his elders and associates. 'I, a stranger and afraid in a world I never made,' in the words of the poet Housman, is not the theme song of an individual who takes upon himself as much as he can the responsibility for making his own semantic environment. It is of great adjustive value to learn that the evaluations which other people make of oneself, and the attitudes they have which affect one's own living, can in a measure be determined by one's own efforts. A stutterer, like anyone else, needs to learn that he is in large measure responsible for the manner in which others regard him and for the policies toward him which they adopt.
IV

Evaluative Behavior. Evaluative behavior, as the term is here used, involves the forming and expression of attitudes, beliefs, wishes, likes and dislikes, assumptions, etc. We are not born with opinions or attitudes; rather, we are born into a semantic environment from which we derive them. The notion that repetitious speech is socially taboo is one of the features of many semantic environments in our culture. Whenever this taboo is highly developed, the child is put under considerable strain, since repetition is one of the prominent characteristics of speech in its early stages. The baby does not say, Da, but, Da, da, da. This tendency to repeat continues into early childhood and even into the adult years to some extent. It is very significant, therefore, that such writers as Froeschels, Bluemel, and Van Riper have emphasized that 'primary stuttering'—'stuttering' in its early stages—consists of simple repetition. It is very significant, that is, that they have called such repetition 'primary stuttering.' We have seen that this sort of repetition is quite normal, especially during early childhood, and the fact that even speech experts would call it 'stuttering' indicates the extent to which, in our society, speech repetition is tabooed, or disapproved.

Once a child has been called a stutterer, it is this taboo against nonfluency that is of particular importance in his semantic environment. The very fact that he is called a stutterer serves to strengthen the taboo. It is likely that if you have never been regarded as a stutterer, you can come nowhere near appreciating the uncanny, crushing power of the social disapproval of whatever is regarded as stuttering. It is probably one of the most frightening, perplexing and demoralizing influences to be found in our culture. In this connection, it is of great interest that a similar condition is found to exist among certain primitive tribes. For instance, in his book, Primitive Behavior, Professor W. I. Thomas says, 'Almost every Bantu man and woman is a fluent and sustained speaker, and Dr. Gordon Brown, who is working among one of the tribes, informs one that the most prevalent mental disturbance is in youths who realize that they are unable to become finished speakers.'

Stuttering, in the writer's opinion, is quite incomprehensible unless one takes this cultural factor of taboo into account. On the other hand, the behavior of stutterers appears to be quite understandable when viewed as their attempts to avoid nonfluency, and thus to avoid the consequences of the taboo against nonfluency. We have seen that what happens to bring about the stutterer's difficulty is that his parents or teachers confuse or identify his normal nonfluency with stuttering. To the child, then, nonfluency comes to be the same as stuttering. For him, the taboo against stuttering becomes generalized as a taboo against nonfluency. Out of this semantic confusion, he develops the fearful effort, exaggerated hesitancy, etc., which we call well-developed stuttering. He develops this behavior as an attempt to avoid the nonfluency that was originally disapproved, but this stuttering behavior is disapproved also, and he is left in a disheartening quandary from which he can see no possibility of escaping.

V

Now most speech correctionists attack this problem (without stating the problem in these terms, however) by attempting to build up the stutterer's confidence in his ability to speak perfectly. In order

1 W. I. Thomas, Primitive Behavior, an Introduction to the Social Sciences (1937).
to do this, they try to get the stutterer to speak while thoroughly relaxed, or to speak very slowly with a sort of drawl, or to speak in a monotone, or in time to some set rhythm, etc. The resulting speech, while usually free from 'stuttering,' is frequently more or less grotesque. Try going to a restaurant and ordering a meal with any one of these speech patterns, and you will get the point. If the parents of stutterers would adopt such speech patterns for themselves they would probably be less gullible in accepting the recommendations of those who advocate them. What such methods amount to is a powerful reinforcement of the taboo against stuttering with which the stutterer has been contending. What the so-called speech correctionist says, in effect, is this: 'Don't stutter. Whatever you do, don't stutter. You can even talk in this strange manner that I am suggesting, but don't stutter.'

