

The following is chapter 2, "Stuttering" from **Speech Therapy: A Book of Readings**, edited by Charles Van Riper, published in 1953 by New York: Prentice Hall, and includes pages 43-111 of the original book. The readings cover a variety of topics by several of the important researchers in the area of stuttering from the past. Van Riper's edits are in bold. (This PDF is 91 pages long in case you were thinking of making a hard copy).

Part One. THE NATURE OF STUTTERING

20. The Pathology of Stuttering by Robert West
21. On the Normality of Stuttering by M.D. Steer
22. On Stuttering Theory by Wendell Johnson
23. Diagnosis and Treatment of Stuttering Cases by L.E. Travis
24. My Present Thinking on Stuttering by Lee Edward Travis
25. On the Causation of Stuttering by E. Hahn
26. A Therapeutic Approach to the Problem of Stuttering in Children by J. Louise Despert
27. On Interfering with the Automaticity of Speech by E. Tomkins
28. Tongue Troubles by S.B. v. Renen
29. On Stuttering and Recession by Leopold Stein
30. The Nature and Analytical Treatment of Stammering by Isador H. Coriat
31. Freud and Stuttering by Smiley Blanton
32. Diagnosis as a Cause of Stuttering by W. Johnson
33. The Indians Have No Word For It: Stuttering In Children by Wendell Johnson
34. The Indians Have No Word For It: Stuttering In Adults by Wendell Johnson
35. On the Creation of the Stuttering Symptom by J. Wyllie
36. Stuttering Behavior and Learning by George J. Wischner
37. Theory and Treatment of Stuttering as an Approach-Avoidance Conflict by Joseph G. Sheehan
38. Integrating Theories of Stuttering by Stanley Ainsworth
39. On a Shift of Handedness as a Conflict by Melbe Hurd Duncan
40. On Interruptions As Causes by Hildreth Schuell
41. On the Fixation of Hesitancy by Schulamith Kastein
42. On Emotional Constructs as Causes by M.H.Krout
43. On Dysphemias by Robert West

Part Two. STUTTERING THERAPY

44. On Curing Stuttering by G. Kopp
45. Do You Know Someone Who Stutter? by James F. Bender
46. Relaxation, The Direct Road To Free Speech by Mabel F. Gifford
47. Dynamic Interpretation and Treatment of Acute Stuttering in a Young Child by Marjorie Harle
48. Treatment by Autosuggestions by E.J.Boome and M.A. Richardson
49. Speech Therapeutic Exercises by Svend Smith
50. Secondary Stuttering and its Treatment by Stanley Ainsworth
51. On Stopping the Physical Struggle by C.S. Bluemel
52. Voluntary Stuttering by Bryng Bryngelson
53. On Casting Out a Stuttering Devil by H.A. Aikins
54. On Tolerance for Other Points of View by W. Johnson
55. Therapy by Breath Chewing by Emil Froeschels
56. Distraction A Fallacy by James S. Greene
57. What is Meant by the Cure of Stuttering by West
58. Prognosis of Stuttering by Bryng Bryngelson
59. On Progress in Treatment by E.J. Boome and M.A. Richardson
60. On Terminal Therapy by H. Heltman
61. How A Speech Therapist Made A Stutterer by Wendell Johnson
62. Stutterers Under the Age of Five by Philip J. Glasner
63. Advising Parents of early Stutterers by Spencer P. Brown
64. Remission of Stuttering Following Total Laryngectomy by V.O. Mabel Oswald

Part One. THE NATURE OF STUTTERING.

Students preparing themselves to do speech therapy find the disorder of stuttering very hard to understand. There seem to be so many theories and therapies conflicting with one another that in the confusion nothing seems certain. Then, too, the literature is so vast that few individuals have ever read more than a part of it. In order to prevent these students from merely accepting the beliefs of their teachers, we are presenting here a group of quotations and excerpts which should provoke the student to do his own thinking. Many of the statements may be challenged. Many others may be but part truths. But here, for better or for worse, is a representative sampling of the literature on stuttering. The first article attempts to organize the phenomenology of stuttering in systematic fashion. Examine it as you should the others in terms of its adequacy in explaining the disorders of the stutterers you have met.

20. THE PATHOLOGY OF STUTTERING * *By Robert West*

* West, Robert. "The Pathology of Stuttering," *The Nervous Child*, Volume 2, Number 2, 1942-43, pp. 96-106.

Many speculations have been offered as to the fundamental nature of the condition underlying stuttering. Some workers have projected their observations with a definiteness that suggest that they believe the problem to be solved. But no theory as to the nature of this condition has been accorded universal or even majority acceptance. About the only generalization as to the underlying basis of stuttering is that the stuttering itself is only a manifestation of an inner condition, and that we should concentrate our attention not upon the variable and transient blockings of speech, but upon the underlying condition that causes them to appear. This underlying condition has been classified by many as one of the dysphemias and is specifically named by many a spasmophemia. In our present state of knowledge (or ignorance) about stuttering, the word spasmophemia will perhaps do as well as any other, although when the fundamental nature of the condition is understood it is likely that it will be possible to employ a **more descriptive or analytic** term. At present the term spasmophemia should be understood to mean very little more than an x factor.

The solution of this problem of pathology of stuttering is that of a jigsaw puzzle, depending upon a piecing together of many apparently unrelated known data. We know many of the pieces that will eventually go together to make up a complete and satisfactory picture of spasmophemia. Doubtless many of the pieces that make up the puzzle are still missing. The absence of these pieces makes the solution of the puzzle at present difficult, if not impossible. At this point, therefore, a listing of the known facts about stuttering may be in order, so that the reader may see something of the nature of the final picture that will emerge when all of the parts are known and assembled in their proper relationships.

THE KNOWN FACTS

Any acceptable theory as to the nature of spasmophemia must take into account and to be compatible with the following facts as to the incidence and phenomena of stuttering; and any theory that does not account for each of these data, or that completely ignores any one of them, must be rejected.

The first fact concerns the nature of stuttering itself. We must note that stuttering is characterized by mild seizures, contractures, convulsions, or blockings of neuromuscular coordination. It is not like the clumsy speech of the paralytic nor the indistinct speech of the deaf and the hard-of-hearing. Any theory as to the nature of dysphemia therefore must be one that will explain its spasmodic nature.

The second fact to be taken into account is that stuttering is frequently, if not usually, associated with late development of speech and with the presence of phonetic lapses [hat show themselves even when the patient is not actually stuttering. In many families the tendency to late acquisition of speech appears to be a transmissible diathesis. Stuttering is more likely to appear in such families than in families in which as a rule speech develops early. In general, individuals who develop speech late continue to exhibit a lack of linguistic agility. Stuttering seems to appear, therefore, in families in which there is a diathesis for a weakness of the neuromuscular mechanisms of speech. This weakness may also result from adventitious causes, such as disease of or injury to the speech area of the brain. Thus stuttering is frequently an associate of childhood aphasia or dysarthria as well as of perseveration of speech infantilisms. Normally, speech begins before the eighteenth month, and on the average about two months earlier in girls than in boys. The retardation of speech may be evidenced either by late onset of speech or by lateness of complete mastery of all the sounds of speech. An onset later than the age of 24 months or a failure of completion of the repertoire of speech sounds at 90 months, is indicative of retardation, especially in girls.

A third piece of our Jigsaw puzzle is the tendency of stuttering to appear and disappear with changes in the social environment and in the conversational relationships in which the patient is involved. These changes are inconsistent from patient to patient. Some can talk better with strangers than with their intimates. With some the situation is quite the reverse. Usually these patients stutter less when their utterance is concerned merely with the repeating of words, as in counting or repeating a learned passage, than when they are using words to accomplish conversational ends. Stutterers can almost invariably read or speak in unison with others even though they may be unable to utter the same material alone.

The fourth fact that must be assembled with the rest is that of slowness of repetitive movements, particularly those of the parts of the body involved in

speech. Although the typical stutterer is in no way paralyzed in his jaw, lips, tongue, and larynx, these parts seem nevertheless to be slower in their responses in serial repetitive acts than those of the nonstuttering individual. The term diadochocinesis has been adopted to cover the function referred to here, and it is tested by asking the patient to perform some simple repetitive act such as raising and lowering the jaw as rapidly as he can do it, or moving the tongue to and from the palate, or alternately compressing and parting the lips. In these tests of diadochocinesis, stutterers are slower than nonstutterers. It is interesting to note that among nonstutterers there is an age factor in this phenomenon of diadochocinesis. The younger the subject, the slower the rate. One may jump to the conclusion, therefore, that stutterers are those that have an immaturity of neuromuscular control and that the requirements for rapid movements of the muscles of the speech apparatus involved in speech are greater than their abilities. This is consistent with the layman's frequent remark that a stutterer "thinks faster than he can talk." Probably, however, even the fastest speech does not approach the rapidity of muscular movement of the diadochocinesis of stutterers. Our problem is all the more obscured when we note that although girls show less stuttering than boys, females as a group have slower diadochocinesis than males, the average adult nonstuttering female having a rate about equal to that of the average adult male stutterer. About all we can say as to the relationship of the rate of diadochocinesis to the rate of stuttering is that for a given individual of either sex there is a normal rate, and if he falls below that rate he tends to stutter.

The fifth fact in our assemblage is that the stutterer lacks vocal inflection. He has a tendency to monotony of pitch or to a lessening of the changes of pitch that the nonstutterer uses in phrasing his ideas. His inflection may change from word to word or even from syllable to syllable, but a given vocalized unit of the word lacks the sliding inflection that is invariable in the speech of the non-stutterer. It is as though for each syllable that he is able to utter there is a tonic set of the muscles of phonation that prevents their changing their tautness during utterance of any one vocal unit. The stutterer finds that if he tries to make natural inflections on these vocal units, he is more likely to block than if he holds each unit to the same degree of tension. He finds that his speech will therefore be freer of spasms if he intones his vowels than if he tries to phrase them as in normal speech. This probably explains why stutterers can sing what they cannot utter in conversational style.*

* Many of the old-time commercial stuttering schools seized upon this phenomenon as a teaching device or trick, having their pupils intone their conversations in hope (usually futile) that gradually they would be able to make the transition from scanning speech to normally inflected speech without a return to the original blockings.

Perhaps one of the most important pieces in our puzzle is a sex difference in the incidence of stuttering. The ratio of stuttering in boys and girls above 36 months varies all the way from 3:1 to 8: 1, depending upon the respective ages. Very few adult females stutter. It is obvious, therefore, that our ultimate explanation of the fundamental nature of spasmophemia will be one that relates stuttering somehow to the condition of maleness. It does not seem, however, that there is much relation between masculinity, as we commonly appraise it, and stuttering, although males may stutter more frequently than females. The female stutterers are not those who seem to have masculine characteristics, nor do the male stutterers seem to be more masculine than the non-stuttering males. Spasmophemia must be related, therefore, to basic conditions of maleness rather than to those of masculinity.

The seventh piece in our puzzle is one that quite evidently must be placed in juxtaposition to the sixth. This fact is that stuttering is apparently a phenomenon of childhood. The typical stutterer begins to stutter in early childhood, sometimes at the beginning of the speech function, and in a majority of cases ceases to stutter before puberty. If stuttering were tied up with the reproductive aspects of sex, we should expect the difference in its incidence to be greater during puberty and adolescence than at any other time of life, and we should expect stuttering to begin with the onset of puberty. Such is not the case. Again we are led to infer, therefore, that the difference between the stutterer and the nonstutterer is not in the secondary aspects of sexual nature, but in something much more basic and fundamental.

The eighth consideration by which we must test any proposed theory as to the nature of spasmophemia is that of the metabolic difference between the stutterer and the nonstutterer. Kopp has reported that the proportions of chemical elements in the blood differ in the stutterer from those found in the nonstutterer. He notes particularly the high blood sugar content. It may be, of course, that this rise in sugar is the result rather than the cause of the stuttering, and that it is thus not an indication of a biochemical difference between the nonstutterer and the stutterer at the time of the onset of his

stuttering. Kennedy and Williams report a linking of stuttering and allergies. They compared a group of 100 stutterers with a group of 1,000 nonstutterers, finding that 52 of the stutterers had personal histories of allergy and that the other 48 had family histories of similar conditions, while in the case of the nonstutterers only 37 out of 100 had either personal or family histories of allergies. Palmer and Gillette, in a study of the heart rates of stuttering and nonstuttering subjects varying in age from 9 years to adulthood, report that "the commonly accepted conclusion that the pulse rhythms decrease in irregularity as age increases is confirmed," but that with the stutterers there is an "increase in irregularity." They conclude that "while increased irregularity of heart beat is not the cause of stuttering, it is a part of a mechanism linked to stuttering and the sex metabolism." These findings as to the metabolic difference between stutterers and nonstutterers suggest that the two groups are rather fundamentally different in biochemical make-up and that these differences, although they may be slight and unimportant in conditioning most functions of life, are sufficient to disturb the delicate mechanisms of speech.

The ninth piece in our puzzle is the inescapable fact that stuttering tends to run in families, and that it is therefore based upon, or related to, something that is so fundamental that it is transmissible from one generation to the next. In ancestral lines back of stutterers more cases of stuttering are found than in the ancestral lines back of nonstutterers. It is, of course, possible that something so susceptible to imitation as speech may be transmitted by social rather than by biologic heredity. However, careful studies by many workers have led them to conclude that the transmission is not merely the result of imitation by the child of the stuttering of a parent or other member of his household. Stuttering so frequently skips generations and appears in children who have had no contact with stuttering relatives that most authorities have decided that its hereditary aspect is more than mere social transmission of the habit of stuttering.

Our tenth datum is that stuttering and left-handedness are correlated. Although left-handers may not stutter and stutterers may not be left-handed, stuttering and left-handedness nevertheless more frequently appear together in the same ancestral lines than do left-handedness and normal speech or than stuttering and right-handedness. To say it in another way, there is more stuttering in the family lines back of 1,000 left-handers than in the families of 1,000 right-handers; and, conversely, there is more left-handedness in the family lines back of 1,000 stutterers than in the families of 1,000

nonstutterers. It is not to be assumed that the left-handedness, even the tendency to left-handedness, is the cause of stuttering, any more than we may assume that the stuttering is the cause of the left-handedness. The fact that the left-hander in the family is frequently not the stutterer would indicate rather that the stuttering and left-handedness stem from a common cause.

Perhaps related to our linking between stuttering and left-handedness is a similar linking between stuttering and twinning. Families in which there is a tendency to twinning and plural births produce more stutterers in proportion to the number in the population than do other families, and conversely families in which stuttering appears in successive generations produce more twins and plural births than do families in which stuttering does not appear. Frequently the children of multiple births are not the stutterers, but they are more likely to stutter than are sibs who are not products of multiple births. Hunter reports that "there seems to be a definite tendency for fraternal twin pairs to show a greater incidence of stuttering than identical twin pairs." The partial conclusion here seems inescapable that stuttering and twinning stem from a common cause. This cause is not always operative to produce stuttering. Therefore, if two children have identical heredities both may escape stuttering, but the probability in regard to stuttering increases when the heredities are separate as in the case of fraternal twins. Again, twinning is not to be thought of as the cause of stuttering.

Our twelfth significant piece of puzzle is that the diathesis for stuttering runs parallel with a tendency to certain diseases of the respiratory tract. In families in which stuttering appears, there seems to be a weakness or lack of resistance to air-borne infections of the nose, throat, larynx, trachea, bronchii, and lungs. One might jump to the false conclusion that these diseases are the agencies that weaken the speech mechanism and therefore cause stuttering. Such a conclusion is hardly tenable in the face of the fact that the age in childhood at which there is the greatest difference between stutterers and nonstutterers in resistance to respiratory infections is well beyond the average age for the beginning of stuttering.

The thirteenth part of our puzzle is one the significance of which is particularly obscure, namely, that no diabetic has been reported as stuttering. A search has been made of the case histories of thousands of diabetics and to date not a single case of stuttering has been found among them. If this fact

stands up under future search, we shall be forced to the conclusion that there is something incompatible between spasmophilia and diabetes.

Parallel with these thirteen known facts about the difference between stutterers and nonstutterers, we should list certain facts of negative significance that we shall need to keep in mind in evaluating any theory as to the fundamental nature of spasmophilia. These facts are those as to the similarities between stutterers and nonstutterers.

Stuttering is found in all races and climates. It is found among rich and poor. It is found among those who live a quiet rural life and among city dwellers. It is found among the subnormal, the normal, and the supernormal in intelligence. It is found among the thin and anemic and among those who are well nourished. It is found among blondes and brunettes. It is found among persons representing all of the different blood groups, and the blood grouping of stutterers shows substantially the same proportions as that of the nonstutterers. It is found among those who have special skills, as in athletics, art, and music, as well as among those who apparently lack ability in these pursuits...

21. ON THE NORMALITY OF STUTTERING * *By M. D. Steer*

* Steer, M.D., "Symptomatology of Young Stutterers," *Journal of Speech Disorders*, 1937, page 13.

(1) In one sense at least, children in general do not stutter. The child's speech pattern is so broad that it may normally include variations that might be recognized as symptoms of stuttering. But such variations in the child's speech pattern would, by definition, be only normal or merely a function of limited maturation. If the child consistently and generally manifested such variations, he would be classifiable as a stutterer. In other words, if the child's speech pattern emphasized the deviations recognized as symptoms, he would be recognized as a stutterer; but he might manifest the deviations without undue emphasis or consistency and still be normal as to speech.

(2) On the other hand, if the generally accepted symptoms of stuttering are really indicative, then their presence in the speech patterns of children of both types, stuttering and non-stuttering, would indicate that children in general do stutter. In other words, stuttering might be defined as a function of the maturation of the mechanism involved in speaking. And therefore

adults who stutter, do so because of a condition of arrested development in the speech mechanism.

(3) It would perhaps be admitted by the speech pathologist that the symptoms accepted as characteristic of stuttering are only relatively diagnostic. Each symptom represents a deviation from some presumed or established norm; and whether or not the deviation is sufficiently great to justify a classification of stuttering in almost any given case will depend to some degree at least upon clinical judgment.

22. ON STUTTERING THEORY * *By Wendell Johnson*

The chief justification for our present theories and methods is that we don't know any better. This is not to say that they are without value. On the contrary, they produce results that are vastly better than could be achieved without them. But one's stature as a special education teacher should be measured by the number of old ideas and methods that one puts aside for new ones that are better. To defend an idea in this particular field for more than five years is usually a mark, not of astuteness, but of sheer stagnation.

*Johnson, Wendell. "Some Fundamental Objectives in Special Education." *Journal of Exceptional Children*, 1944. Volume 10, p.116.

Here is the original statement of the cerebral dominance theory of stuttering as presented by Dr. Travis at the first convention of the American Speech Correction Association.

23. DIAGNOSIS AND TREATMENT OF STUTTERING CASES * *By L. E. Travis*

* Travis L.E. , *Proceedings of the American Speech Correction Association*, 1931, Vol. 1, p.121.

The general aim in the treatment of stuttering is to establish and maintain a dominant gradient of excitation in the central nervous system of sufficient complexity and potency to integrate the movements of the organism in the production of normal speech. This is accomplished along two general lines: (1) the carrying out of certain exercises to increase directly the dominance of one hemisphere over the other and lower levels, and (2) the elimination of certain psychological and environmental factors which operate against the

establishment of and toward a reduction in a dominant cortical control. All therapeutic measures should point either directly or indirectly toward the accomplishment of either one or both of these goals. We feel that more emphasis should be placed upon the realization of the first one. It seems more important to build up a large margin of speech safety with which to resist environmental stresses and strains than to attempt to reduce the force of these latter factors. However, both work together toward the attainment of the general aim, namely, the establishment of a dominant gradient of excitation of sufficient complexity to integrate the complicated movements necessary in speech production.