If, for some odd reason, the stutterer is actually content to speak in the grotesque manner that is advocated, or if, by some miracle, he gains from the use of it a kind of abnormal confidence in an ability to speak perfectly, the results might be in a way satisfactory. But the writer has used such methods on himself, and he has seen many other stutterers who have used them, and it would seem that the results are usually tragic. It is common knowledge that, except in rare instances, these artificial speech patterns tend to wear out; in time the individual stutters as much, or more, when he talks slowly or in a monotone, etc., as he ever did. When that happens, he is not back where he started from—he is far behind that point. He is again a stutterer, but the taboo against stuttering has been intensified by the 'speech correction' he has had. His fear and desperation are now greater than before.

Simply by making a clear differentiation between stuttering and the normal nonfluency which it is designed to avoid, such unfortunate methods and the misunderstandings from which they arise might readily be eliminated. What the stutterer needs to learn is simply that he ceases to stutter to the extent that he permits nonfluency to occur. This does not make sense, of course, until a clear distinction is made between the effort to avoid nonfluency (which effort constitutes stuttering) and non-fluency. The stutterer suffers from a semantic confusion, which he has interiorized from his semantic environment. He identifies nonfluency and stuttering.

It helps the stutterer greatly to observe that so-called normal speakers are nonfluent. In the absence of systematic research on the speech fluency of adults, the writer can only report his scattered observations of normal speakers, professional lecturers for the most part. Counting their repeated syllables, words, and phrases, their exaggerated hesitations, conspicuous pauses, their uhs and ahs, they tend to average from five to eight nonfluencies per minute in continuous, relatively extemporaneous speaking. For one famous lecturer, 540 nonfluencies were tabulated in slightly less than one hour. For another, 65 ahs were counted in five minutes. So they go. This sort of thing is normal. Stutterers generally regard it as very unreasonable, as torture even, when first instructed to speak with this much nonfluency to be performed deliberately. To them it is stuttering. Nevertheless, when they do speak with such deliberate nonfluency, wholeheartedly, they loosen up very considerably, speak more smoothly, stutter much less. This, of course, is precisely what one would expect if one regards their stuttering behavior as an effort to avoid nonfluency.
So far as evaluative behavior is concerned, therefore, the stutterer needs to understand the taboo imposed by his semantic environment. He needs to understand the semantic confusion involved in this taboo as he has interiorized it. He needs to differentiate stuttering from nonfluency, and to see stuttering as his attempts to avoid nonfluency. Stated in so many words, this may sound rather simple. In practice it involves extraordinary difficulties. The indicated alterations in evaluative behavior have to be made in the face of powerful counteracting influences in the stutterer’s semantic environment. It is usually very difficult to get the stutterer’s parents, teachers and associates to make similar changes in their own evaluations. As a rule, they continue to praise him for speaking fluently, and to express or imply sympathy and anxiety when he does not speak fluently. Also, having learned to regard him as a stutterer, they quite automatically regard any nonfluency he may exhibit as stuttering—even though they give no heed to similar nonfluency in their own speech.

It must be realized, too, that for a stutterer to speak with repetitions, hesitations, etc., on purpose, is to reverse drastically long-established habits. He has been oriented for years, as a rule, to doing everything possible to keep from doing the very thing he is now being told to do. He is being asked to abandon evaluations which have come to seem natural to him. He is being asked to cultivate evaluations that strike him as contrary to common sense. Like so many other principles and practices that have been developed by modern scientific students of behavior, these, too, may appear to be very simple, but in our culture they are not easy to put into practice. Insofar as they are adequately applied, however, their value becomes evident.

Overt behavior. A great deal of what might be said under this heading has already been indicated and implied. The main alterations to be made, so far as the stutterer’s overt behavior is concerned, involve the deliberate performance of nonfluency, the sloughing off of certain mannerisms, grimaces, etc., and an increase in the amount of speaking and in the number of situations in which speaking is done. The primary objective of these behavior changes is to aid the stutterer in cultivating the evaluations that will lead to fearless, enjoyable, spontaneous speech—to speech of normal (not perfect) fluency.

In the usual case perhaps the steps to be taken would be of this order: First, it is sometimes necessary, or at least advisable, to convince the stutterer that he is capable of normal speech. This can be done by having him read in chorus with another person, even another stutterer. Strangely enough, two stutterers are, with rare exceptions, able to read aloud together without difficulty. It is also helpful in some cases to have the stutterer read and talk when alone, or perhaps to his dog, since practically all stutterers can do this without stuttering. Such practices are helpful to the extent that they counteract any assumptions the stutterer may have as to his physical inability to speak.

Second, practically every adult stutterer exhibits certain mannerisms, or so-called associated movements, such as closing his eyes, turning his head, swinging his foot, etc., while stuttering. In some cases, these mannerisms are responsible for much of the social handicap. Moreover, they can frequently be eliminated; the stutterer can rather quickly learn from directed practice, preferably before a mirror, that he can stutter with-
out doing some of these things. The value of eliminating such mannerisms lies in the fact that the social handicap is reduced, and the stutterer's notion that his stuttering is fixed and unalterable is weakened. One must be careful, however, not to carry this too far; one must see to it that the individual understands that he is not being instructed not to stutter at all. Such an instruction would tend to strengthen the taboo with which the stutterer has to contend, and result in increased tension and discouragement.

Third, insofar as possible the stutterer should deliberately imitate his own stuttering. This should be done at first in front of a mirror with no one present but the teacher; or, the stutterer can do it by himself provided he understands clearly what he is to do. Later, he should do it in speaking to other people. Having learned to imitate his own manner of stuttering, he should practice faking it without the effort and hurry that usually characterize it. He should do this at first while he is alone or with his teacher, and later in other situations. In doing this, the aim should be to make the stuttering entirely effortless, free from grimaces and fear—a forthright, unhurried, deliberate performance of what would otherwise be done under protest and with tension.

VII

After considerable practice in this, the stutterer is ready for the fourth step, that of adopting a streamlined pattern of nonfluency. This is not to be confused with stuttering; for the nonfluency pattern is adopted and used instead of stuttering. Probably a simple repetition, like 'tha-tha-tha-this,' is most preferable, partly because it was just such behavior that was originally diagnosed as stuttering and seeds, therefore, to be reevaluated as normal and acceptable. However, a simple, effortless prolongation of the first sounds of words will, in some cases, prove satisfactory, although considerable practice is required in prolonging the $p$ and $t$. Also, care must be exercised lest the prolonging become a complete stoppage reaction, which would be merely another way of stuttering. Having adopted, say, a simple repetition pattern, such as 'tha-tha-tha-this,' the stutterer should practice it a great deal when alone, preferably before a mirror. If a dictaphone or, better, a microphone is available, it is helpful to record one's speech, using the new repetition pattern, and then listen to it over and over again, in order to become thoroughly accustomed to it, and to learn to do it as smoothly and effortlessly as possible.

Gradually, then, the stutterer should introduce this pattern of nonfluency into his everyday speech, trying it out first in the easier situations and then introducing it in more and more difficult situations. He should employ it whenever he would otherwise stutter and he should also feign it liberally in saying certain words on which he would not otherwise stutter. He will find that the more nonfluency he fakes the less he will experience a tendency to stutter. This follows because his stuttering constitutes his attempts to avoid nonfluency, and to the extent that he is set to perform it, he is not set to avoid it. As time goes on the amount of feigning can be gradually reduced, since the tendency to try to avoid nonfluency (to stutter) will have been weakened, and eventually normal speech becomes possible.

What is accomplished by this means is that the individual ceases to be a stutterer and becomes instead, for a time, a rather nonfluent speaker. The unusual amount of repetition in his speech, provided it is performed wholeheartedly and without apparent effort, calls far less at-
attention to itself than one might suppose, and is for other reasons; also, far less serious than the stuttering. One of the main reasons why it is less serious is that the repetition tends to decrease in amount with time. This is so because the voluntary repetition is performed in order to counteract the impulse to stutter (to avoid repetition or other nonfluency). But this impulse to stutter tends to become weaker and weaker, and to occur less and less frequently, as the strength of its motivation, which is the desire to avoid nonfluency, is decreased. As the inclination to stutter decreases, the need or occasion for voluntary repetition decreases correspondingly. Gradually, therefore, the individual's speech comes to be less and less nonfluent, and tends eventually to become quite smooth. Thus, the vicious spiral of stuttering leading to more stuttering, as the individual develops a stronger and stronger set to avoid nonfluency—this vicious spiral is reversed, so that there is less and less stuttering as the individual develops a greater and greater tolerance for nonfluency. And as the threat and dread of stuttering decreases, the need for actually performing nonfluency decreases, and the individual speaks more and more smoothly.