The treatment of stutterers may be considered under five large heads, as follows: Physical Hygiene, Writing and Speaking Exercises, Unification of Motor Leads, Mental Hygiene and General Speech Exercises. The cerebral dominance theory of stuttering stimulated a great deal of research and a lot of controversy. Now that much of the tumult and the shouting has died, we can at least be grateful for the fact that it started the trend to give speech therapy a scientific foundation. In its essence, the cerebral dominance theory was never a "handedness" theory, and in its conception it took into account the emotional and semantic pressures which could lead to speech breakdown. Many enthusiasts, however, carried the practices of shifting handedness to extremes and neglected other and far more important factors. The research to which it gave birth soon showed the vulnerability of the hypothesis. At present, few people feel that it is applicable to more than a minority of our cases.

24. MY PRESENT THINKING ON STUTTERING* *By Lee Edward Travis*

* Travis, Lee Edward, "My Present Thinking On Stuttering," *Western Speech*, Volume X, Number 4, October, 1946, pp. 3-5.

During the last several years, I have been asked in and out of the classroom if I had altered my position in relation to the nature and management of stuttering. It has been difficult for me to determine whether the question was meant as a complaint or as a compliment. Regardless of the motive back of the query, may I bring my latest thinking on the matter of stuttering to you as a partial answer, at least, to the question.

My relatively long silence in answering was occasioned both by a press of activity in the war effort and by a delay necessary for the accumulation of further experimental and clinical data.

As usual, I look upon the stutterer as a person, as a whole. In this I have not changed. Medicine has given us a new name for the old concept, psychosomatics. It takes the emphasis off the trouble and places it on the patient, himself. It is not enough to ask, What causes the trouble? What are the symptoms? Rather one should ask, Who has the trouble? May I state my thesis then immediately? It is that in certain individuals there exists a somatic variation producing a certain imbalance within the constitution which may lead through personality disturbances to stuttering.

Logically let us turn to the somatic variation first. It may be stated as follows: Stutterers tend to have a different lateral (hemispheric) excitability than do non-stutterers. Many of you are familiar with the evidence I have presented in the past to support this concept. Today, I wish to present to you more powerful and more recent evidences of the validity of this theory. The evidence comes from electroencephalographic studies conducted by Freestone, Douglass and Knott. All of these men are former students of mine but they have not the slightest interest in forwarding any pet ideas of mine. Knott, particularly, has been one of my most severe critics.

On the basis of a detailed and exhaustive analysis of brain potentials, Freestone determined the following facts: (1) Stutterers have a tendency towards bilateral brain wave equality in form and amplitude. (2) The stuttering act reveals a bilateral hemispheric unity not found in the stutterer's normal speech. (3) Stuttering reveals a voltage increase in brain potentials. In an equally detailed and exhaustive study Douglass found that stutterers as a group tended to have a higher percent-time alpha present in the left than in the right occipital area, while nonstutterers tended to have a lower percent-time alpha present in the left than in the right occipital area. This differentiation occurred during silence and not during speech. For those who are unfamiliar with brain wave or EEG studies may I say that "percent-time alpha present" refers to the proportionate amount of time the relatively large sinusoidal waves, called alpha, are present in a given record and that these alpha waves are quite universally indicative of a state of low cortical excitation. Knott confirmed the Douglass study.

In the simplest language possible what do these technical findings mean? Let me restate them. Freestone found mainly that when a person stutters his brain wave patterns from the two sides of the brain are approximately the same and that when he talks normally, they are different. We may say then that bilaterally similar brain waves are abnormal since stuttering is abnormal, and that bilaterally dissimilar brain waves are normal, since speech is normal. Similar brain wave patterns from the two sides may mean that both hemispheres are equally active. Dissimilar patterns from the two sides may mean that the two hemispheres are unequally active. Would it be too much to say then that normal speech demands or requires increased activity of one hemisphere over the other?

Now Douglass and Knott found that there were more large, smooth waves (alpha) from the left hemisphere in stutterers during silence and more of such waves from the right hemisphere in nonstutterers during silence. According to all the evidence we have, this means that the stutterer's left hemisphere and the non-stutterer's right hemisphere are less active during silence, since alpha waves are indicative of decreased cortical excitation.

Fifteen years ago I wrote that the dominance theory postulates a pathophysiological subsoil upon which stuttering is built. Since Douglass and Knott found the difference between stutterers and non-stutterers to exist during silence, may we not think of their findings as powerful support of this theory?

Thus we have the somatic variant in stuttering—a hemispheric excitability characteristic of a few people who stutter. When and how it got there are uncertain. Because it appears to be present in a distinctly minority group, and because stuttering appears so early in life, I am inclined toward the supposition that the somatic variant is biologically and not socially or psychologically determined.

In terms of all the clinical and laboratory evidence we now possess, it is very doubtful if the somatic variant alone would operate to produce stuttering. This variant would appear to exist only as the pathophysiological subsoil of stuttering. My present concept is that our western culture, in demanding an early, harsh, complete and uncushioned renunciation of infantile and childish behavior, works in conjunction with the somatic variant possessed by a few infants and children to produce stuttering. Stuttering may be considered then as a failure of the child to deal successfully with a given life demand, a

failure to find socially acceptable gratification for subjective needs under given circumstances. This failure depends upon the balance between the organism's stability and adaptability and the difficulty of the *confronting* problem. The stutterer is one in whom the force of unfavorable constitutional factors and traumatic experiences in infancy and childhood is great in relation to traumatic experiences in later life. The stutterer of any age, but particularly the older stutterer, acts according to outdated patterns. The old pattern (stuttering) was an attempt at *adaptation* on the part of the child to parental behavior. With the stutterer the original pleasures were denied him. Time and experience do not really touch or significantly alter them. His early infantile and childish wishes, hates, and fear remain dynamic and force their way into expression as the symptoms of stuttering.

As I wrote several years ago, "the stutterer, when he is stuttering, is trying to say just exactly what is not openly said and exactly what he thinks none of us wishes to hear." His symptoms reveal a mixed condition of sense-craving, rage and fear. Contradictory reaction patterns are aroused simultaneously. His so-called speech mechanism behaves as if it were in conflict with itself and is trying to function in two contradictory ways at the same moment. And indeed it is. Stuttering is a compromise between expressing and inhibiting, between "letting out" and "holding in." It advertises part-success and part-failure for each of two conflicting interests or intentions. The stutterer wants to express himself, to reveal his thoughts and feelings, and at the same time, fears to do so.

In helping the stutterer, the method of management will be determined by the age of the patient. With the young child the problem is mainly the modification of parental attitudes and behavior. The pre-school stutterer will require little direct therapy. Instead, the bulk of the work will be with the parents. They must become more tolerant, less restrictive, more acceptant of infantile and childish reactions and less concerned about the early acquisition of socially acceptable behavior. They will need to let their young stuttering child express his feelings of frustration, hates and resentments fully. They will need to ease up on schedules, social training and the child's acquisition of social skills. They will need to look to themselves as the real cause of their child's speech trouble. They will need to reevaluate themselves as the transmitters of the culture of their children. By being loved and accepted and permitted a long infantile period, the young stuttering child will absorb and integrate his contradictory and ambivalent feelings towards his parents, and stuttering will disappear.

With the older stutterer, a more direct therapeutical approach will be necessary. The stutterer will be given an opportunity in his relationships to the therapist to develop the same emotional conflicts he had toward his parents and to find a new and modern solution to his conflicts. He will have to experience a new parent-child relationship before he can release the old. This cannot be done as an intellectual exercise. It will have to be lived through, felt by the patient and become an integral part of his personality. The core of the cure is for the stutterer to experience the troublesome conflicts emotionally with the therapist (parental image) and then correct them in a new relationship. The new relationship has a chronologically older person (patient) with the infant still within him and an acceptant, tolerant, empathetic parental image (therapist) who can accept anything and everything the patient has to release. This relationship will expose the patient, under favorable conditions, to emotional situations which he could not handle in the past. He will undergo a corrective emotional experience suitable to repair the damaging influence of childhood experiences. Because the therapist's attitude is strikingly different from that of the authoritative and frustrating persons of the past, he gives the patient an opportunity to face again and again, under practically perfect circumstances, those emotional experiences which were formerly unbearable and to deal with them in a manner different from the old.

I no longer believe that shifting handedness is effective. I do believe, however, that parents should not tamper with a child's native handedness, but instead, should help him to develop a dominant lead as soon as it is clearly indicated.

25. ON THE CAUSATION OF STUTTERING * *By E. Hahn*

In conclusion, from a study of these theories and therapies, one finds that considerable progress has been made in meeting the basic problem. Many stutterers are cured. However, those using a particular theory and its accompanying treatment cannot claim to cure all stutterers, nor can they find a cause in every stuttering case which will coincide with the elements in their theory. The problem of the causation and treatment of stuttering remains a challenging one.

*Reprinted from *Stuttering: Significant Theories and Therapies*, by Eugene Hahn. Stanford University Press.

We have seen one attempt to explain stuttering in terms of a somatic or neurological factor. We now present another view, the conception of stuttering as a form of neurotic behavior. Adult stutterers usually show many features common to neurosis: compulsive behavior, anxiety, intermittency, variability of symptoms and symptom-profit. The critics of the neurotic theory of stuttering have also been busy pointing out the instances in which Stutterers fail to fit the theory. Many of them concentrate their criticism on the fact that the neurotic features are largely those of adults and the result of the stuttering rather than its cause. The following article presents support for the theory in terms of a child.

26. A THERAPEUTIC APPROACH TO THE PROBLEM OF STUTTERING IN CHILDREN * *By J. Louise Despert*

* Despert, J. Louise, "A Therapeutic Approach to the Problem of Stuttering in Children," *The Nervous Child*, Volume 2, Number 2, 1942—43, pp. 134—141.

Dynamic studies of children who stutter show that while stuttering has been considered primarily as a neuromuscular dysfunction, it is always associated with neurotic manifestations. Anxiety as a primary psychodynamic factor is present, though it is often interpreted as secondary to the speech defect, and, owing to this interpretation, its social aspect is stress. Two cases of stuttering children observed and treated at the Out-Patient Department of the Payne Whitney Psychiatric Clinic are here presented. This presentation affords a basis for the formulation of a therapeutic approach to the problem of stuttering in children.

[Only the first of two interesting cases is here presented.]

Case 1. At the age of 10 years, 2 months, this boy was brought to the clinic by his mother, who stated: "I noticed his speech was not too clear two years ago (8 years old). He was stuttering. He starts snorting. . . ." The mother seemed at first to have ignored the speech defect, but "it kept coming back." When the boy developed headaches a few months later, he was taken to a physician, who gave him thyroid; this increased the stuttering. (The child was overweight, but this was not brought up as a complaint at the time of admission.) As observed by the psychiatrist, the patient's speech disorder consisted of a block with sudden cessation of speech, or repetition of one

syllable, or introduction of an extraneous syllable that was in the manner of a voiced inspiration. There was also a breath dysfunction consisting of a sudden block of breathing in expiration. The boy said, Every time I talk like that, my mother hits me. She wants me to learn control or something. The sound doesn't go. The words want to come out. I don't want to stop them from coming out, but my mother does."

During the block, the boy's cheeks became flushed, there was a marked pallor around the nose and the eyes, and blinking of the eyes. At such times, he had to close his eyes to be able to speak. There was also a facial twitching associated with the speech dysfunction. The disorder was predominantly tonic and very severe.

Both paternal grandparents were Jewish. The paternal grandfather, 68 years old, was born in Roumania, and came to the United States at the age of 17. He was right-handed. He was a healthy, quiet, slow-going, good-natured person who liked people. The paternal grandmother, about 68 years old, was born in Poland. She came to the United States at about 10 years of age, went to public school here, married at 21, and had two children. She was good-natured, not excitable, and was right-handed. Both maternal grandparents were Jewish. The maternal grandfather, 70 years old, lived in Poland. He was right-handed, healthy, not excitable. Since the patient's mother left home at the age of 17, and since nothing had been heard from her family in recent years, she could give little additional information. The maternal grandmother had been a healthy woman who bore six children, three of whom died at an early age. She died at about 42 years of age of a "weak heart."

Both parents were orthodox Jewish. The mother was born in Poland, and had a happy childhood until she was 12 years old, when her father remarried. After leaving home at the age of 17, she worked in a factory for six years before her marriage, and attended night school for four years, acquiring the equivalent of a high-school education. She had a great deal of drive and was eager to learn. She considered her marriage a happy one and spoke of her husband in glowing terms. At the time of the patient's admission to the clinic, the mother was 36 years old, an intelligent, attractive-looking woman. Her speech was slow, overarticulated, with a slight block and with letter substitution - *w* for *r*. From the patient she demanded perfection, saying that he was "perfect except for his speech." Although she claimed that she "just loves children," she was aggressive, domineering, and in favor of corporal

punishment. She slapped the boy on the mouth when he "said bad words," and, according to the child, used a strap on him and "yells until she almost gets me deaf," She threatened, urged, and nagged him constantly to do good school work, and he was terrified if his report card was not perfect. Although for years the mother fought the child's battles, she later began to punish him for not fighting his own. Yet there was a strong bond of affection between the mother and the patient; he often left little notes for her when he went out for a while.

The father, a 40-year-old bookkeeper, was born in New York and had a high-school education. He was the first of two siblings. As a child he had violent spells of anger and crying spells. He used to suck his thumb and curl his hair. His relation to his own parents was not good, and he played frequently with the idea of leaving home, but never actually did. He had been engaged to another girl, but the mother "picked him," and he married her when he was 28 years old. He felt that it was their second child, a girl, that made the marriage a happy venture. He was a large man, slow and insecure, and had a slight speech block with marked sigmatism. (In high school he took elocution to get rid of his speech hesitancy.) He drew a similarity between the patient and himself. With his children, the father was friendly and warm; the patient seemed more at home with him than with the mother. The father had never spanked the boy except once, when he refused to leave the bathroom while his father was urinating. He related the child's tic to a defeat in a fight, and was also convinced that the stutter could be "cured by medication." When the medication was tried, the stutter became worse, and the father was confused. There was one sibling, a girl, 5 1/2 years younger than the patient. The mother reported that the patient was never jealous of his sister, but that did not tally with the boy's account. He resented his mother's greater leniency with the sister, and her demand for perfection from him. He did not like being moved from the parents' bedroom after the baby arrived. Later the two children slept together on a day bed.

The patient was born less than two years after his parents' marriage. Pregnancy was full term, and delivery was easy, with a two-hour labor. The child was small (birth weight 5 pounds, 3 ounces), "thin and puny, the funniest baby in the hospital." His mother said that he had a pyloric spasm "from the start," but the hospital report did not confirm this. He was, nevertheless, given atropine for two or three months to "control the spasm" after leaving the hospital. The child "never liked the nipple." When he was 2

months old, the milk had to be pumped from the breast, and because of the mother's objection to this, the baby was weaned at about that time. He did not like the bottle and would spit at it. At 4 or 5 months he took solid food, but did not have whole milk until he was 1 year of age. His mother urged and nagged him to eat. At 6 ½ months the child sat up; he "had to be strapped" because he was overactive. He had his first teeth at 10 months, walked at 14 months. He said his first words at 1 ½ years, which his mother interpreted as "late." At 2 years he spoke in short sentences. Bowel training was achieved early, at 6 or 7 months; bladder training at 2 ½ to 3 years. He was taken up frequently and was not punished. At the time of admission, however, there was still occasional bed wetting. As an outcome of his mother's interest, the boy was always interested in his stools. "I like to know how much I do; I like to study the different shapes of stools." The mother reported that there had been no masturbation since the age of 1 year, when he was "diverted" by her. When he was 5 ½ years old, he saw his mother pregnant and asked questions that were not answered satisfactorily. He revealed that he was interested in where babies came from, but "afraid" to ask his mother. "She told me not to say dirty words." Consequently he had considerable anxiety about babies growing in somebody's stomach and staying there. He recalled that when he was 6 years old he thought that people, including boys, might get a baby after "eating something."

As to physical development, the following points are of interest: the patient was circumcised at 3 ½ months, instead of 10 days, because he was "underweight." The mother reported that he vomited repeatedly during the first months of life. He had whooping cough at 1 ½ years, chickenpox at 7 years. He was a thin baby, but at 3 ½ years began to put on weight, and from the age of 8 on was overweight. (At the time of admission to the clinic, a careful examination ruled out the Froelich syndrome.) Thyroid was prescribed for him by the family physician, but discontinued because of the effect on his stuttering. At 8 years of age, he had headaches about three times a week, a symptom that disappeared with the use of appropriate glasses. His mother reported that during a period of months he was "allergic" and had rashes from "what he ate at school." He was a shy boy, with feminine characteristics in appearance and attitudes. He was inactive, disliked athletics, liked to read "too much." Until he was nearly 2 years old, he sucked his fingers and curled his hair at the same time; he continued to suck his fingers. When the mother had used bandages and pepper for the correction of the habit without result, she finally decided to "let him outgrow it."

The boy had various fears that were brought out in the course of treatment. Though he feared “dirty words,” because his mother might spank him, he still felt like “saying f_____ all the time.” He was afraid of ghosts, ghost stories, robbers, thieves. At night he could “hardly fall asleep” as he watched the fire escape. His sister sometimes “scared” him with her snoring. He had night terrors and anxiety dreams. “One night I dreamt that when I came home there was a bear sitting on a bench. Every time he saw someone, he killed him. I went around and around to avoid him. I woke up. My sister kissed me, so I wasn’t killed. In a dream you never get killed.” He dreamed also about being murdered. He was sensitive, self-deprecatory, fearful of being different from others. He did not want the boys to call him a sissy, but did not like to fight: “They’re bigger than me and I start running.” The mother overstressed the necessity of the boy’s speaking well: “He must speak perfect by 13 years of age for his *bar mitzvah*.” The boy said about his confirmation speech, “It’s an honor, like you don’t steal or murder somebody.” He verbalized destructive impulses, but rationalized immediately: “Those people who feel like shooting or killing are nuts.” Besides his public and Hebrew school attendance, he studied the piano, with his mother exerting considerable pressure about practicing. A psychometric test at the age of 10 years, 4 months, gave him a mental age of 13 years, with an I.Q. of 126. Physical and neurologic examinations were negative, motor coordination was poor.

At the clinic he phantasied a great deal about killing people, though he denied having the desire to kill. He also indulged in sadistic phantasies, and one day brought a large knife with which he stabbed his “victims,” shouting, “Die, Knave!” His phantasies revolved frequently about having his sister out of the way. One day when he read “Snow White and the Seven Dwarfs,” he stuttered violently at the passage, “She lay down and died anyway.” He protested spontaneously that his sister sits down when she is exhausted but does not lie down. Then he told of his sister’s nearly drowning, and of how he “saved her.” He phantasied making her scream with wormlike shapes. In the clinic the patient was given an opportunity to express his anxiety and hostility and to gain insight into his phantasies. The mother was also able to release her anxiety, and gradually gave the boy more independence, to the point of allowing him to come to the clinic alone and later letting him go to camp. She also permitted him to read “Growing Up,” in conjunction with sex information and explanations given by the psychiatrist. He spontaneously gave his conception of the treatment: “I tell you things because I’m scared I can’t talk right. If I told you the definition, you

wouldn't understand it, how it corrects my speech to tell you what I'm scared of."

Chewing-speaking exercises were instituted, which the patient carried out conscientiously. After several months there was a remarkable improvement in his speech. He said, "I talk better. I can feel it. It feels nice. It's a lot easier to talk, and my teacher, even my mother tells me too." He grew less tense and shy, more independent and self-reliant. He went to camp for the first time at 10 years, 6 months, four months after admission to the clinic, and enjoyed the experience considerably. He participated in athletic activities, and learned to swim. His motor coordination showed marked improvement. He was discharged after one year and ten months of fairly regular weekly attendance. Progress in behavior and speech have continued, four months after discharge.

27. ON INTERFERING WITH THE AUTOMATICITY OF SPEECH * *By E. Tompkins*

It has been shown that the stammerer can say what he fears he cannot say. Also it is recognized that he makes an effort to talk. But since he does not know how he talks, the effort conflicts with his normal automatic words and he stammers. In other words stammering is a conflict between normal speech and a conscious effort misdirected through ignorance of its proper function.

*Tompkins, E., "Stammering and its Extirpation." *Pedagogical Seminar*, 1916, Vol. 23, p. 55.

The stutterer's usual explanation of his stuttering is couched in terms of word fear and situation fear. Here is a typical statement by a South African stammerer. In Great Britain, the term stammering is the inclusive one; in the United States we prefer the term stuttering.

28. TONGUE TROUBLES * *By S. B. v. Renen*

* Renen, S. B. v., "Tongue Troubles," *The Journal of Logopaedics*, South African Logopaedic Society, 1950, Volume 1, p. 18.

Here I was brought face to face with the truth—I was a stutterer. Could anything be done about it? I racked my brain, I read books: in fact, I even

thought of doing away with myself. Then I was referred to a speech therapist. It was not long before I was walking into shops and asking the prices of different articles—definitely faking as I asked, though it required some courage in the first instance. I was beginning to face up to my problem more objectively as I stopped trying to hide the fact that I stuttered from others.

Slowly it dawned on me that if I walked up to a person and stuttered— yes, stuttered as if it was the most common thing in the world—he would not notice that there was anything particularly defective about my speech, and would therefore not react differently towards me. To prove to myself that it was the way I reacted to people first that mattered I purchased the most “zoot” tie (yellow with pink elephants) and colorful socks, which I wore to a party soon afterwards. As I entered the room I could feel the people looking at the tie but I reacted as if everything was perfectly normal—the result— nobody even remarked about my tie. As I sat down I made sure to show my socks, and one girl burst out laughing at them. I asked what the joke was, and then she suddenly seemed to come to her senses, as she could not answer me.

That evening was certainly a triumph for me, slowly but surely I was gaining confidence. If I could wear that tie without myself feeling conspicuous, it would be accepted as part of me. If I therefore stuttered without feeling ill at ease or self conscious it would be accepted as my manner of speech.

I enrolled at a public speaking class next and the first evening everyone had to rise and say why he had come to the class. The first said that they found it necessary for business purposes to be able to talk fluently and easily in public, etc. Then came my turn—no worrying about stuttering this time—I faked for an extra long period on my first word and watched all the faces turn towards me. Some became uneasy in their seats, as I went along but that was just what I wanted; for years I had always been the one to tense up. They seemed quite bewildered as I went on to explain that I had joined the class in order to familiarize myself with public speaking. That a stutterer wanted to learn public speaking seemed too absurd for them, until I explained that it was only by such means that I could rid myself of the tenseness which every stutterer experiences. Everybody speaks in a hesitant manner at times but only the stutterer becomes tense.

29. ON STUTTERING AND REGRESSION * *By Leopold Stein*

The stammerer unconsciously wishes to remain a suckling. The patient, owing to anxiety, unconsciously reverts to the suckling stage and so replaces consonants with clicks. He can release these but fails to release or join them with the vowel.

*From Stein, Leopold, *The Infancy of Speech and the Speech of Infancy* (Methuen & Co., London, 1949, p.118).

Psychiatrists, like the rest of us, have found the disorder of stuttering both interesting and frustrating. Many of them feel that since the conflict makes its appearance in speech, the very medicine for self-healing, it is difficult to offer a favorable prognosis. Coriat is less pessimistic and so we offer his interpretation.

30. THE NATURE AND ANALYTICAL TREATMENT OF STAMMERING* *By Isador H. Coriat*

* Coriat, Isador H., *Proceedings*, American Speech Correction Association. Volume I, 1931, pp. 153-155

When a stammerer attempts to talk, the mouth movements are the persistence into maturity of the original sucking and biting lip-nipple activities of infancy. In this connection it is also significant that the labials (p, b, m) which are usually the most difficult sounds for stammerers to enunciate, are also among the earliest sounds made by children. The physiological lip movements utilized to produce these sounds are the same movements employed in nursing at the mother's breast or in sucking at the rubber nipple of the nursing bottle. The stammerer, therefore, in the course of his development, has not successfully overcome this early nursing phase, but remains fixed at this infantile stage of oral tendency which inflexibly hinders the individual to the sucking and biting period of infantile oral erotic gratification. Excessive mouth eroticism, therefore, is not only at the basis of all stammering, but the mouth has become the principal and all-powerful organ of the earlier nursing pleasures which are gratified through the oral discharge into speech. There can be noted in addition to the frequent sucking movements with the lips and the excessive salivacation during the paroxysm of stammering, other accompaniments such as deep breathing, rapid heart beat, yawning, all followed by a feeling of relaxation after the

enunciation of the difficult word. There is here observed an actual reproduction in adult life of the relation of the infant to the nipple, that is a gratification of the oral erotic zone in pleasure sucking, reenacted and reanimated in maturity. In fact, under these conditions, the stammering becomes sort of a compulsive- repetition of the very primitive and early nursing activities. The oral libido is fixed on the symptom of the speech defect and becomes therefore, a psychophysiological manifestation of the oral nursing stage.

The anxiety in stammerers when they attempt or prepare to speak is not due to anticipation or to anxiety over a specific situation, but is caused by the fear of the ego being overwhelmed by the all-powerful oral erotism. This is particularly shown by the fact that stammerers frequently have literal dreams of nursing. Stammering becomes, therefore, a form of gratification of the original oral libido which continues as a post-natal gratification in talking. The confirmed stammerer tenaciously retains his earliest source of pleasure, that is, nursing; he reacts to the original oral binding of the mouth through a compulsive-repetition localized in the speech mechanism, that is, in the tongue, lip and jaw movements of the original physiological nursing activities.

However, the objection may arise that every human being has been nursed either at its mother's breast or by the bottle, and yet only a certain number become transitory or confirmed stammerers. This brings us to a specific problem of great importance, namely, why a particular person becomes a stammerer and others remain free from this defect. Without going into the technical details of the subject, it can be stated that stammering develops only in those individuals who have never renounced or forsaken the pleasurable infantile oral tendencies, that is, in those individuals who remain anchored in their libido development to this very early nursing stage, the ego instincts having advanced to a greater degree of maturity than the libido trends.

In the analytical treatment of stammerers, the character traits are of pre-eminent theoretical and practical importance. The customary view of character formation is that it is derived from two sources—inherited disposition and the effects of environment on the child. According to psychoanalysis, however, the origins of character formation are those elements of pregenital sexuality, which are excluded from participation in the adult sexual life, that is, the same libido level out of which the

stammering neurosis develops. Without going into details, for which the original sources should be consulted, it can be shown that the oral erotism of stammerers has a distinct effect upon their character formation and thus the character traits of stammerers in many instances are almost as infantile as the oral erotism out of which these particular traits originated. The character analysis of stammerers is of great importance in analytical treatment, but it presents extreme difficulties, for these traits are so completely accepted by the ego that there is no insight into their nature, and they likewise involve the entire narcissism of the stammerer.

As stammering is not a speech defect, but a psychoneurosis, any rational treatment of a narcissistic disorder must take into consideration several factors. The speech defect has a meaning, the oral libido is fixed upon this symptom and the object of psychoanalysis is to overcome this fixation of the pleasurable oral libido upon the speech apparatus. Owing to the character traits of the stammerer and his resistances, this analytical procedure encounters great difficulties. In stammering as in all the narcissistic neuroses, a vulnerable point must be found in the narcissistic shell of the personality and this vulnerable point in stammerers is the oral libido. The speech training of stammerers reinforces the oral-erotic pleasure instead of minimizing or relieving it; it actually gratifies the oral discharge of speech, Speech training does not treat the neurosis as a whole, but only the isolated symptom, and as such, is inadequate and unscientific. It is impossible in this short paper to go into the details of the analytical treatment of stammering except to state that it is directed primarily against the resistances and should penetrate deeply enough so that the patient can revive and reenact the earliest oral experiences. Furthermore, the so-called "habit" of stammering, analytically speaking, is a form of compulsive-repetition whose object it is to retain the original infantile pleasure of nursing. For this reason, phonetic exercises are diametrically opposed to the analysis, and should not be combined with it. The analytical treatment of stammering should be undertaken, only by those who have had a long and varied experience with psychoanalysis in both its theoretical and practical aspects, and should be carried out in what may be termed a pure culture, without any admixture of phonetic training.

In addition to the regular analytical procedure, a specialized modification of analysis, termed "active therapy" has been used in the treatment of stammerers. This active therapy consists of a deprivation of various external forms of oral gratification, or rather an abstinence from those external

factors which tend to prolong the gratification or to reinforce it. This active intervention should be aimed at a definite deprivation of these oral gratifications, and to this end all forms of smoking or gum-chewing should be prohibited, as these desires for mouth gratification tend to reinforce the oral difficulties of the stammerer. It is realized that this short paper has only touched the surface of the analytical interpretation and treatment of stammering; for further details, the original publications summarized in the appended bibliography should be consulted.

31. FREUD AND STUTTERING * *By Smiley Blanton*

Dr. Freud said he felt sure that there are constitutional factors involved in stuttering and that except in rare cases, psychoanalysis alone was not able to effect a cure.

*Blanton, Smiley, "Stuttering," *Mental Hygiene*, Vol. 15, 1931, p.271.

The next three selections illustrate still another point of view regarding stuttering. We hope that this taste of the semantic or diagnosogenic theory will motivate the student to read the author's *People in Quandaries*.

32. DIAGNOSIS AS A CAUSE OF STUTTERING * *By W. Johnson*

An illustrative case is that of a high school boy who developed stuttering. All through his previous school years he had been known, not merely as a normal speaker, but as a definitely superior speaker. He had won a number of speaking contests, had served as chairman of several student groups. But one day a "speech correctionist" examined him in the course of a school survey, and for some reason told him that he was a stutterer, and advised him to "watch" and "be careful." Within a few months he would have been regarded as a stutterer and a fairly severe one by anyone professionally familiar with this type of speech problem. In reacting to the diagnosis—i.e., to the diagnosed characteristics of his speech, interruptions of one sort or another which are normally to be found in the speech of everyone but which in his case had been called "stuttering"—he developed muscular tensions, facial contortions, apprehensiveness about speaking, embarrassment, etc.

*Johnson, W., "Language and Speech Hygiene," *General Semantics Monog. I*, Chicago, 1939, Institute of General Semantics, p.38

33. THE INDIANS HAVE NO WORD FOR IT: STUTTERING IN CHILDREN * *By Wendell Johnson*

* Johnson, Wendell, "The Indians Have No Word for It: Stuttering in Children," *Quarterly Journal of Speech*, 1944, Volume 30, P. 334.

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 hound 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 evaluations 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.

34. THE INDIANS HAVE NO WORD FOR IT: STUTTERING IN ADULTS * *By Wendell Johnson*

* Wendell. "The Indians Have No Word for It: Stuttering in Adults," *Quarterly Journal of Speech*, 1944, Volume 30, pp.456-457.

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 non-fluently, repeating frequently, pausing conspicuously, saying *ah* 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 non fluently*. He can speak fluently all right; so long as his speech is fluent, as it is 80 percent 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 fluently 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. Non-fluency 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 expectations 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 or overt 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.

35. ON THE CREATION OF THE STUTTERING SYMPTOM * *By J. Wyllie*

He had stammered in the usual manner up to the age of about 15, but at that period of life he began to make great efforts to overcome his impediment and found that, when in difficulties he could always pronounce the word by having recourse to the "drawback method" (inhalation) of phonation. Practicing this method voluntarily at first he soon found that it became unvoluntary and habitual with time.

*Wyllie, J., *Disorders of Speech* (Oliver and Boyd, Edinburgh, 1884, pp. 18—19).

One of the newest and most promising theoretical formulations explaining stuttering deals with the disorder in terms of learning theory. All workers in the field of speech therapy have long known that much of stuttering is learned. This article presents an attempt to understand the disorder in terms of anxiety conditioning.

36. STUTTERING BEHAVIOR AND LEARNING * *By George J. Wischner*

* Wischner, George J., “Stuttering Behavior and Learning: A Preliminary Theoretical Formulation,” *Journal of Speech and Hearing Disorders*, 1950. Volume 15, pp. 329—332.

After all, not all children who develop anxiety become stutterers. Here is the general problem of symptom choice, the answers to which are yet to be found in experimental investigations of the hypotheses concerning the development and fixation of maladaptive behavior generally.

In those instances where it can be readily demonstrated that the actions of the adult are directly associated with the speech behavior of the child, it seems reasonable that the anxiety may become focalized about the act of speaking. There appear to be at least two alternative hypotheses concerning the relationship between the anxiety and the manifestation of what is recognized as stuttering behavior.

A first hypothesis assumes that although the anxiety is learned, the stuttering behavior itself is not learned, but represents a disorganization of speech behavior consequent upon the state of anxiety which is specific to the speech act. In this connection reference may be made to Mowrer’s assumption that when anticipatory tensions are very intense and are not greatly diminished by the reactions they help to produce, there may be no learning, but a disintegration of behavior.

A second hypothesis assumes that both the anxiety and the stuttering behavior are learned. It follows Mowrer’s formulation which postulates that the acquired anxiety is a drive state which motivates the individual to engage in behavior which will lead to escape from the painful stimulation. Those acts which lead to escape are reinforced as a result of the anxiety reduction

which accompanies them. In the case of stuttering behavior, it may be that for the child one way of avoiding disapproval (painful stimulation) is not to talk at all. On the other hand, the pressure to communication is so great that there is generated in the child a conflict between the desire to speak, and the fear of speaking in a certain manner. The child may try, at random, to speak in any one of a number of alternative ways. That pattern of speech will tend to be used most often by the child which is not followed as regularly by punishment (disapproval) on the part of adults about him. That is, the speech behavior which leads to relatively successful avoidance of the anticipated noxious stimulation, and consequently a relatively greater reduction in anxiety, will be more strongly reinforced than the speech behavior which does not lead to equally successful avoidance of the painful stimulation. Why, then, does not the child adopt a “normal” speech pattern? Perhaps because it is this “normal” pattern with its normal nonfluencies which has served originally to initiate the anxiety-producing sequence of events.

What Perpetuates Stuttering Behavior? The issues inherent in this question encompass far more than the stuttering problem alone. One is confronted here with the more general question as to why organisms may sometimes manifest persistent maladaptive or non-integrative behavior. In a recent article concerned with this highly important but complex problem, Mowrer and Ullman write:

Persistent non-integrative behavior, i.e., behavior which has consequences which are usually more punishing than rewarding, remains one of the important unsolved problems in psychology.

It is the intention in this section to offer for consideration certain hypotheses regarding the possible mechanisms underlying the perpetuation of non-integrative behavior, with special reference to the problem of stuttering. Within the present frame of reference stuttering behavior, viewed as an acquired reaction pattern, may be regarded as one type of non-integrative behavior. The specificity and availability of the stuttering response would appear to afford an excellent opportunity for the study of the mechanisms perpetuating such behavior. The hypotheses regarding the nature of these mechanisms which are offered below are to be viewed as first approximations which may be refined on the basis of further analysis and experimentation.

1. It is proposed that the act of stuttering may be specifically reinforced by virtue of its relatively close association with anxiety-tension reduction accompanying the removal of a feared word. It is assumed that a feared word arouses a state of expectancy (anxiety) and that the act of stuttering on the word is reinforced by the tension reduction accompanying the completion of the word on which difficulty is experienced. This hypothesis emphasizes the possibility of a vicious cycle in stuttering behavior in which the completion of the stuttered act results in a reduction of the anxiety-tension evoked by the stimulus word, with consequent reinforcement of the stuttering behavior.

2. That stutterers manifest varied types of avoidance behavior has been shown by Kimmell. Some of these avoidances are specific to the speech act itself. For example, many stutterers deliberately develop large vocabularies so that when they come to a feared word, they may substitute another word for it. Other avoidances are associated with speech situations or social situations generally. Stutterers will avoid class recitations, parties, dates, etc. It is assumed that such avoidance behavior is strengthened by an anxiety reduction mechanism. The word or situation arouses the anxiety which leads to behavior to avoid the dangerous stimulus situation. The anxiety reduction accompanying the escape from a feared situation reinforces the behavior which leads to escape.

3. The expectancy phenomenon in stuttering behavior suggests one other possible mechanism of reinforcement which is based, not on tension or anxiety reduction, but on the confirmation of an expectancy. The mechanism in this case might be described figuratively as a self-verification by the stutterer of his expectation of stuttering.

4. Earlier, reference was made to stuttering behavior as an example of non-integrative behavior which is more punishing than rewarding. Thus far only reinforcing mechanisms in stuttering behavior have been considered. That there are penalties attached to stuttering behavior and that the act of stuttering itself is unpleasant would be emphasized by practically all stutterers. So far as the fixation of behavior is concerned, what does occur when an act is followed by both reward and punishment? One of the more recent theoretical treatments of this problem is that by Mowrer and Uhiman. Their hypothesis, which is supported in part by experimental evidence, is as follows:

The consequences of a given act determine the future of that act not only in terms of what may be called their quantitative aspects, but also in terms of their *temporal pattern*. In other words, if an act has two consequences—the one rewarding and the other punishing—which would be strictly equal if simultaneous, the influence of those consequences upon later performances of that act will vary depending upon the *order* in which they occur. If the punishing consequence comes first and the rewarding one later, the difference will be in favor of the inhibition. But if the rewarding consequence comes first and the punishing one later, the difference will be in favor of the reinforcement.

According to our earlier analysis of the original development of anxiety in the stutterer, a pattern other than the disapproved (punished) normal non-fluent pattern led to anxiety reduction and therefore consequent reinforcement. This would make it appear that the original stuttering behavior was reinforced by anxiety reduction first although it may have been punished later. The first hypothesis concerning the reinforcement mechanism in stuttering behavior assumed that the stuttering act is reinforced by the tension reduction consequent upon the completion of a stuttered word. It would seem, then, that in the case of stuttering behavior, though there may be both reward and punishment, the initial consequence is probably that of reinforcement due to tension reduction. According to the Mowrer-Uhlman hypothesis, this would result in fixation of the non-integrative stuttering behavior

5. That there may be numerous secondary gains connected with stuttering behavior is pointed out by Fenichel. One factor mentioned by Fenichel is the pity that may be aroused in others and that may be utilized by the stutterer. Clinical experience reveals a wide variety of material benefits that may accrue to the stutterer without his necessarily being aware of them. Thus there may be “considerate” teachers who excuse Jimmie from recitation. Or Bill may receive a medical discharge from the Army on the basis of his speech with a disability pension attached. All of these may well serve to reinforce stuttering behavior. It seems important from a therapeutic standpoint to investigate very carefully the possibility of secondary gain in each stuttering case. To accept the stutterer’s negative reply at face value to the question, “Does your stuttering bring any rewards?” is inadequate, since the stutterer very often is not directly aware of the benefits that he might be deriving from his speech behavior.

Another approach to the consideration of stuttering in terms of learning theory is given in this article, only a portion of which is included.

37. THEORY AND TREATMENT OF STUTTERING AS AN
APPROACH- AVOIDANCE CONFLICT * *By Joseph G. Sheehan*

* Sheehan, Joseph G., "Theory and Treatment of Stuttering as an Approach-Avoidance Conflict," *The Journal of Psychology*, 1953, 36, 27-49.

THE CONFLICT HYPOTHESIS

If stuttering occurs whenever approach and avoidance tendencies reach an equilibrium, we should be able to analyze the process in terms of relative strengths of gradients of each. Miller and Dollard have provided us with an excellent theoretical model for such an analysis.