Finally, it should be added that as the stutterer proceeds with this program he should be encouraged, even definitely assigned, to speak more and more and to enlarge the range of his speaking situations. As his evaluations of nonfluency change, he will exhibit less reluctance to speak, less of a tendency to avoid social contacts. This should be encouraged judiciously, remembering at all times that the main objective of all these measures is to help the individual to cultivate such positive evaluations of his speech as will enable him to speak without fear and tension, and with enjoyment and poise.

VIII

Physical condition. On the basis of the more adequate scientific studies done to date, there seems to be little or no reason for supposing that stutterers, as a class, have any greater need for physical hygiene than do other people. As a population generally we are not, on the average, the answer to a wise physician's prayer. Fundamental lack of good health is indicated by most of us in the condition of our teeth, the relative ease with which we catch colds, our tendency to become fatigued readily, and in various other ways. Stutterers, then, are not to be compared with an ideal population of nonstutterers who enjoy perfect health. They compare very well, indeed, with nonstutterers as they actually are found to exist with respect to their physical condition.

What might be important, however, is the possible tendency for some individuals, at least, to lack enthusiasm and to become discouraged under conditions occasioned by excessive fatigue, loss of sleep, improper diet, lack of exercise, or disease. In order to carry out effectively the sort of corrective speech program outlined above, the stutterer needs as much energy, enthusiasm, and 'good feeling' as possible. Once a stutterer has begun to change his speech behavior, the main thing with which he has to contend is the tendency to revert to old habitual ways of behaving whenever he feels tired and discouraged. From this point of view, good health is important for a stutterer.

It need only be said, in this connection, that for the most part physical hygiene involves adequate practices of eating, sleeping, exercising, working and relaxing. Beyond that, anyone is to be advised to see a doctor, and to report back sufficiently often for him to check the effectiveness of his recommendations and
oestall any serious threats of disease. far as stuttering is concerned, it is to said simply that, although anatomical basic physiological matters are usual-
ly of little importance, if they are shown e of importance in a specific case they uld be given proper attention.

IX

A great deal more could be said about stuttering. The impression is not to be left that the results of scientific studies of the problem have been fully reported. Several hundred investigations of stuttering have been made and a large number of publications on the subject are available. In order to summarize and especially to evaluate this material, it would be necessary to write a very large book. In fact, in order to elaborate in detail the basis and the implications of the discussion that has been presented, it would be necessary to expand that discussion to the proportions of a volume of considerable size. The main purpose in the writing of this article has been to suggest one type of practical approach to the problem.2

In the actual carrying out of this approach, use is made of any specific techniques and of any particular manners of explanation and instruction that seem advisable in specific cases. Details of treatment depend upon the age and background of the individual, the nature and complexity of his semantic environment, the severity of the stuttering, the time available for conferences and instruction, etc. Not only are no two stutterers alike, but no one stutterer remains the same from time to time. The principles presented here, insofar as they are sound, are useful only as they are judiciously adapted to the individual and to his ever-changing state and circumstances.

1 A concise statement of the point of view presented here is to be found in W. Johnson, 'A Semantic Theory of Stuttering,' in Stuttering: Significant Theories and Therapies, by Eugene Hahn; published by the Stanford University Press, 1943.

Perhaps, as has often been said, the trouble with people is not so much with their ignorance as it is with their knowing so many things that are not so. . . . So that it is always important to find out about these fears, and if they are based upon the knowledge of something that is not so, they may perhaps be corrected.

WILLIAM A. WHITE

It is often said experiments must be made without a preconceived idea. That is impossible. Not only would it make all experiment barren, but that would be attempted which could not be done. Every one carries in his mind his own conception of the world, of which he can not so easily rid himself. We must, for instance, use language; and our language is made up only of preconceived ideas and can not be otherwise. Only these are unconscious preconceived ideas, a thousand times more dangerous than the others.

H. POINCARÉ, The Foundations of Science