For the stutterer, the speaking of a difficult word involves a goal, that of communication, but also a fear, that of inability to communicate. The stutterer thus has a "feared goal" in Miller's sense. . . . From the fact that the fear- motivated avoidance gradient is steeper than the reward-motivated approach gradient, it can be seen that an organism put in an approach-avoidance conflict situation will *go part-way and then stop*, or oscillate helplessly in the zone where the gradients cross. This is exactly the behavior the stutterer shows in attempting a feared word, or upon entering a feared situation. He says "K-K-K-Katy" or blocks silently after having begun the word. He freezes at the instant of picking up the phone, or halts on the threshold of a strange office.

If this formulation is essentially correct, we are in a position to answer the first question. The stutterer stops after advancing part-way because he is in a conflict situation, and the moment of his stopping is determined by the relative strengths of approach and avoidance gradients. Stuttering behavior it- self has a hesitant character because it is the result of a conflict. Such an interpretation of stuttering accords well with Freud's Classic view of the nature of neurotic conflict:

... neurotic symptoms . . . are the result of a conflict. The two powers which have entered into opposition meet together again in the symptom

and become reconciled by means of the *compromise* contained in the symptom-formation.

In the compromise, i.e., the symptom of stuttering, the conflict is neatly externalized.

Many of the secondary symptoms of stuttering, as analyzed by Van Riper, may be interpreted as compensatory efforts to overcome avoidance, to go forward in the face of fear. Others, as he has pointed out, are just reactions to fear, directly expressed avoidance. Among the compensatory measures to overcome avoidance are the devices of starting, antiexpectancy and release. These are, in effect, attempts to reach the goal by a roundabout route, a characteristic of conflict behavior noted by Lewin. Devices of avoidance and postponement, on the other hand, are essentially reactions to fear, direct expressions of the approach-avoidance conflict.

The primary symptoms of stuttering can equally be attributed to approaching avoidance conflict. Repetition and prolongation may represent oscillating and stopping, respectively, near the point where the gradients cross, at the point of equilibrium in the conflict. Both Johnson and Van Riper have pointed out that syllable repetition and other forms of nonfluency in children characteristically appear in the midst of many conflicting speech pressures, e.g., vocabulary acquisition, phrase choices and sentence building. Adults similarly tend to speak hesitantly in pressure situations.

Speech is a sequence of movements, and stuttering is a breakdown in the sequence. Whatever the involvements of the disorder, the point at which the breakdown occurs must bear a relation to these involvements. The breakdown occurs early in the sequence, but seldom prevents initiation of the Sequence. Stuttering is, in other words, chiefly a disorder of *release*, of going partway and then stopping. Froeschels has called repetition and prolongation (“clonus and tonus”) the only symptoms common to all stutterers, an observation supported by the author’s findings. The stopping and oscillation which these symptoms may express are the features common to approach-avoidance behavior.

The conflict on speaking is as follows: There is an approach tendency for speaking, since it is socially demanded. But since speaking entails the danger of stuttering, there is an avoidance tendency based on the fear elicited

by the danger. This is the type of conflict which Johnson and Knott held responsible for stuttering.

The conflict on not speaking is as follows: There is an approach tendency for not speaking, because silence becomes an attractive alternative to the danger situation of speaking. But this alternative also is to be feared.

In a situation which calls for speech, not speaking or not being able to speak in itself involves a threat. Many stutterers show a *fear of silence*, and any dead stop in their communication spurs panicky efforts to release the block. Many of the irrelevant and apparently unintelligent symptoms of the stutterer can be understood as a filibustering, a measure taken against the fear of silence.

Consequently, there is an avoidance tendency for not speaking as well as an approach tendency for not speaking. Movement toward either feared goal elicits more fear, so that the net approach tendency will be greater toward the more distant goal. As this is approached, e.g., as the stutterer gets closer to the speech attempt or as he gets further away from it, the alternative goal becomes more distant, hence less dangerous and more attractive.

Levels of Conflict

In order to present the conflict hypothesis directly and simply, more thorough analysis of the different levels at which conflict may occur in stuttering has been reserved for separate presentation. Five distinct levels emerge: word-level; situation-level; emotional content level; relationship level; and ego-protective level.

At the *word level* the conflict is between the urge to speak the word and the urge not to speak the word. For example, the stutterer wants to say "hello," i.e., he approaches this word, but fear holds him back, because "h" sounds have through past experience acquired cue value.

At the *situation level* there is a parallel conflict between entering and not entering a feared situation. The stutterer's behavior toward using the telephone, reciting in classes, or introducing himself to strangers illustrates this conflict. Many situations which demand speech hold enough threat to produce a competing drive to hold back.

These two levels are based upon Van Riper's distinction between specific expectancy, or word-fear, as contrasted with general expectancy or situation-fear. Such fears are usually based on past speech experiences and involve directly learned avoidance.

Conflict due to the *emotional content* of words, apart from their phonetic properties, such as has been described by Travis, involves unconscious motivation for avoidance. This is illustrated by the stutterer whose speech grows worse in describing a traumatic experience, or upon giving information he is reluctant to divulge. It is the emotional and verbal content that is involved, not the situation or the worth in themselves. Dunlap said of the stutterer, "Sometimes he is in constant fear lest he inadvertently reveal something he would rather his elders did not hear." The inhibition of emotional content, especially hostile feeling, is a common denominator in many instances of stuttering.

At a closely related level of conflict, the occurrence of stuttering is in part a function of the *relationship* between the stutterer and his listener. Some stutterers experience no fear when they play a dominant role. One may give a fluent public address but stutter to individuals in the audience before and afterward. A child may block severely before one parent but speak easily to the other. An army enlisted man could never say "sergeant" until he became one. The fact that many stutterers can act in plays seems to show the effect of changed role. Several of the conditions listed by Bloodstein as involving the behavior of the listener may equally be interpreted in terms of relationship. Pointing out that the stutterer can usually talk well when alone, Adler concludes, ". . . I can only interpret his stammer as the expression of his attitude toward others." Fletcher, Travis, Fenichel, Abbott, and many others have stated in one way or another the importance of the relationship between the stutterer and his listener.

Since stuttering may be termed a compromise between speech and silence we should consider the symbolic significance of all three in analyzing what is expressed toward the listener. Depending upon our initial reference points, we may get widely differing results: (1) stuttering may be considered an act of aggression against the listener; fluency then would be non-aggressive or friendly behavior; (2) speech may be considered an aggressive, competitive, phallic (in psychoanalytic terms) act; silence here is presumably neutral; (3) silence in itself may be viewed as hostile. Noting that in dreams to be mute is a symbol of death, Fenichel likened stuttering to a partial mutism resulting

from a turning inward against the stutterer's own ego of hostile urges originally directed against the listener. From his discussion it is possible to infer all three of the above meanings. Perhaps it should be concluded simply that either stuttering or speech or silence can be used to express hostility or more positive feelings at various times, but that no constant or universal meaning can be offered. Whatever the behavior through which the feeling is expressed, the occurrence of stuttering will in part be determined by degree of conflict at the relationship level.

At the ego-protective level, stuttering serves as a life-long defense mechanism keeping its possessor out of dangerous competition. Through the stuttering, certain aspirations may be abandoned which might involve threat of failure, or threat of success.

Although our formulation of the ego-protective level stresses life aspirations and goals, the concept is sufficiently broad to include any defensive function of stuttering. Travis' excellent formulation more nearly represents the classic Freudian view of symptoms as defenses against forbidden impulses:

...stuttering is a defense created with extraordinary skill and design to prevent anxiety from developing when certain impulses of which the stutterer dares not become aware, threaten to expose themselves.

That stutterers do tend significantly to avoid threat of failure is shown by their behavior in an experimental level of aspiration situation. Compared to normal controls, stutterers set less exacting (though more realistic) goals for themselves, predicted more modest performances, and showed in general a lower level of aspiration.

Any particular moment of stuttering may be understood in terms of the interplay of conflicting forces at these levels. Whatever the level of conflict, the overt conflict is experienced at the word-level. Conflict at the ego-protective level, for example, might explain a stutterer's resistance in therapy. It would not explain his blocking on a word, except through the mediation of word-fear. In like manner, the pressure of the situation, emotionality of the utterance, or nature of the interpersonal relation must ultimately be expressed at the word-level. It is in this fundamental sense that stuttering is a conflict between speaking and not speaking.

If stuttering results from a conflict, how is the conflict resolved? According to the conflict hypothesis, the stutterer stops' when approach and avoidance

tendencies reach an equilibrium. Why then doesn't the stutterer remain permanently in a conflict situation? How is he able to obtain release from the block?

At the beginning of a block the stutterer is stuck. He cannot get the word out. By the end of the block some change has taken place, so that he can flow and utter the word. What has happened between these points? If the stutterer cannot say the word for a time, why is he able to say it at all? To account for this, the hypothesis is advanced that the occurrence of stuttering brings about a reduction of the fear which elicited it.

During the moment of stuttering, there must be sufficient reduction of fear, avoidance tendency and conflict to "release" the blocked word. Were it not for this fact, once the stutterer became stuck on a word, he would remain stuck indefinitely.

How can the occurrence of stuttering reduce the fear that elicits it? Why should the stutterer be in any better position to speak the word at the end of a block than at the beginning? After all, the symptoms of stuttering frequently bear little relevance to the actual speaking of the word.

The occurrence of stuttering may effect a reduction of fear in several ways:

First, since the stutterer's fear is tied up with his avoidance and is an effort to hide the disapproval symptoms, once the stuttering begins to occur it can no longer be hidden. The stuttering block itself forces the stutterer to "face" his stuttering to a certain extent. This reduces the conflict. The thing the stutterer feared has now occurred. He can no longer avoid it completely, and this partially reduces the fear. On the other hand, successful avoidance builds up tension.

Second, once the stuttering block begins to occur it is a known entity. As the stutterer begins to approach a block, he has a vague dread, a generalized expectancy. As he nears the actual moment landmarks (initial sound, length of word, cf. Brown) and is even able to predict the duration of the block with [sic] stuttering, he recognizes more familiar some precision (study by Milisen and Van Riper). Hence, he gets some feeling of control, the fear is now more specific and there is less fear of the unknown, and there is a reduction of the element of fear from a sense of helplessness (study by Mowrer and Viek).

Third, to the extent that stuttering can be interpreted as an aggressive act directed against the listener (Fenichel) the stuttering relieves the aggression (frustration-aggression hypothesis), hence reduces the inhibition to aggression, hence reduces the approach-avoidance conflict of the stuttering.

There have been many attempts to reconcile the various theories of stuttering. This one by Ainsworth is especially noteworthy.

38. INTEGRATING THEORIES OF STUTTERING * *By Stanley Ainsworth*

* Ainsworth, Stanley, "Integrating Theories of Stuttering," *Journal of Speech Disorders*, 1945, Volume 10, pp. 205-210.

There have been several articles and parts of some books designed to aid the student of speech correction to understand and integrate the conflicting theories of the causes of stuttering. Bender and Kleinfeld (1), Berry and Eisenson (2), Heltman (9), Travis (11), Van Riper (12) and others have grouped in number of sub-divisions involved. Hahn (8) has given us a digest of some twenty-five theories with presumably corresponding therapies. These studies have been helpful in clarifying a confusing area. However, the writer has found useful a more compact framework into which the various points of view concerning the etiology of stuttering may be fitted.

It might be well to begin any study of stuttering theories by examining the really fundamental differences in the points of view of many authorities. It should be clear that the following integration is presented as a personal—and not necessarily original—organization which has served to clarify the writer's own thinking in the field and has helped to prevent confusion for beginning students. No attempt will be made to describe the various theories in detail; this has been done quite adequately in existing publications. The specific ones cited will be referred to merely for purposes of illustration. It is believed that an examination of current theories will indicate that they can be fitted into the framework outlined below.

OUTLINE AND DESCRIPTION OF BASIC POINTS OF VIEW

I. Developmental Theories

In this group are the theories which agree on the following basic assumptions: the stutterer is not inherently psychologically or

constitutionally different from the normal speaker; he develops stuttering speech due to situations which occurred during his development. Ideas concerning the character of these environmental disturbances and the accompanying individual reactions may be quite at variance from theory to theory.

II. *Dysphemic Theories*

The theories which may be placed in this classification differ from those in the developmental group in that the stutterer is thought of as being somehow different from the non-stutterer. The exact nature of this difference seems not to be thoroughly understood, but according to these theories it is assumed to be along biochemical, neurological or physiological lines, and to be probably an inheritable tendency.

III. *Neurotic Theories*

This point of view—that stuttering is a symptom of a psychoneurotic condition—is probably the most widely held theory, particularly in the medical field. Psychoneurosis (or neurosis) may be defined as an emotional maladjustment which results in, or involves deviate behavior. As used here it is intended to include milder states as well as well-developed hysterical anxiety, neurasthenic and compulsive conditions. Cobb (4), for instance, includes nervousness as a classification of neurosis. The precise characteristics of the emotional problems which give rise to the disorder of stuttering are the subject of many disagreements. The problems assumed to be responsible vary from comparatively simple psychological difficulties which yield to relatively simple treatment, to deepseated, complicated problems which will respond only to Competent psychiatric attention.

This classification is apt to be confusing because it is not parallel to the other two categories. The developmental-dysphemic organization presents a dichotomy which would seem to include all theories- the stutterer either does or does not have a particular constitutional make-up. However, a third possibility exists. It is quite possible to think of stuttering as an outgrowth of *another* disorder, which does not immediately involve the above dichotomy. It should be clear that if stuttering is regarded being due to a dysphemic condition, this is different from saying that stuttering is the result of a psychoneurotic condition which, in turn, may be due primarily to a condition described by some speech pathologists as dysphemic. To illustrate: A person

may be neurotic primarily because of a nervous system which is inherently unstable—but the stuttering itself may be directly the symptom of the resulting maladjustment. Once a satisfactory emotional adjustment is obtained, the stuttering may disappear, yet the dysphemic condition—i.e., unstable nervous system— still remains. On the other hand, if the stuttering is a direct outgrowth of the dysphemic condition, then the speech difficulty should remain until something is done to improve the neurological or metabolic deviation.

DISCUSSION OF THEORIES IN RELATION TO BASIC POINTS OF VIEW

The relationship of various theories to these three points of view or approaches may best be clarified by citing specific examples of differences within a clearcut classification and of overlapping ideology. Although original sources were examined and are used for many examples, it was found that condensations of the theories as presented in Hahn (8) often contained more concise statements. References from Hahn consist of quotations from summaries prepared by the authorities themselves. Details of the various theories are not necessary for the present analysis. (It might be worth mentioning that as elaborations of the various presentations of different authorities are studied, more similarities of statement may be found. Differences are not nearly so apparent as in a condensation; and, as has been noted by others, disagreements in therapy are not nearly so extensive.)

Probably one of the best illustrations of the developmental point of view is provided by Johnson (8, 59) in his semantogenetic theory. “It is to be noted that the theory strongly implies that stuttering, at least in its more serious forms, is learned behavior, that it is more readily learned in some semantic environments than in others, and that for the learning of such behavior it hardly appears necessary for the individual to possess a special type of organism imbued with so-called ‘predisposing factors.’

Kenyon (8, 66) presents quite a different analysis as to the development of stuttering, but he too feels that, “Stammering is not a disorder peculiar to the psycho-physiologically abnormal child, as has been maintained,” and, “The attainment of practical maturity in the habit production of normal speech serves, with only very occasional exceptions, to prevent the onset of stammering.”

Bluemel (3, 69) believes that “speech is regarded as a conditioned reflex and stammering as partial or intermittent inhibition. During the early or formative years of life the conditioned reflex of speech is insecurely established, consequently it is subjected to the hazard of inhibition.” The proper establishment of this conditioned reflex may be inhibited by various environmental influences—excitement, fatigue, shock, illness, fear and continuing emotional stress.

The dysphemic point of view is typified by West (13) when he says, “There is some point in considering dysphemia as the psychophysical complex of which stuttering is the outward manifestation” (p. 53) and, “If one may judge from the symptoms of stuttering itself (i.e., from the speech manifestations of dysphemia), the condition underlying the stuttering is transmitted from parent to offspring by biological heredity” (p. 60).

Bryngelson (8) also believes that “Dysphemia refers to an irregularity of neural integration” (p. 19); but he stresses a lack of adequate hemispherical dominance as the principal characteristic of dysphemia. and, “This central condition which one can only infer exists may be of such a nature as to demarcate the ‘stuttering’ child as possessing a nervous system differing in kind and not in degree from that of the normal speaking child.” Furthermore, “The dysphemic state, producing peripheral myospasms, may also be established in a child whose inherent predisposition to develop a complete and normal speech function is faulty” (p. 20).

The Travis-Orton cerebral dominance theory, and Van Riper’s (8, 105) Opinion that “the average child who begins to stutter does so because his nervous system is less capable of coordinating the paired speech musculature in the precise temporal pattern required by normal speech,” are representative of a definitely dysphemic point of view.

Before citing various examples of theories which involve primarily the neurotic approach, further clarification should be attempted. As was mentioned in the brief delineation of this concept, the neurotic classification is not completely comparable to the other two groupings. This is true, in part, because of the difference of opinion about the causes of psychoneuroses themselves. In fact, the two divergent points of view in the medical field in regard to basic etiology are reminiscent of the disagreements between those believing in the developmental and dysphemic approaches in regard to stuttering. Do only those whose constitutionally stable nervous

systems predispose them to breakdowns become neurotic? Or may anyone become neurotic if he is subjected to “proper” complex stimuli? In spite of this parallel, the writer feels that in reference to the specific disorder of stuttering, the basic viewpoint of many authorities cannot readily be placed in either the developmental or dysphemic classification. They have developed theories of stuttering based on fear, anxiety, and other psychological concepts without referring directly to the neurophysiological basis for these states; or, if they have taken the constitutional make-up into consideration, their emphasis has been in the areas of the emotional factors themselves. This third grouping, then, includes those who emphasize the—broadly speaking—emotional maladjustment of the individual as the principal source of the stuttering, and who feel that elimination of the maladjustment will usually clear up the speech problem. Stuttering is looked upon as one of many possible symptoms of conversion hysteria, anxiety neurosis, compulsive neurosis, or a manifestation of less severe emotional difficulties. This, to the writer’s way of thinking, is a distinctly different approach from that which says that stuttering is the more or less direct outgrowth of environmental circumstances or of a constitutional condition. Therefore, the neurotic point of view must be included in order to present a total picture of basic differences in theory.

Just as there is considerable variation in detail among the theories in other classifications, so here the opinions as to the specific characteristics of the neurotic condition responsible for stuttering speech vary greatly. Mrs. Gifford (6, vii) believes that “stammering has no organic or functional origin, but is a problem of emotional maladjustment involving the total personality,” and, “The conflicts arising from emotional maladjustments are expressed through the speech tract in spasmodic disturbances.” Coriat (8, 27), on the other hand, says that “stammering is a psychoneurosis caused by the persistence into later life of early pregenital oral nursing, oral sadistic, and anal sadistic components.” Robbins (8, 83) states that “stuttering is one of the many symptoms of certain psychoneuroses.” Krausz (5) considers that stuttering “has obviously very definite signs and characteristics of a compulsion” (neurosis).

For purposes of simplicity and clarity, the writer thus far has written in rather categorical terms, placing each theory in this or that classification without qualification. Obviously this is not quite accurate, nor is it generally desirable. The most cursory reading of many theories, even in their condensed form, reveals statements which make their inclusion within a

single classification impossible, and the more extended writings of authorities already quoted contain statements which do not coincide with the above over-simplified groupings. Therefore it might be well to refer to some theories which overlap in the three basic areas. Once the reader observes how the various patterns overlap, it will be quite easy to follow the same type of analysis for other theories.

Some theories bridge two or three classifications quite definitely. Carot (8, 126—27) states, “Of the root causes we find by statistics that 80 per cent of the cases are caused by the wrong bringing up of children—not as the result of deliberate unkindness but rather from a general lack of knowledge as to the working of the child mentally. Ten per cent are due to heredity (predisposition). And the remaining 10 per cent include the following subdivisions: (a) imitation; (b) organic illness; (c) shock in later life; (d) negative fairy tales.” Thus we have an allotment of causes on the basis of individual differences. Another type of overlapping is presented by Greene (7, 11): “The nervous system of the stutterer presents a special makeup, that of increased irritability with diminished capacity; a system that through a heavy heredity predisposition becomes easily affected from the least cause . . . ,” and, “Having a strong neurotic tendency he is *naturally* sensitive, impressionable, strongly emotional, and lacks the strength necessary to direct his will in a way which will keep him in a balanced state.” Although the dysphemic point of view is prominent here, there is also evidence of emphasis on precipitating factors of an emotional or neurotic character. Robbins (8, 83) also presents an hypothesis that, although he considers stuttering as one of the symptoms of psychoneuroses, the disorder “appears most frequently in nervous individuals who inherit a tendency either to stutter or to exhibit other nervous traits.” West (13) was said to typify a dysphemic point of view, but he does not ignore social and *emotional* elements in theory and in treatment.

The developmental viewpoint is demonstrated in Fletcher’s (6) social morbidity theory in that he dismisses physiological changes in stuttering “as being primarily accompanying symptoms” (p. 200). However, although he rejects “vague, unfocused, free-floating fear which Freud describes as neurotic fear” (p. 227), his emphasis on emotional abnormalities of a specific sort arising from social relationships, and on a type of mental hygiene therapy for the control of emotional reactions, would tend to indicate that his theory is largely of the neurotic type. Van Riper’s (8) theory was cited as an example of the dysphemic approach, but he also considers

the possibility of a normal nervous system being subjected to pressure sufficient to cause disintegration. Cobb (4, 52) believes that a combination of lack of cerebral dominance and anxiety neurosis accounts for most stuttering, but he summarizes his views by saying, "The causes are almost always multiple and complex."

Other theories may be analyzed and found to fall in one, two, or even three *of the basic areas*, with varying emphasis in each. It is quite possible that some readers would disagree concerning the classification of various theories as presented. The writer would be the last person to insist on a particular classification of a theory. Many times such an arbitrary procedure would result from one's opinion as to which aspect was thought to be the most dominant in the mind of the originator. This, in turn, would be strongly affected by whether the reader studied the statement of the theory only or included *an* analysis of the proposed therapy; for an authority might feel that dysphemic (actors could hardly be affected by available therapy, and thus concentrate on emotional re-adjustment or retraining of speech habits.

Certainly, from the standpoint of the stutterer himself, the theoretical implications of a speech pathologist's therapeutic program would seem more truly indicative of his basic point of view than would a statement of the theory unrelated to considerations of therapy. For convenience of study in clinic classes, the writer has grouped therapies under the following classifications: (1) neurophysiological: those which aim at alleviating the dysphemic condition; (2) psychological: those which seem to be primarily effective in aiding psychological re-adjustment; and (3) habit-training: those which seem to be aimed primarily at retraining habitual speech patterns.

Rather than create a controversial issue as to the validity of this or that classification of theories and its therapeutic application, it would seem better to view the above organization as a tool to be used in the study of stuttering theories. It is possible, also, to use it as a framework for developing an organized, eclectic point of view.

In beginning the study of any theory of the causes of stuttering, it might be well for the reader to ask himself these questions: Does the author believe that the stutterer is constitutionally different from the normal speaker? If so, what is the character of the difference? Does the author think that stuttering is a direct outgrowth of specific constitutional factors—or of environmental influences—or does he feel that it results from a neurotic condition? With

this kind of start, it is usually fairly simple to see in any particular theory similarities and differences from other theories; and thus it becomes easier to approach the whole question of the etiology of stuttering with something like coherence.

39. ON A SHIFT OF HANDEDNESS AS A CONFLICT * *By Melba Hurd Duncan*

*From Melba Hurd Duncan, "Home Adjustment of Stutterers," *Journal of Speech Disorders*, Vol. 14, 1949, page 257.

"The first conflict of my younger days that I can remember occurred when my mother and kindergarten teacher tried to change my writing from my left hand to my right. . .

"When I was four years old my mother took a job and put me in a day nursery. We had moved to an apartment at about that time which was located on the top floor and we were required to walk up five flights of stairs to get up to it. One of my habits was to run up the five flights and upon getting into the house I would try to speak while out of breath. This is the first time I can remember 'stumbling' in my speech."

40. ON INTERRUPTIONS AS CAUSES* *By Hildreth Schuell*

*Hildreth Schuell, "Working with Parents of Stuttering Children," *Journal of Speech Disorders*, Vol. 14, 1949, page 253.

"Sara's trouble is that she never gets a chance to say anything. The rest of us talk all the time, and she can't get anyone to listen to what she wants to say."

41. ON THE FIXATION OF HESITANCY* *By Shulamith Kastein*

*Shulamith Kastein, "The Chewing Method of Treating Stuttering," *Journal of Speech Disorders*; Vol. 12, 1947, pages 195-196.

"At an early age, between two and three years, almost every child for a period of several weeks or months, is inclined to repeat syllables or words.

These repetitions in the young child, however, are merely the result of an incongruity between the formation of thoughts and the capacity to find words to express them adequately, a discrepancy between the thought tempo and the speech tempo. . . The difficulty (may) become a fixation and the vicious circle of imaginary difficulties and the resulting fear of the anticipated difficulty with its entire galaxy of symptoms is started. The child becomes a stutterer.”

42. ON EMOTIONAL CONSTRUCTS AS CAUSES * *By M. H. Krout*

*M H. Krout, “Emotional Factors in the Etiology of Stuttering,” *Proc. A.S.S.D.S.*; Vol. 6, 1936, page 179.

“Certain deep seated emotional conflicts have an etiological bearing on stammering. . . . Since the origin of the symptoms seems to lie in early fixations on the oral and anal levels, those who would stutter even in an environment most favorable to the development of speech...”

43. ON DYSPHEMIA* *By Robert West*

*R. West, “The Pathology of Stuttering,” *The Nervous Child*, Vol. 2, 1942-43, page 101.

“There are children whose speech mechanisms are so rugged that, no matter how adverse the social environment, they would not stutter; and there are those who would stutter even in an environment most favorable to the development of speech...”

Part Two. STUTTERING THERAPY.

This part of the chapter begins on a very pessimistic note, and one which its author now recognizes as being far too black. Yet all of us have had similar moments when we tried to help those of the tangled tongue. Herman Klencke, an early German therapist, said this almost one hundred years ago: “Stutterers have certain characteristics which are associated with inclinations toward extreme indolence, suspicious and passive opposition to any inconvenience. This leads them to a sanguine belief in anything which seems to point to an easier and more rapid cure.”

44. ON CURING STUTTERING * *By G. Kopp*

*Kopp, G., "Treatment of Stuttering," *Journal of Speech Disorders*, Volume 4, 1939, p. 166.

...I have questioned every theory of stuttering that has ever been advanced. I have done this because I was convinced that no one method of treating stuttering is sufficient to correct the speech of all stutterers. Nor is any one method adequate to correct the speech of the majority of stutterers. In ten years of working with stutterers I have never been able to completely cure a single adult stutterer, using one or several approaches. It is true that I have helped to improve the speech of a number of stutterers, both young and old. But I would hesitate to assume much credit for what happened to any of them. Dr. West had an apt way of distributing the honors, if any, for what we did with stutterers at Wisconsin. He would say, "Oh sure, God, nature, the patient, Kopp, and myself have helped a few stutterers..."

45. DO YOU KNOW SOMEONE WHO STUTTERS? * *By James F. Bender*

* Bender, James F., "Do You Know Someone Who Stutters?" *The Scientific Monthly*, 1944, Vol. 59, pp. 221-225.

An entirely different approach was used to help Mr. X, a business executive of forty years of age. He had stuttered most of his life and had undertaken various kinds of "cures" from time to time. But a promise of a substantial promotion and added responsibility, contingent upon his acquiring control of his speech, gave him a strong incentive to do something about it in a sustained way.

The psychologist explained to him that only he could help himself. That he might well adopt the attitude that his stuttering could not be cured in any miraculous way. But by relearning to speak through conscious management of the speech process, he could at least control the symptoms of stuttering.

Training was then given him each morning, before he reported for work, in *rate-control*, a technique of speaking based upon phonetic analysis designed (1) to awaken aural speech consciousness, (2) to permit accurate diagnosis and isolation of habituated articulatory and vocal defects, (3) to relax the organs of articulation and use them economically, (4) to induce mental ease while speaking or reading orally, (5) to improve vocal quality, (6) to develop conscious control of the mechanical factors of articulation, and (7) to enlarge

breath capacity. These principles were applied to the oral reading of sounds, then syllables, and then words, and finally phrases and sentences. Once the technique was mastered in oral reading, the same principles were applied to improvised speaking. He was asked to talk about pictures that were flashed to him. After this step was mastered, he was requested to talk impromptu about a scale of subjects that required ever-increasing attention to the subject matter, always using a rate that allowed him to speak smoothly. The final step was to apply rate-control over the telephone and before a formal audience.

In the case of Mr. X. the time required for him to relearn to speak was a year. He visited the psychologist every day, including Sunday, for the first two weeks. Then followed a month of visits on alternate days. He came twice a week for the subsequent five months and once a week thereafter until his speech was completely under control.

Along with the speech re-education went discussions about matters pertaining to his attitudes toward himself and his associates—mental hygiene—for Mr. X, like so many seasoned stutterers, had developed characteristic maladjustments of temperament. As Mr. X's speech improved, his attitude toward himself and a great many things changed for the better. The vicious circle had been broken as soon as he had learned that he could control the speech symptoms of stuttering.

Mr. Y, another business executive of age and background comparable to that of Mr. X, found *voluntary stuttering* a helpful reeducational process. Voluntary stuttering is based on the theory advanced by Dr. Knight Dunlap that "repetition may be employed in dissolving or breaking habits as well as in the formation of habits." The assumption is that stuttering is a collection of undesirable habits that can be eliminated by voluntarily repeating them. Psychologists and speech clinicians who use the technique of voluntary stuttering usually have the stutterer repeat the first sound in each word distinctly and clearly several times, varying the number of repetitions at the beginning of words to avoid establishing a set speech pattern. Whenever a stutterer has a speech spasm while Using voluntary stuttering, he is requested to repeat the word until he can say it without difficulty. In the case of poly syllabic words, voluntary stuttering may be practiced on each syllable, each initial syllable being assigned varying sound combinations; thus, for example, s-s-s-stutter or st-st-st-st-stutter. When the mature

stutterer has tics and other nervous mannerisms, he is taught to control them by reproducing them voluntarily before a full-length mirror.

Both rate-control and voluntary stuttering are only two of a large number of reeducational techniques. They are mentioned here to illustrate the old adage, "What's one man's meat is another man's poison." Mr. X found relief in the former and not the latter; and Mr. Y's experience was the exact opposite. That is why the psychologist who handles cases of secondary stuttering needs to know many approaches and to be able to select the most helpful for each individual case. Sometimes he employs a combination of techniques. For example, both Mr. X and Mr. V were given daily progressive relaxation exercises along with their respective speech reeducative techniques. Like most other therapeutic approaches involving human contacts, speech correction is an art as well as a science. The important consideration is that stutterers cannot be put into a Procrustean bed. Each case must be approached to meet its peculiar needs.

Perhaps the most significant single item in the correction of stuttering is the rapport established between the stutterer and his correctionist. The value of rapport, the reciprocal feeling of friendliness and confidence, cannot be stressed too heavily. Once rapport is established the stutterer can be attacked by one or more of a variety of techniques known to the specialist. Fundamentally it is because of rapport that so many techniques prove successful. Of equal importance to the stutterer is his need to accept his disorder of speech as part of his fate. He must not feel too sorry for himself, but meet and know a large number of people of accomplishment in all walks of life who have been stutterers. It is the nature of all of us to be handicapped in some respects: stuttering, like chronic indigestion or procrastination or shyness, can often be corrected completely or diminished in severity or compensated--if only the stutterer will give himself the opportunity, and progressive communities will make that opportunity possible.

The tenseness which characterizes the adult stutterer is so marked that relaxation procedures have long been used. Stutterers have been treated with almost every type of relaxation technique known, and all of them seem to respond, at least until fear makes them tense again. This excerpt describes one systematic method for inducing relaxation and a resulting cessation of stuttering.

46. RELAXATION, THE DIRECT ROAD TO FREE SPEECH * *By Mabel F. Gifford*

* Gifford, Mabel F., *How to Overcome Stammering* (New York, Prentice-Hall, 1940, pp. 8-17).

. . . Tension is the opposite of relaxation. The best way to realize how it feels to relax, however, is first to tense. Separately and deliberately the various parts of your body and then withdraw the force you exert. When you thus tense your muscles before relaxing them, you are throwing tension *voluntarily* into your body, with your mind in control of the situation. The tension you feel while talking is ordinarily not voluntary; it is an almost automatic accompaniment to the fears and other emotional patterns you have built up in connection with the blockade which inhibits speech. So note carefully in the following exercise how promptly your body responds to your directing mind.

Lie on your back and close your eyes, allowing your arms to fall gently by your sides. Become still, very still. With your mind, command every part of your body to let go. You are going to rest, let go, be at ease. Consciously, systematically, start alternately to tense and to relax your body. First, to sense the distinction between tension and relaxation, throw force into your toes. Withdraw it. Relax. Similarly, put force into the feet, the ankles. Each time withdraw the force and relax. Feel the perfect power of your directing mind over every part of your body. Throw tension into your legs. Withdraw it. Now tense the thighs, the hips, the muscles of your back, your shoulders. Relax each bodily part after you have tensed it. Tense and relax your upper arms, your lower arms. Clench your fists. Let go. Tense your fingers, and then feel the force slipping out at each finger tip. Next tense the neck, the head, and all your facial muscles. Relax completely. . . . Tense and relax the wrist, and, finally, the outer chest muscles. Concentrate all of your imagination on each bodily part as you tense and relax it. Then forget that part. . . . Let your imagination progress inwardly. Feel as though you were inside your brain, and let go completely. It is not necessary to be tense any longer. You feel as if all the forces were withdrawn from your entire body. Every muscle is relaxed, at rest. Focus your attention within the chest, near the heart. Here is where you should feel still, very still. Think and feel...

more and more still...

more and more still...

more and more still.

Just let go—let go—let go. Now rest.

Once a day, practice this thorough relaxation for at least fifteen minutes. The best time for children is after school. The most satisfactory time for men and women is after the day's work.

Relaxation is refreshing. It rejuvenates your whole body and your attitude toward life as well. When you are in a condition of deep, complete rest, you seem to be floating down a smoothly flowing stream after a strenuous effort in battling upstream against the currents. Your body, your mind, your whole self seem without beginning or end, saturated with a feeling of unlimited and perfect peace. It is as though you were reaching some unfathomed inner center within you, a state of equilibrium in the very core of your being.

While you are thus resting, with eyes still closed, imagine a lovely orchard far out in the country where it is very still. See the trees full of blossoms and the cool green grass. You are lying on the soft grass and looking through the trees. All nature is resting in the sweet warmth of mid-day. There is no sound in all the orchard, it is very quiet. The clouds are slowly floating overhead. They drift, drift across the sky. The air is very lazy, too. It moves with a slow, rhythmic motion. You can feel it on your face, pouring through your body as you breathe. In and out of your nose and throat it pours, constantly flowing. Feel your chest gently expand and contract. Unwilled, involuntary breathing goes on all day and all night. Nature takes care of it for you. *All you have to do is let your breath flow in this tranquil, natural way.*

Vary the picture any way you wish but concentrate on the idea of stillness until you produce the completely calm mood. Everyone has an individual image of some place in nature which symbolizes peace to him. It may be a clear blue mountain lake; a forest; a lush spring meadow starred with flowers; the vast silence of the desert. Therefore, to claim the mood, recall the stillest and loveliest place in which you have ever been or have ever imagined. Then the abstract idea of calm will become real to you because the mood of the mental picture will flow through you. Your body, your thoughts, and your feelings will become calm.

The exercise above (in fact, all the other exercises, too) is not simply an exercise. Its purpose is to act as a stimulus, the response to which is a mood. In this mood lies the feeling of ease. In the feeling of ease is the genie of fluency.

For at least five minutes a day, right after you have practiced relaxation, get into this mood. After you have practiced persistently at home for a while, you will learn how to carry a feeling of calm with you into the outside world. To achieve your goal more quickly, make a mental memorandum of how you felt in the cool, relaxed mood of the exercise. Then, when you are in a real situation, let your thoughts glance over that memorandum. This review will enable you to project the feeling of calm into the actual situation; it is a form of suggestion, which will remind you to be tranquil through the hours of the day.

The Sigh Principle

Becoming still, inside, is the core of the whole new pattern you are building. When you abandon your body utterly to deep, easy relaxation, and reach with your thoughts and your feelings into the very center of stillness, you will notice how tranquilly your breath flows in and out, you know that smooth, rhythmic breathing is a continuous and automatic process. So relax, close your eyes, and breathe in the natural way. Feel the air going in and out. With the outgoing breath stream, let a deep sigh flow through you. This sigh is really just an increase of the normal exhalation. Let the sigh flow out freely—one, two, three, four, five, six times. When you sigh, your whole body is relaxed. You are "letting go" because you are freely releasing the breath stream, which is a natural bodily process. This simple principle of *letting go* is the foundation of speech control.

Now let us put a soft little tone on the outgoing breath. The exhalation *must* be the full pressure of the sigh. You should feel this pressure of the breath escaping as a sigh. The need for *feeling the heavy sigh pressure cannot be over-emphasized*. The outgoing breath, which is scarcely noticeable in ordinary exhalation must be increased to a heavy sigh in speaking. The "sigh" stream is the element, the substance, the fabric of speech itself, for the stammerer. He has to have an extreme release in order to counteract his extreme tension. Because of his mental and emotional tension, resulting from his fear of words and situations, he has developed a physical tension.

The physical result of this tension is a repression of the breath. The sigh is the means of freely releasing the breath.

This exaggerated method of breathing, based on a deep sigh, is really only an extreme use of the natural breath stream, which is smooth, rhythmic, automatic, and relaxed. Base all your practice on the sigh during your beginning exercises, or until you have ceased to repress your breathing during speech. The sigh principle will give you a more rapid freedom from muscular spasms than any other single method I know. Merely increase the outgoing breath to a heavy sigh when you speak.

The tone you put on the heavy, outgoing breath forms a sound like “hah.” Prolong this sound for the length of the exhalation. Hear the voiced sigh, the “hah.” Feel the freedom of the tone. Talking is similar. *It requires no more effort to talk than to sigh.* Simply let your voice float out with the sigh and you will discover how effortless speech can be.

Repeat the above exercise several times daily. It will offset or neutralize your impulse to struggle, which is an element of your blockade pattern. Noticing how easily your voice flows out with this sighing, tranquil breath will reinforce your conviction that there can be nothing wrong with your voice stream. It is absolutely perfect.

After you have practiced this soft, vocalized sigh about ten times, you should reinforce the resulting feeling of release by using the method of *silent recall*. This exercise is a mental one in which you concentrate your thought on the feeling of physical ease and outpouring you experienced when your breath flowed so tranquilly through the free open channel of your breath tract. When you have silently recalled the feeling, then recall the sound of your voice pouring out.

In all the exercises that follow, we are going to use the “sigh principle.” When you use it, you cannot help talking in an exaggerated, breathy voice if you are doing the exercise correctly. Such a manner of talking in this early period of speech re-education, however, contributes to the proof and conviction of fluency.

A breathy quality in the normal speaking voice is, of course, not desirable. This method is advocated only as a means toward an end, just as speech exercises in the first stages of therapy are emphasized for the same reason. (The use of the breathy voice, however, is one of the most essential steps in

overcoming stammering.) After the stammerer has gained the conviction that his speech mechanism is reliable when he speaks with this easy outpouring of the breath stream, he can gradually modify it until the breathy voice is, finally, completely discarded—until he no longer needs it to give him confidence. Its function is similar to the crutch that a person who has suffered a broken leg uses in the convalescent period when he is gradually regaining the original strength and reliance of that leg. When a former stammerer learns to speak with normal fluency, his voice quality is similar to that of any average person.

Following are the three most important reasons for using the breathy tone:

1. It produces a relaxed feeling in the throat muscles, which can become extremely tense when you are struggling through a speech situation.
2. You can actually hear yourself speaking in this fluent, easy manner. Your response to the self-stimulation of your auditory receptors creates a feeling of control and freedom. You are thus promptly assured that your motor speech control is not failing you.
3. It gives you the feeling of *Pouring out* the voice, which in turn gives you confidence in your ability to speak fluently.

We shall now apply the sigh principle, the breathy tone, to words. But we are going to ignore the consonants in words. Consonants, particularly the first ones in a word, are often a source of dread to stammerers. But any initial element, a vowel as well as a consonant, often arouses fear in the stammerer's mind. So, although we pronounce only the vowels in the following exercises, they are not pronounced with the exactitude required in normal speech. The vowels will pour out so freely with the breath stream that you will find it easy to obtain gradual control over them.

Be regular and persistent in the exercises which follow. If your spasms are severe, continue the practice for weeks, or until you feel serenely sure of yourself. You are now doing the most difficult part of your re-education. You are not only letting go of the conscious strain you have experienced all these years while speaking, but also of the unconscious strain which has been pulling at the very roots of you and your desire to speak fluently. *A small amount of practice will not do.* You have to do these exercises with thoroughness and an earnest enthusiasm, for you are building a new pattern

of speech control. Put careful and systematic labor into this constructive process. Then you will get results.

The following article presents a case treated primarily through psychotherapy alone.

47. DYNAMIC INTERPRETATION AND TREATMENT OF ACUTE STUTTERING IN A YOUNG CHILD* *By Marjorie Harle*

* Harle, Marjorie, "Dynamic Interpretation and Treatment of Acute Stuttering in a Young Child," *American Journal of Orthopsychiatry*, 1946, Volume 15, pp. 156-162.

Patty was referred to the clinic at the age of three and a half by her mother who was concerned about the child's stuttering. This symptom had started three months earlier following a spanking administered by the mother after the child had run into the street and narrowly missed being run over by a car. Shortly afterward the stuttering cleared up, but a few weeks later, after a second spanking for running into the street, she again began to stutter. Other symptoms shown were constipation, food-fads, bossiness with other children, apparent fear of, hostility toward, and clinging to, mother, and avoidance of contact with father.

Patty came to the clinic for weekly Sessions, as did her mother, over a period of ten months. There were forty-one treatment hours, after eighteen of which the psychiatrist left for the Army, and the treatment was carried on by a social worker. Analysis of this child's activities during treatment, together with information given by the mother, demonstrated the close connection between the patient's symptoms and her unsatisfying relationship with her mother, particularly in early infancy, which set the stage for later expression of conflicts related to the oedipus situation. Patty's activities in treatment appeared to parallel closely her life experiences. She expressed her oral and anal interests, her conflicts in regard to physical sexual difference, her relationships with both parents, and relived with fantastic additions the experience of almost being run over.

She was an attractive, sturdy little girl with blonde hair, blue eyes, and a determined chin. In our initial contacts with her at the clinic, she was overconforming, meticulous, and inhibited in play and speech. On the Stanford-Binet she scored an IQ of 130. Basically good language

development was masked by a pronounced stutter of the trigger type, which was particularly bad under tense circumstances when the response was verbal, face to face. Then she would break down completely, become flushed, confused, frustrated, and unable to respond. She was acutely conscious of the stutter, and would point to objects and make signs rather than talk. In the freer situation with the psychiatrist she spoke hardly at all, and there was a queer kind of posturing as though she were trying to convey some meaning without speaking. She was conforming in every way, even to the extent of making a show of playing with the toys, which she obviously did not enjoy.

Patty was the only child of a couple who had married somewhat late in life and who, despite their difficulties in growing up, had made an acceptable adjustment to society, were financially comfortable and got along well together. Father disapproved of treatment for Patty and did not participate. He was described by mother as a “mild and uncomplaining person” and “overanxious and lacking in confidence.” He had had a complete breakdown the day he became engaged to his wife, and was subsequently in a sanitarium for fifteen months in a depressed state. He had stuttered on and off since childhood. Both parents were rigid, overclean, and meticulous. The mother’s participation was not easy for her, and at one point she almost withdrew because of father’s opposition and their concern over Pattys increased assertiveness and messiness. The mother’s feelings about Patty’s birth came out only incidentally and late in treatment after the child had shown improvement.

The mother talked most about her relationship with her own mother which was characterized by a great deal of hostility, fear, and guilt. She described her mother as strict and domineering. Even to this day she starts when her mother calls her, and has a sinking feeling in the pit of her stomach. She was greatly attached to her father, felt that her mother disapproved their relationship, and they had to be careful to conceal their real feelings for each other. Mother was apprehensive lest Patty be as bad as she visualized herself to have been as a child. She feared aggressiveness in Patty but, on the other hand, feared she herself would be the kind of mother to Patty that her own mother had been to her; that she would nag and be as repressive in regard to freedom and sexual interests. Her relationship to Patty became the battle ground on which to wage the war of her conflicting feelings about her own mother. This was so even before Patty’s birth. Though they had planned to have a child, mother was “miserable” during her pregnancy with hay fever,

asthma, and a kidney infection. She worried lest the coming child look like her own mother “with those beady black eyes and sharp features,” and knew that if it did she could never love it. She had a feeling of impending doom. Her association with this feeling of doom was that she might hear of a dreadful accident which had befallen a child.

This unconscious conflict in the mother was presumably reflected in Patty’s feeding and toilet training experiences. Patty had “a bad disposition as a baby.” She cried excessively and screamed, apparently with rage. On the bottle from the beginning, they discovered that she needed more food and that they had been starving her. When mother attempted to wean her from the bottle at eleven months of age, she resisted vigorously. At the time of referral there were still difficulties in eating. The child was finicky, would try nothing new. She placidly rejected food, or wanted to be fed by mother. Her toilet training reflected her faulty relationship with her mother. Toilet training was started when Patty was a year old and “It was the most difficult job I have had in bringing her up.” She complained that Patty was three before she stopped wetting, and even then would soil herself on occasion. She had always been constipated.

In the treatment situation, Patty’s oral interests were not as obvious as her anal ones which appeared later. The stuttering was little in evidence after the first five or six hours, though it continued at home. Her pleasure in the use of words requiring much lip movement was noticeable. With much giggling and use of the lips she would say “Mommy says I should say 'in a moment, in a moment, in a moment.’” She would sing, “Can you see me mairzy dotes, mairzy dotes, mairzy dotes?” There was considerable play in the second half of treatment around eating and drinking. It was not until the very end, however, that she played at being a baby with a bottle.

A great deal of Patty’s activity at the clinic centered around her toilet interests as shown in her messing play with paint and water, and in toilet rituals. At first there was a great deal of inhibition; on several occasions she refrained from touching the paints, saying that Mommy had told her she must not paint. When this happened she was restless and frustrated. She would say, “I wish I can’t paint,” meaning apparently “I wish I didn’t want to paint.” On one of these occasions she wet herself. As time went on, however, she became free to engage in the messing. She would slop the water and paint around, put thick blobs of paint on the paper or table and rub it around with her hands, smear it thickly on her arms and legs, and jump up

and down with glee in a puddle of water. It was obvious that she derived intense sensual pleasure from these activities. She was absorbed, dreamy, and blissful as she caressed and patted the gobs of paint, delighted as she splashed. She cooed with pleasure as she smeared it on her legs, murmuring "It feels good—it feels cold." It was obvious that this type of play also served as an expression of defiance against her mother. On several occasions she had insisted on wearing her best dress, volunteering to mother that she was not going to paint today. Then, at the clinic, she would go about almost systematically getting the dress messed up, remarking as she did so that Mommy thought she wasn't going to paint.

Associated with this messing play were activities around going to the toilet. At first she was secretive and timid if anyone were in the bathroom she would come out and wait until they had gone, complaining "they 'sturb me." As her messing play became freer, so did her toilet activities. She began openly to show her pleasure in her bowel movement, and would leave it on display. She became more and more exhibitionistic about it, shouting "Peek-a-boo Fanny!" as she took down her pants, and "Ping! Ping! Ping!" as the feces dropped into the bowl. She agreed enthusiastically that it felt "good." She would play an exhibitionistic game as she sat on the toilet behind the swing door, "Can you see my foot?" "Can you see my pants?" "Can you see my underpants?" "Can you see my hand?" Not until after twenty-three hours of play consisting almost exclusively of activities around messing and the toilet, was Patty able to abandon it. About this time the mother reported that Patty was no longer constipated.

Patty began to show more of her feelings toward sexual difference and toward her parents. She steadfastly ignored anatomical difference, and indicated that she had ideas of castration. The mother was perturbed about the fact that Patty never asked questions about sex. She had hoped that attendance at nursery school, where the boys and girls went to the toilet together, would stimulate her curiosity. This had not happened, and no one at nursery school had ever seen her go to the toilet. On one occasion she did ask her mother if she was going to the hospital to have a baby, and appeared relieved when she said no. Once, when the little boy next door exposed himself to her and her father, she made no comment. At nursery school she was playing exclusively with boys. She was described as not so much playing with the boy as admiring and imitating him, "as though what she did was worthless, and what he did was perfection and she must copy him." That she was acquainted with her own genital anatomy is proved by the fact that

at the age of two, having been taken to the doctor because of vaginal discharge, seven closed safety pins were found in her vagina which had to be removed under anesthetic. She remembered this at the age of four in connection with a proposed tonsillectomy. Patty's curiosity expressed itself only indirectly in questions about lame and blind people, by whom she appeared to be fascinated. Once when Patty and her mother were visiting, Patty was found under the table lifting up the dress of their hostess and examining her legs, which were swollen by some ailment.

At the clinic, about the same time as the above incidents, Patty also gave some indication of her attitude toward sex. One day she brought her doll, announcing that its name was "Richard." When asked if it were a boy or a girl, she replied snappishly that it had on girl's clothes. To the comment that "Richard" was a boy's name, she said firmly, "It is a girl doll named Richard." When the worker insisted that there is a difference between a boy and a girl, she dismissed the subject by saying, "You can call it anything you want." In other words, it makes no difference, there *is* no difference. Soon after this she became interested for the first time in the stuffed elephant; not in his trunk, a dramatic part of his anatomy, but only in his "seat," which she looked for and examined minutely. Then after stuffing his trunk out of sight, she asked if the worker had ever seen a boy's "seat." She commented that it was "the same" (as a girl's). She firmly ignored any reference to the elephant's trunk or the boy's penis. Her irritation and placid withdrawal when the subject of sexual difference was pursued indicated the amount of feeling she had in this connection.

Mother was concerned about Patty's attitude toward her. "There is something wrong with our relationship," she said uneasily. Patty clung to her, but was also hostile and afraid of her. She would say, "Mommy, don't look at me like that, you scare me." She became more aggressive and pugilistic in her attitude toward mother, would whack off the heads of mother's flowers, draw herself up and stamp her foot. On one occasion she cut up a book which mother had cherished since her own childhood. However, she clung closely to mother, wanted to be fed by her, asked for the mug she had drunk from as a baby. At the same time she was showing a peculiar attitude toward father in that she avoided contact with him as much as possible, and was sometimes hostile toward him. When both parents were putting her to bed at night she would not allow father to touch her and would avert her face. One night when father was attempting to assist her in the bathroom, she was found stumbling back to bed by herself, half asleep and

muttering, "I don't want my Daddy to touch me because I want my Mommy." In other words, she could not afford emotionally to have the father because she still needed her mother with whom she was so insecure.

The clinging to mother also showed up at the clinic. In the first few sessions she would frequently leave the interview to go and sit on her mother's lap for a brief time. She clung to her mother in the waiting room. It was not until more than half way through treatment that she became secure enough to come in alone and wait for mother in the waiting room later. In her contacts with the psychiatrist, who was a man, there was evidence that she associated him with her father. She inadvertently called him "Daddy," was coy toward him in the waiting room in the presence of her mother, and expressed the wish that mother would go away and leave her there with him. In her play with dolls she always arranged it that the father and the girl dolls were together and the mother doll apart from them.

Following the change of therapists, Patty concentrated on her more infantile activities for a long time, and then her attitude toward her parents again came out. At the time that she was avoiding contact with father at home, she told the worker that she was mad at her daddy because "he doesn't hug me enough," and "he hugs me sometimes, but I want him to hug me *all the time*." She mentioned him a good deal, expressed eagerness to leave the clinic so she could see him, etc. It seems that her infantile hostility against mother increased in the rivalry situation with mother for father, and reached its peak at the time of her running in the street and being spanked. This incident, which precipitated the stuttering, appeared to be associated with strong feelings of hostility on her part toward her mother. Undoubtedly this episode held great symbolic significance for her.

In the thirty-second hour Patty dramatically relived this episode. Seated on the kiddy-kar which she pushed rapidly back and forth in front of the worker, and with every evidence of excitement, she told the story. In the telling she stuttered so badly that it was difficult to understand her, though she had not been stuttering at all for over two months. She said that when her mommy was three years old she ran into the road and a horse and wagon were coming and nearly ran over her. Today on the way to the clinic, she and mommy were crossing the road and a horse and wagon were coming. Patty ran across the road and "scaped away," but "Mommy was under the horse." She described vividly and with great excitement how mommy was in the street, and not only the horse but the wagon was on top of her, and "she

would get flattened.” This recital was followed by hostile play such as had not before been shown. She ran over and killed all the soldiers, explained that Donald Duck would bite the worker, and then vigorously killed him. She played a repetitious game in which the “milk wagon,” which obviously represented mother, was constantly getting smashed up. Her guilt about this play was expressed at the end of the hour in her ritualistic handwashing, and by the request “Don’t tell Mommy.” This session was followed by more direct expression of hostility toward the worker. The beginning of termination in treatment was shown in cleaning-up activities, admonitions regarding the next child who would come, invitation to visit her at home, etc.

In the thirty-eighth hour Patty announced her intention of terminating in three more sessions, and commented, “I like my Daddy now.” She explained that previously she had not liked to hug him but now she does. She displayed her new red pocketbook and red shoes. In this hour and in the next two she returned briefly to the messing with paint which she had abandoned five months earlier, but which was now more conscious and deliberate. The toilet play was also repeated, and the exhibitionistic game now became a display of her whole self as she shouted, “Can you see me mairzy dotes?” At one point while sitting on the toilet, she remarked that she had forgotten the paint which she had smeared on her leg and had just wiped it off with toilet paper. She was asked if she thought that painting were like going to the toilet, and she replied, “Don’t say such awful things—I do.” In this interview she played at being a baby with a bottle. Using a small watering can with a long nozzle, she filled it with water and sucked at it with absorption and smacking of the lips while she told of a baby who had a bottle, and that she had had a bottle when a baby but did not remember it. She sucked with great pleasure for a long time as though this were her last chance at it. Later she demonstrated how a girl and a boy urinate, by making the water run through a hole in the side of the soap dish, and then by having the water from the watering can go in long arcs across the room. She brought with her a long baton with a bulbous silver end, one end of which she placed in her navel so that it stuck out a couple of feet in front of her. For the first time she painted a picture. It was of “an animal” with a prominent tail. In the last hour there was no painting. She piled up the Bingo discs, first as piles of dirt, then as piles of money, then as food coupons for the soldiers. Her play was very sharing, she was friendly, relaxed, and differentiated. She commented, “I am just a little girl.” When she was asked what she was going to do with the

time that she had hitherto spent here, she said, "I'm going to play with the kids on my street."

Mother described Patty as "more assertive and more amiable" and "more grownup and not so demanding." She had not appeared afraid of mother for a long time, and father was delighted with her responsiveness to him. "Patty is really fun these days. She is just not the tense excited child she used to be. She seems more like a person in her own right." She was getting along well with other children, and the stuttering was no longer a problem.

The mother was also able to gain something in her interviews at the clinic, though at first we had thought that little could be accomplished beyond helping her not to interfere with Patty's treatment. In so freely expressing her feelings in regard to her own mother, she was apparently able to become more relaxed toward her, and consequently toward Patty. Mother was puzzled and pleased by the fact that she had lost the desire to bite her nails, a habit she had tried to overcome for a long time.

Eight months after termination of treatment the mother described Patty as a delightful and well-organized child, amiable and friendly, self-confident, and able to assert herself when necessary. By this time Patty was attending kindergarten where she was popular with the children and the teachers. She was playing mostly with girls but had one boy friend whom she said she intended to marry. She was showing considerable ability in painting pictures, and liked to sing. She continued to get along well with both parents and enjoyed the attention from her father. The stuttering had not recurred, but remained as an occasional hesitation consisting of a slight drawl.

I believe that Patty's improvement was due to her having the opportunity to express her oral and anal sensuality in the presence of a permissive mother person. This helped to rid her to some extent of her infantile ambivalent tie to her real mother so that she was able to go on to tackle more directly the problem of sexual difference, and of her relationship to both parents. Stuttering as one means of expressing her conflicts was due to many factors. Her unsatisfied oral need, and consequent infantile hostility toward her mother, was the first of these. In addition there was a great need to repress because of her own hostility and guilt, and because of the kind of people her parents were. As Patty herself said, "My Mommy doesn't like me to say what I think." The stuttering expressed her oral sensuality, her need to withhold, and her anger. Her infantile anger was augmented, as she became

older, in the rivalry situation with mother for father. She sought to protect herself by clinging to mother through regression to a more infantile state, and by avoiding contact with father. In the episode of running into the street and being spanked by mother, her feelings which could not be expressed appeared in the stuttering.

Suggestion plays a part in all therapy, but certain therapists concentrate their efforts in building up the confidence of their clients. Very many types of suggestion have been used including hypnosis. Some stutterers are benefited by this means as are some by any therapeutic effort. The general trend in American speech therapy is away from direct or autosuggestion techniques since relapse occurs far too frequently.

48. TREATMENT BY AUTOSUGGESTION *

By E. J. Boome and M. A. Richardson

* Boome, E.J., and Richardson, M.A., *The Nature of Treatment of Stammering* (New York, E. P. Dutton, 1932, p. 100).

...A formula of autosuggestion to be used by the patient is of great value, and one of which we make full use. It should hardly be necessary to mention that negative suggestion does more harm than good; "I will not stammer," for instance, generally has the effect of enhancing the trouble. A child of nine informed us when he first came that he had already had "thought treatment," which consisted in the formula: "Every day and in every way my stammer gets better and better." If "better" stood for "bigger," the formula was having excellent results! We find that even Coue's well-known phrase, which we used for several years, may defeat its own ends -With stammerers at any rate—by being too positive. At times it is all too evident to a severe case that he is *not* "getting better and better" at the moment. On the other hand, that of Appelt, quoted on page 103 we find admirable, because it is entirely conditional and cannot therefore be gainsaid by the most "contrary" mind.

Great care should be exercised by instructors not to give negative advice. Of what use is it to tell one who stammers *not* to think of the letters or words that most embarrass him, or never to be afraid of speaking? The very orders remind him of his phobia and dread, and help to keep them alive; and yet methods based on the iteration of such "rules" are still all too prevalent.

Suggestion calculated to inculcate habits of mental and physical relaxation not only prevail in establishing those qualities but divert the patient's mind from his former obsession with "what he is going to say."

49. SPEECH THERAPEUTIC EXERCISES * *By Svend Smith*

* Smith, Svend, "The Treatment of Stuttering: Speech Therapeutic Exercises," *Report of The Conference on Speech Therapy*, 1948, pp. 81-82.

The one principle that must be abolished is blaming the pupil if he does not catch the purpose of your therapy or advice. You cannot tell him as you may tell an ordinary schoolboy, that he lacks will-power. If you do, it is a sign of your defect rather than his.

I suspect the value of the following methods:

- (a) Making the pupil speak without stuttering when you sit with him quietly, making him relax, and then think you have cured him.
- (b) Scaring the pupil in such a way that he does not dare to stutter but develops "concealed stuttering."
- (c) Following the practice of Leibmann by helping the pupil as soon as any difficulty arises, and so convincing yourself that you can still do something.
- (d) Persuading the pupil to say that he does not stutter, even if he does, and thinking this would produce a cure.

None of these methods can be recommended. They are tricks, and stutterers must be taught not to rely on tricks.

A clear outline of some of the clinical methods used with older stutterers in this country.

50. SECONDARY STUTTERING AND ITS TREATMENT* *By Stanley Ainsworth*

* Ainsworth, Stanley, *Speech Correction Methods*, Chapter VI, Stuttering (New York, Prentice-Hall, Inc., 1948, pp. 84-94).

CLINICAL OBJECTIVES

... An examination of the things which can be accomplished in a therapeutic program for stutterers reveals that there are two primary objectives which may best be worked toward by the speech correctionist. They will be discussed in detail after being presented briefly.

Make the Stutterer's Overt Behavior More Acceptable. This applies primarily to his speech and to the secondary reaction patterns which have developed in relation to the stuttering. Some attention, however, should be given to changing undesirable general behavior patterns.

Bring About a Better Personality Adjustment of the Stutterer. Here again, emphasis should be given to attitudes toward the stutterer himself and his speech, but efforts should be made to alter attitudes, toward others and situations, which are affecting his general well-being or adjustment.

Although there may be a difference in *emphasis* in individual cases, both objectives should be worked toward in every case. In fact, it is doubtful if it would be possible to separate them completely in practice. However, various aspects of each will be discussed under the two headings.

It should be stressed again that the following information is not presented as a total "Therapy for Stutterers." It is merely an organization—or outline—into which a tremendous variety of therapies may be fitted for intelligent application. The student should not neglect any source of aid for the stutterer, and many therapies which are mentioned here need to be studied further in books and articles. Furthermore, the ingenious clinician can devise many more therapies and variations than are presented here. This outline, then, is to be used as a *starting point* in a confusing area.

MAKING OVERT BEHAVIOR MORE ACCEPTABLE

Remove Secondary Reactions. The principal types of secondary reactions are:

1. *Starters.* Noises, words, blinking, stamping, arm swinging, "forcing," head jerking, lip and tongue movements, Panting, and sudden pitch changes are some typical examples. These are acquired as a means of "breaking" a block – a way of getting speech started when a word "sticks."

2. *Avoidance mechanisms.* Substitutions, sentence rearrangements, long pauses or prolongations of sounds, and "dodging" of situations are some

avoidance often used. These are designed to postpone or to avoid an anticipated block. It is often difficult to determine if a particular device is being used as a Starter or an avoidance mechanism, but this distinction is not always important.

3. *Tensions.* Any *excess* tension of the speech or other musculature during talking may be a secondary reaction. This may occur in the lips, tongue, jaw, throat, chest, or, for that matter, as far away from the speech mechanism as the toes!

4. *Breathing irregularities.* Besides talking on residual air, panting, and speech on inhalation used as starters, the whole breathing pattern may become disintegrated in a complex way during a stuttering block.

The following methods are often helpful in alleviating secondary reactions:

1. Do some mirror practice to demonstrate the appearance of the severe secondary reactions.
2. Begin with reading and speaking practice in which a conscious effort is made to eliminate starters or avoidance mechanisms of a verbal or muscular character.
3. Teach the stutterer an easy *pattern* of doing the stuttering as a substitute for various secondary reactions.
4. Relaxation and slow, easy speech tend to reduce excess tensions.
5. Breathing exercises and their application to reading and speaking may be helpful.
6. Make the stutterer do some negative practice of the undesirable reactions. Practice them in private and do them purposely in specific public situations.
7. Impress the stutterer with the fact that these reaction patterns have failed him in two ways: (a) He still stutters— perhaps worse than ever—after using them for a long period. (b) He has not been able to conceal the stuttering from other people. In fact, the reactions exaggerate the fact that he is having some difficulty.

8. In relation to this last process, make him *experience* and analyze what happens if he does *not* use the secondary reactions. For, after all, any reluctance to abandon them is based on the assumption that whatever might happen to him would be worse than the embarrassment and difficulty experienced during speech *with* these starters and avoidance mechanisms.

REDUCE THE SEVERITY OF THE BLOCK

There are two types of blocks. The tonic block is a complete stoppage in speech; whereas the clonic block indicates repetitions of sounds, syllables, or words. Either may or may not be accompanied by extreme tension and other secondary reactions.

1. *Teach the stutterer how to relax.* The factor to stress here is that although we all need *some* tension in the speech musculature for it to function, the stutterer is in the habit of exerting force beyond what is needed. General relaxation and attempts at specific relaxation are helpful in reducing this excess tension. The stutterer can learn to talk in a way that is *relatively* relaxed.

2. *Change the pattern of stuttering.* Prolongation of initial sounds, easy repetition, and stopping whenever a block is encountered are the three most common methods of stuttering in a particular manner. They are useful in that they teach the stutterer to be consistent and they give him something to *do* about his speech—something that he *can* do. There is a tendency for him to stutter more easily and not add secondary reactions because he is concentrating on handling his blocks in a specific, standardized way.

3. *Mental hygiene should be used.* Methods and details of this way of bringing about improved speech will be discussed at greater length under the changing of attitudes. At this time, it is enough to point out that a reduction of the fear of speech and stuttering will be apt to decrease the severity of the block. Also, by creating willingness to accept stuttering for the present, and by getting a proper perspective on the whole problem of stuttering, the speech aspects improve sharply.

4. *Teach that good speech is easy speech.* By demonstration and practice show that one of the essential differences between stuttering speech and “normal” speech is the comparative ease with which the latter is done. When an individual does the former, he *works*; while doing the latter, he is seldom conscious of any particular effort. Suggestion is helpful. By noting kin-

aesthetic differences during situations in which the person stutters badly and those in which he has fluent speech, he can become more aware of this difference. And the suggestion begins to work that his principal job is to *learn* to do his speech the easy way in all situations. Moreover, since he can do it in *some*, he should be able to learn to do it in many more.

REDUCE THE FREQUENCY OF STUTTERING

This should be the last step attempted. Often no specific attention need be given to it. The lessons aimed at relieving other aspects may result in a decrease in frequency, but work can be done on this if it is necessary.

1. *Careful speech of any kind has a tendency to reduce frequency of stuttering.* Careful speech may *incidentally* be slower than normal—that is, slower than the usual rate at which the person tries to talk; but slowness is not the important factor. (If slowing down would relieve stuttering, most adult stutterers would have stopped long before coming to a clinician.) The important thing to stress is that the stutterer is being *careful enough to do what he has been assigned to do.*

2. *Apply any techniques of control, ease of production, methods of easing severity of the block, et cetera, in progressively more complex situations.* What represents an increase in complexity is something which must be worked out with the individual.

IMPROVE POOR GENERAL SPEECH HABITS

Mumbling, repetitions of words, indistinct articulation, monotony, and many other habits of poor speech may be present. "These may be the result of the stuttering in an effort to conceal or prevent blocking, or they may be unrelated. Specific work should be done to remove these habits, and in all practice, insist that the pupil use the *best* speech of which he is capable.

IMPROVE GENERAL BEHAVIOR PATTERNS

This applies to all habits which are socially detrimental to the individual. These may be the result of the stuttering or be unrelated to it, or both. Some of these antisocial activities are surliness, unfriendliness, aggressiveness, bad manners, untidy or unclean habits of dress and person, excessive daydreaming, continual withdrawal, and fear of speaking in ordinary situations.

1. *General mental hygiene techniques are helpful in changing the above types of behavior.* This problem is closely related to the second general clinical objective - that of bringing about better adjustment of the stutterer—but it is put here in order to emphasize the change of *activities* that are necessary.

2. *After there has been enough discussion for the pupil to understand what his problem is and the necessity of changing his behavior in regard to it, there should be specific assignments to practice elimination of particular bad behavior patterns. Although this implies a change of attitudes, these can be realistically and practically realized Only by requiring specific activity in regard to a particular attitude.*

BRINGING ABOUT BETTER ADJUSTMENT OF THE STUTTERER

Immediate Adjustment. The stutterer comes for help, and he wants it as soon as he can get it. Therefore, it is well to know what can be done *soon*. The following items will aid in his immediate adjustment and build up a feeling of confidence in the clinician's methods.

1. *Convince the stutterer that he is not abnormal.* (a) Cite research to support this. (b) Show that there are more stutterers than he thinks—that he is not unique. (c) Point out that his reactions to speech failures and frustrations are *normal* reactions. Any repeated failure would bring about similar reactions on the part of anyone.

2. *Show him that something can be done immediately* to improve his ability to communicate—namely, the removal of secondary reactions.

3. *Point out that stuttering can be lived with—cite* some of the many successful people who stutter.

4. *Make it clear* that he can learn to accept non-fluent speech *for the present*. In other words, if he is willing to stutter *easily*, and does not try to conceal it, a large portion of his problem is solved. The simplicity of just *letting* himself stutter has often never occurred to him. *Long-Term Change.* The following things need more time to accomplish. Fundamentally, these are similar to the principal clinical objectives. Specific methods given in many later sections are applicable to these long-term goals.

1. *Motivate him to use, and make him practice, his best speech.*

2. *Remove specific negative and other harmful attitudes.*

3. *Teach the stutterer to talk differently.* This obvious statement is included because in the effort to aid the stutterer to make better psychological adjustments, it is sometimes forgotten. After all, no matter what attitude changes or *general* social successes have been brought about, if the individual still has speech which is so non-fluent as to draw attention to itself and to interfere seriously with communication, the job has not been completed.

IMPROVE ATTITUDES TOWARD HIMSELF AND HIS SPEECH

Eliminate the idea that stuttering is the root of all his troubles. He is apt to be using his “poor” speech as a convenient alibi—even to the extent that he does not want to get rid of the stuttering. Demonstrate that his social difficulties are due primarily to factors other than stuttering. This may be done by talking to him, analyzing evidence that this is true, and assigning specific activities designed to change his habitual ways of thinking. Place emphasis on *activity* (overt behavior) on his part as a means of bringing this about. The following are examples of this type of procedure.

1. *Have the stutterer make two lists.* One sheet should have personal characteristics and mannerisms that he likes and sees demonstrated in actual situations by people he knows and has contact with. The other list should include the listing of things he dislikes. Then have him write up accounts of situations in which he observes any of these things in himself.

2. *Have him list specific reasons why he thinks his stuttering speech handicaps him.* Then make him prove by evidence (also **written** down) from actual situations that such a general assumption is a valid conclusion. Evidence must come from actual overt behavior of other people, not from what he *thinks* they *feel*. If he gets any evidence, have him keep track of *how often* it happens. Compared to the times he talks and blocks, it will be very seldom. Therefore, his general assumption is not valid.

Changes of this sort can be made only in *degree* and *emphasis*—it is not a question of changing to another attitude. This aspect often is lost sight of in considering mental hygiene therapy. There may be *some* basis for the stutterer’s belief that his speech is a handicap. It is not that this attitude is all wrong, it is bad in the *degree* to which he believes it is so, in the degree to which he allows it to stand in his way from achieving his social and personal

goals. Thus he should not be expected to reach the point of assuming that stuttering is not a handicap—for quite obviously it is.

There are several faults of personality that are a much greater handicap than the stuttering itself. These may be worked on by methods similar to those just illustrated. Some of the common faults are: lack of friendliness, lack of initiative, excessive daydreaming, behavior at a lower age level than mental and chronological age would indicate— acting like a “baby,” and lack of consistent application to work—whether on speech or in a job.

Feelings of inferiority are so common as to warrant separate treatment. Any full discussion of this topic would require more space than can be used here. But such feelings are quite common to *everyone* and particularly in severe stutterers. The basic philosophy is to prevent acknowledgment to specific, relative inferiorities (a condition that is universal) from being interpreted as evidence of general or *total* inferiority.

1. Develop and emphasize any abilities and talents as a compensation for speech difficulty.
2. Discuss and demonstrate feelings of inferiority in others. This may be done by observing and listing how the stutterer himself displays such feelings, then by observing the same activities in other people.
3. By assignments, force activity to demonstrate that the feelings are not “real”—that they do not have to hamper his social adjustment as they have been doing—that they are the result of his *evaluations*, not “actualities” which cannot be altered.

IMPROVE ATTITUDES TOWARD OTHERS

The stutterer often assumes that his stuttering is so obnoxious and such a severe personality defect that others think first, “He is a stutterer”— meaning, “He is abnormal.” Whereas, those who meet him most often think of him as a *total* person, just as he reacts to other people. His stuttering is only a part—and if he has proper perspective, a small part—of his total personality. Here again, the desired change in attitude is not a complete reversal of his assumption, but a change in emphasis and degree. That is, sometimes, some people think of his stuttering first, but not enough to cause him to react as violently as he does. Also, this is related to the problem of

the relative importance that he *thinks* they place on stuttering as a handicap in social intercommunication.

Start by analyzing his own attitudes toward others and the reasons for them. List actual people. Have him observe them in specific situations. Write down analyses of his reactions to them. Include some people who have definite handicaps of various kinds. Assign the Stutterer to analyze their activities in relation to their social successes and failures. Lead him to one or both of the following conclusions: we usually react to and think about people in terms of *whole* personality, rather than to a Specific *handicap*; and if we do habitually react to the handicap, it is due to the expressed attitude of the individual—he tries to hide it or is overly conscious of his handicap.

Another closely related difficulty is the stutterer's failure to realize that *he* is largely responsible for the attitudes of others. Thus, by consciously controlled activity, he is able to build up desirable attitudes on their part toward him, if he so wishes.

The basic technique for convincing him that this is time is to have him analyze *why* he likes and dislikes certain individuals. Do this on paper, not just verbally. He can easily be led to understand that his opinions are due primarily to overt activities on the part of these people. The further steps, then, include determining the specific things he is to do to make an effort to create the desired attitudes toward himself. This should be done gradually by working on only one or two changes in habitual activity over any particular period of time. Such methods can be adapted to nearly all age levels.

IMPROVE ATTITUDES TOWARD SITUATIONS

The basic approach may be the same here as in changing attitudes toward himself and others. Analyze certain key situations in regard to their important emotional elements. *Examine why* he feels how he does, *demonstrate* falsity or impracticability of such an attitude, and *practice new habits*, first of acting and then of thinking, in regard to these situations.

For instance, a stutterer may be afraid of using the telephone. List reasons why he thinks he is afraid (such as—the person will hang up if he blocks too long; the operator is a stranger and will not understand his difficulty; he will make mistakes that will embarrass him; *et cetera*). As completely as possible, demonstrate the falsity of using these as reasons for being afraid, by experiencing and analyzing actual situations in regard to them—showing

that the feared result seldom or never occurs. Reduce fear by frequent use of the telephone. Have him listen to a recording of two of his telephone calls—one using a great many starters, avoidance mechanisms, unrestrained blocking, *et cetera*; the other using the speech controls he is being taught. The latter should sound much better. Have Specific objectives for each telephone situation practiced. Judge success or failure *entirely in regard to these*, not on the basis of the amount of stuttering or the degree to which he was “nervous.”

51. ON STOPPING THE PHYSICAL STRUGGLE * *By C. S. Bluemel*

*Bluemel, C.S., “Stammering as an Impediment of Thought,” *Journal of the American Medical Association*, May 30, 1931.

I feel that the stammerer’s first task in speech correction is to learn to stop the physical struggle with which he has formerly met his speech block.

One of the more recent trends in speech therapy has been that of modifying the stuttering symptoms rather than trying to prevent or repress them. The concept of “voluntary stuttering” has had a profound effect. If we can teach the stutterer to keep his abnormal behavior from being automatic and involuntary we may be able to help him learn to master it. “Voluntary stuttering” was the parent of all the more streamlined varieties of stuttering which we try to get our patients to substitute for their struggling frustrating symptoms. Easy stuttering rather than contorted avoidance and struggling escape often provides the bridge to acceptable speech. Here is the original description.

52. VOLUNTARY STUTTERING*

By Bryng Bryngelson

* Bryngelson, Bryng, “Voluntary stuttering,” *The Professional Discussions of the Ninth Annual Convention of the American Speech Correction Association*, 1934, Vol. 4, pp. 35-38.

Many various causes of stuttering have been listed in the literature from time to time. Likewise, a variety of treatments has been described. But I know of no method which does not consider the emotional factors in stuttering. Most of the clinicians handling stutterers agree that the stutterer does experience mental distress of one sort or another. Many people believe that the mental

aberrations are of etiological significance, and others, few in number, believe that the emotional deviations are the natural results of a disintegrated speech function. The latter group holds to the neurological considerations as the basis in the etiology of stuttering, and contends that the emotional maladjustments of the stutterer, as revealed in a clinical situation, are the results of his inability to speak fluently.

Until very recently I have faithfully followed the contentions of this latter group. However, during the past seven years, I have had occasion to study some 2,000 stutterers, ranging in age from two years to sixty-two years, and I find that I must modify my beliefs about the physiological nature of stuttering.

Indeed, there are many stutterers who possess neither anxiety nor fear in relation to their broken rhythms in speech. This situation I have found to be quite prevalent in children, as well as in adults, who have stuttered since the onset of speech. It is an interesting observation that these folk show no marked abnormal reactions to anything about themselves or to their environments in general. They meet the requirements of well-adjusted personalities. This past year, I have studied more than fifty stutterers, both mild and severe in character, who do not desire treatment of any kind. They passed through the lower grades in school with stuttering speech, but suffered no hardships, and developed no conflicts or sensitivity. They were quite well aware of their differences in speech but had never felt the need of help. I have likewise studied children between the ages of two and ten, to whose parents the stuttering was of great concern; but to whom, personally, stuttering was just a way of talking. I am trying to point out that not all stutterers need mental hygiene therapy, and moreover, because they are adjusted to their stuttering, they may never come to a clinic for any kind of treatment.

On the other hand, there are those who are decidedly sensitive about the fact that they stutter. I would be unwilling to say whether or not this group is in the majority. But this type of case usually gets into a training situation, either through voluntary decision on their part, or through the common avenues of suggestion and advice from parents, teachers, and friends.

There is a possibility, not too remote for consideration, that research in the future will warrant one to conclude that the fact of sensitiveness on the part of the stutterer is dependent upon inherent factors of the nervous system,

predisposed by heredity. If the child does not come into the world with a predisposition to react nervously to a stutter, he may continue to stutter for many years without showing any unusual reactions to it. It is becoming more and more positive to me that a child will not become sensitive to his stutter unless he inherits a neuropathic disposition. In the family studies we have made at the University of Minnesota there are excellent examples of this condition. We have stuttering siblings, one of which will take the stuttering very seriously, and the other show no concern whatsoever. Then, too, the sensitive child is often reared by very well adjusted parents. The environmental conditions may not be altogether responsible for such differences.

So much by way of introduction. In this paper I desire to discuss a type of therapy, which has come to be called Voluntary Stuttering. It serves many useful purposes, as it has a great significance for the maladjusted stutterer and can also be used in the treatment of the well-adjusted stutterer.

As I intimated earlier in this paper, I belong to the minority group of speech pathologists who believe that stuttering is a deep-seated neurological disturbance of the central nervous system. Dr. Lee Travis of the State University of Iowa, the leading exponent of the theory of cerebral dominance, describes stuttering as a conflict between higher and lower neural levels. The stutterer's brain lacks a dominant gradient of excitation in one cerebral hemisphere of sufficient potentiality to integrate the bilateral structures of speech. In the act of stuttering, says Travis, cortical control is lacking, and the speech function is under the dominance of subcortical levels. In the treatment, then, of any case of stuttering, we believe that one should aim at setting up a center of speech control on one side of the cortex, thus relieving the sub-cortical levels of any direct hierarchy over the speech function.

Stuttering is involuntary. The spasms occur at an irregular rate, last for an indefinite time, and are relieved usually, with great difficulty, as indicated by the numerous compensatory movements of the face, hands, and body of the stutterer. In voluntary stuttering, the stutterer is taught to willfully imitate the spasms as he studies them in his own speech. By the use of a full sized mirror he observes his spasms and then tries to reproduce them. No one can reproduce a stuttering spasm accurately, either as to rate or as to form. This fact was established experimentally in research which I carried out in the Iowa laboratories in 1930—31. Therefore, there is no danger of increasing or

intensifying the actual stuttering by such a practice of trying to stutter. The neurological advantage of this way of talking lies in the fact that the cortex is exercised instead of the sub-cortical levels. Constant repetition of the initial letter, syllable, or word mobilizes speech energy on the highest level of response and tends to ultimately build a center of greatest dominance in the brain.

It doesn't make any particular difference neurologically, whether one has the stutterer begin with clonic spasms repeating each initial letter of the word as he reads, or whether he immediately tries to imitate the tonic spasms he has in his stutter. The voluntary drill is fatal, however, if one happens to place a very sensitive stutterer before the mirror and asks him to imitate his spasms, the reality of which has never been apparent to him. I recall the Case of Joe, who was so thoroughly frightened at the sight of his own stuttering that when he was asked to repeat those peculiar expressions and grimaces he ran out of the door and never returned. It is safer to begin with all cases on the clonic spasms and then, after the psychological adjustment to the stuttering has been made in the mirror, one can employ the tonic type of manipulation. An outline of the individual exercises will be listed at the close of the paper.

The chief neurological values of this type of therapy are the following: it exercises the higher voluntary levels; it conserves a great deal of nervous energy which is ordinarily dissipated on the lower levels; and it directs the flow of nervous energy into one center of control as in normal speech. Thus, whether or not a stutterer is in need of mental hygiene, voluntary stuttering is efficacious for his cure.

I wish now to discuss the psychological benefits derived from the voluntary stuttering practice. Obviously, when a stutterer who has tried to hide the fact of his stutter for many years is found face to face with his stutter in a mirror, some change in attitude is bound to be effected. Needless to say, the clinician prefaces the mirror drill with conferences pointing out the need for the adoption of a more objective attitude toward his speech defect. It is made clear to him that he can live like a normal human being while he is undergoing neurological treatment for his stutter. As a matter of fact, many stutterers are unable to stay at the task of establishing sidedness, essential for a complete *cure*, unless they can be helped in obtaining a more wholesome attitude toward their stuttering.

One of the first assets of the voluntary stuttering technique to the maladjusted stutterer is that it enables *him to* discard all so-called “crutches,” which until now he has been accustomed to employ in order to disguise his defect. I refer to such techniques as markedly slow or rapid speech, talking on inhalation, spelling, substituting, looking into space, or avoiding speech situations. Willfully imitating his myospasms tends to minimize the need for such “crutches.” True, voluntary stuttering is a crutch inasmuch as it keeps one from stuttering, but it is a good crutch because it advertizes the stuttering. The activity employs the same muscles used in stuttering, but it does so freely and effortlessly. Through the voluntary practice the stutterer says what he wishes, and fear of stuttering tends to be minimized.

The use of a full-sized mirror aids the stutterer in seeing himself as others see him. He sees the humor of stuttering before others see it. This has the psychological effect of putting the listeners on the defensive—the reverse of the situation in which a stutterer is self-conscious of his spasms. His former defense mechanisms, through the voluntary stuttering, lose their former true emotional basis. Instead, he makes a very positive affirmation of his speech difference and thus gains control over a speaking situation which formerly baffled and defeated him.

Success in voluntary stuttering brings confidence, assurance, and successful communication to the foreground. The hypersensitivity, with its morbid social implications, vanishes, and the stutterer is for the first time an emotionally free individual, ready for work in a clinical routine fashioned ultimately to *rid* the nervous system of its dysintegrations, which lie at the basis of the inherent stuttering pattern.

VOLUNTARY STUTTERING

Aims: to adjust the stutterer to his speech spasms, and to enable him to gain more control over his speech.

General rules to follow:

The first sound in each word should be repeated clearly and distinctly several times.

The number of repetitions at the beginning of words should be varied, to avoid establishment of a set speech pattern. Whenever a stutterer has a

spasm while using voluntary stuttering, he should repeat the word, using “voluntary,” until he can say the word without any difficulty.

In longer words, “voluntary” may be practiced on each syllable. On the initial syllable, varying sound combinations may be used to advantage. (E.g.— s-s-stutter, or, st-st-stutter.)

“Voluntary” should be practised in front of a mirror at first. After the stutterer begins to master the technique, he should employ that type of speech not only in the classroom, but also in every outside situation.

53. ON CASTING OUT A STUTTERING DEVIL * *By H. A. Aikins*

*Aikins, H.A., “Casting Out a Stuttering Devil,” *Journal of Abnormal Psychology*, 1923, Vol. 18, p. 137.

After our last talk I thought to myself: that thing is there and it is up to me to get rid of it. So I just literally threw it away. Sometimes when excited or nervous I get blocked but when calm I rattle off words like a steam engine.

54. ON TOLERANCE FOR OTHER POINTS OF VIEW* *By W. Johnson*

*Johnson, W., “The Treatment of Stuttering,” *Journal of Speech Disorders*, 1939, Volume 3, p. 170.

“The longer I work with stutterers the more tolerant I become of anyone who has any therapeutic ideas at all concerning it. . . . There is no such thing as the method for treating stuttering, and the fact that so many different methods are more or less successful is of more than incidental interest.”

Stutterers tend to fixate their speech organs, close the lips or tongue or vocal cords tightly and then try vainly to blow them open. The chewing method has been used by people from at least three different schools of thought, by Robbins, by J. Louise Despert, and by Froeschels, the author of this article. If you continue to chew, you cannot stop.

55. THERAPY BY BREATH CHEWING* *By Emil Froeschels*

* Hahn, Eugene F., *Stuttering: Significant Theories and Therapies* (Stanford University, California, Stanford University Press, 1943, pp. 134-35).

...Froeschels presents a statement of his therapy:

“I have the method of ‘Breath-chewing’ for stutterers in the therapy which I have used in my clinic ambulatorium of late years. The patient is asked to make toneless, savage-like eating movements, at first by opening his mouth and using extensive movements of his lips and tongue, then accompanying the eating movements by sounds of breathing out. One must be very careful that he does not produce stereotyped ‘nganga-nga’ or mamamama’ but really accepts the psychical situation of wanting to chew some food. Thus we seize upon a physiological function which, in the details of action, is completely unpremeditated and which, on the other hand presents a far-reaching similarity to speech, since one can eat and speak with the same muscles. Thus the patient actually ‘chews his breath.’ The foundation of the method is then a complete diversion of the patient from the details of his articulation on the basis of identical comprehension - of the whole procedure of speech.

“The obvious point of the method is the actual substitution of a completely unpremeditated or automatic movement (i.e., eating), which, however, does not always succeed with the first attempt. Often the therapist must first demonstrate; but he must always be very careful that the ensuing psychical substitution is not disturbed by any secondary distractions. It would be all wrong to wish to reach this substitution gradually and progressively. So we let the patient ‘chew his breath’ about ten or twelve times a day for half a minute, with the expressly emphasized purpose that he is not to drill upon something but merely to call up the thought of the identity of speech movements and chewing movements again and again.

“Very soon the inner and outer procedure can be carded over to speech. The best way to do this is to have him chew his breath and, with the same attitude toward speaking as toward chewing, speak and read words.

“The cure for stuttering can be estimated to take an average of two or three months in the clinic. However, the achievement of good speech outside the clinic will sometimes take as long as is necessary to establish the correct speech- behavior patterns and right substitution in all speech situations. Besides strikingly rapid cures of two or three weeks, we have also several cases on record whose cures have required months. These special cases usually necessitated a profoundly psychological treatment. There were even several cases, though these are rare, which have defied our method. The method of breath-chewing has shown such value as a stuttering therapy that

it has become the chosen method in my clinic in recent years. A general psychotherapy is also necessary in many cases.”

Most stutterers learn a good many methods of self-distraction by themselves. They try to take their minds off their stuttering, hoping thereby to decrease their fear and subsequently their blockings. Unfortunately, as soon as the distractions become habitual they no longer distract. Also, since they are often rewarded by a release from blocking, they, too, become parts of the stuttering. Few therapists resort to obvious tricks of this sort whose only value is that of temporary distraction.

56. DISTRACTION A FALLACY * *By James S. Greene*

* Greene, James S., “Stuttering—What About It?”, *American Speech Correction Association-Proceedings*, Volume 1, 1931, pp. 172-73.

... The stutterer must not be made to think that direct or specific acts, instrumental or otherwise, is his special salvation, for in the last analysis it all evolves into one and the same thing—distraction. Treatment using any form of distraction cannot be lasting despite the fact that it has been employed so extensively. Whether the patient is told to press his nails, or swing his arm, or pace, rub a button, or learn to write all over again, or speak according to smoked tracings—no matter how scientific the explanation may be for doing the special trick, it’s all one and the same thing— specific distraction.

At one period I took a group of 25 stutterers and purposely tried out every trick of distraction we ever heard and besides improvising a few new ones for the occasion. The results were positively bad, for as soon as they discarded their temporary crutch they went back to their old style of stuttering speech. Two cases did show decided improvement and stayed so, but those were the ones which get better anyway with very little persuasion of any kind. They are the highly impressionistic cases that occasionally appear and immediately improve no matter what treatment they receive, as long as it is considered treatment by them. We found that tricks, distractions of any kind, interfere with the orderliness of the stutterer’s thoughts causing him to talk mechanically and interfering with his ability to concentrate on what he is talking about.

57. WHAT IS MEANT BY THE CURE OF STUTTERING? * *By West*

*West, "Similarities and Differences in the Treatment of Stammering (Stuttering) as Practiced in America," *Proceedings of the American Speech and Hearing Association, ASCA, Volume 2, 1932, 126-145.*

1. Cure, in the minds of some, is the learning of a technique by which the patient can speak in spite of his tendency to stutter, though his speech is not entirely automatic...
 2. Cure, in the minds of others, is a complete return to normal speech with no need for a constant watch lest it slip, in short, to an automaticity of speech.
 3. Cure, in the minds of others, is the reduction or elimination of the situations in which stuttering is elicited, - this by changing the attitude of the stutterer toward these situations. This is the mental hygienist's cure, and assumes that if the old attitudes are brought back again stuttering will return.
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It is often difficult to estimate with any degree of accuracy the success you will have with any single stutterer. Often the most severe cases make the most rapid improvement, while those with very rare moments of blocking remain impervious to treatment. This article tackles the problem of prognosis.

58. PROGNOSIS OF STUTTERING* *By Bryng Bryngelson*

* Bryngelson, Bryng. "Prognosis of Stuttering," *Journal of Speech Disorders, 1938. Volume 3, pp. 121-23.*

The question of prognosis of stuttering patients must be discussed from two points of view—the child whose experience with stuttering has been brief, the adult whose stuttering experience has persisted through the years with disastrous effects on the thought, emotion, and general behavior of the patient.

In the first place, 40% of stuttering children need not worry a clinician because before the age of eight, through general cerebral maturation assisted by developmental factors in the environment, stuttering subsides. In a few of these individuals there appear to be but slight remnants of an earlier severe type of stuttering. But the bugaboo is, how is a clinician going to know

which patient is going to end his sojourn as a stutterer at the age of eight. It is not predictable. The least one can say is that a speech clinician managing young stutterers ought to have a favorable prognosis in 40% of his cases.

After fifteen years of experience with some 5,000 stutterers, I am forced to say that an absolute cure in adult patients is very rare. By absolute cure I would mean the elimination of all symptoms, fear, sensitivity, habit patterns, avoidance and postponement devices, psychologic and physiologic crutches, the short rapid neurologic spasm, all of which the adult stutterer has fallen heir to.

One is not surprised at this hopeless picture when one envisages the seriousness of this disorder in adults. The experience of stuttering has not only more deeply imbedded the original neurologic pattern disintegrated as it probably was in the beginning, but habit patterns and emotional adjustments have likewise been preserved behind a host of ruses, masks, and ingenious hiding devices to soften the scourge and allay the fear of stuttering. Yes, stereotyped habit patterns and behavior reactions not only are inevitable in a person whose journey is constantly frustrated by exploiting and ravishing social and communicative situations, but are also extremely difficult to manage, uproot, and salvage in clinical procedures.

The more hopeful outlook for adult patients is that of setting up goals for improvement in their speech and personality. For after all a person need not necessarily think of himself as inefficient and inadequate because his speech patterns do not approximate the smoothness and synthesis of the speech of others. He rises or falls in relation to his point of view of himself as a stutterer.

Just what can be done along this line? The so-called secondary reactions already alluded to, which the stutterer has attached to his original primary neurologic spasms, can be eliminated. This can be done to the point where for all practical purposes his speech and emotional adjustments will serve him well in social and professional situations.

On the average this program takes about three months. The prognosis for *improvement* in the stuttering person is more hopeful, if the patient possesses the following qualities:

1. Sufficient intelligence to gain adequate insight into the goals and practices in clinical procedure.
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2. A degree of determination which so few people possess. It means sticking to a task unmolested by ordinary diversions of the clinic or society at large.

3. Self-discipline in fulfilling the requisites essential in the performance of duties which oft times are unpleasant and very difficult.

Lastly, it is essential for a good prognosis to be effective, that the patient is not held back by disturbing and non-co-operative factors in the home and school. Daily assignments must be carried out in the home and school as well as in the clinic.

If these qualities are present in the patient, we can feel more certain that when bad habits of adjustment have been altered, when secondary involvements have been minimized, and when the emotional and psychologic "under brush" has been cleared, a more integrated functioning of cortical dominance is more likely to obtain.

With the young stuttrer we have a more hopeful prognosis. We deal here for the most part with stuttering in the "raw." The primary neurologic spasm is our most important consideration. Here, too, we have the help of nature, who so graciously manages 40% of our patients into free speech.

59. ON PROGRESS IN TREATMENT * *By E. J. Boome and M. A. Richardson*

* Boome, E.J., and Richardson, M.A., *The Nature and Treatment of Stammering* (New York, E.P. Dutton, 1932, pp. 98-99).

A stammerer's progress is disconcertingly uneven, and he is liable to sudden relapses and equally sudden recoveries. One patient will make great strides during the first three months of treatment, only to halt for weeks; another will show no signs of progress for what seems to him an endless time, and then will bound forward as though released from a spring.

60. ON TERMINAL THERAPY* *By H. Heltman*

*Heltman, H., "History of Recurrent Stuttering and Recovery in a Twenty-Five-Year-Old Post Graduate College Student," *Journal of Speech Disorders*, Vol. 6, 1941, p.50.

For those cases for which we have specific records of recovery with no relapses over periods of eight years or longer, there appears to have been in every case, after the treatment, participation in speech activities such as debating and contest speaking while in school and considerable group and platform speaking for those who have finished school and gone out into adult life. This, I believe, is the cue to the solution of the perseveration problem in the successful treatment of stuttering.

61. HOW A SPEECH THERAPIST MADE A STUTTERER * *By Wendell Johnson*

* Johnson, Wendell, "Letter to the Editor," *Journal of Speech and Hearing Disorders*, June, 1949, Volume 14, Page 175.

The new year of 1949 started off for me with the following letter from a good friend who is a speech correction supervisor. There seems no point in merely filing it away out of sight. I'd like to share it with as many others as possible:

"A couple of weeks before Christmas a teacher related to me the following sad tale:

"In our schools we have a speech correctionist who comes once a week, takes the children out to a special class for 30 minutes. I did not send a little girl 634 years of age, from my first grade, because she has spoken perfectly all year and *does not have a speech defect*. But her mother called the principal about her and the speech therapist came to my room to get her. 'Why?' I asked. 'Because she stutters,' the speech teacher replied. 'But she has *never* stuttered yet in school!'

"The speech teacher insisted it would please the mother to have her child getting the advantages of the speech correction program, so I sent the child to the speech clinic. When she returned we heard her falter and hesitate for the first time in her classroom. The following week I sent her again. Upon her return we were having a 'sharing' period about Thanksgiving experiences. This little girl got up as usual, began with a smile, then blocked completely on the word 'turkey.' She struggled for quite a while, then she broke into tears and sobbed to her classmates, 'I can't say it because I *stutter!*'"

“You will fully realize how I feel about such a crime being committed under the name of speech correction. The pity is that thousands of kids across the country are being sent to such special group classes, the mere attendance, even if the word ‘stutter’ is never used there, being sufficient to create most unfortunate disturbances. I related this incident at a meeting last week, and one teacher asked me how else it could have been treated!

“Of course the problem in this case is, as usual, that average daily attendance in the corrective speech classes is the basis for financial reimbursement to the local district by the state. Had the speech therapist visited the home and treated the causes there where the stuttering appeared she could not have counted her time for excess cost reimbursement. She can count her time only if she spends it with the child, not if she spends it with the parents. Where are we going to wedge in with some revolutionary and drastic revisions of such static concepts of speech therapy?”

Since the last article in this chapter is concerned with the treatment of the very young stutterer, we present first a brief picture of him.

62. STUTTERERS UNDER THE AGE OF FIVE * *By Philip J. Glasner*

* Glasner, Philip J., “Personality Characteristics and Emotional Problems in Stutterers Under the Age of Five,” *Journal of Speech and Hearing Disorders*, 1949, Volume 14, pp. 135-36.

These children were referred to the author for diagnosis and treatment because of abnormal speech. In most cases the repetitions, prolongations, or blocking of sounds were in various ways different from the familiar repetitions and stumblings of children. Their speech was characterized by a change in muscle tonus, pitch, speed, and rhythm. This difference, in most cases, was observed by the physicians, usually pediatricians. One mother, who had been a nursery school teacher, said of her two-year-10-month-old child, “All children repeat at times in their speech, but hers is different from any I’ve ever heard. She is so tense when she speaks.” As a rule, there was an element of tension and compulsion in their speech which distinguished them from other children. Such children cannot be passed off lightly as merely being in the so-called “primary stuttering” stage when speech is simply to be ignored. Rather, it must be recognized that some emotional disturbance has disrupted their normal pattern of speech.

The attitude of these children toward their speech was extremely difficult to determine since the problem was never openly discussed by the therapist. While it is true that young children do not have the deeply rooted speech fears and situational anxieties characteristic of adult stutterers, there was evidence that some anxiety and consciousness did exist. Some of these children, whose attention had apparently not been directed to their speech, after a prolonged repetition or block would blurt out or whisper, "I can't talk." Some showed their frustration by crying, others by stamping their feet or walking away without completing their sentence. Some placed their hands over their mouths whenever they were about to stutter. Two had been known to avoid speech for a period of two days. Obviously, many of these children were disturbed or anxious while stuttering, but whether this is the cause or the effect of the stuttering cannot readily be determined. The only thing that can be said with certainty is that many children under five when stuttering do *not* exhibit the same calm, totally unconcerned attitude characteristic of normal children when they speak with usual childhood repetitions and speech inaccuracies.

In contrast to the variety of theories and therapies for the older stutterer, he who we might call secondary or chronic, we find a large and almost universal agreement concerning the treatment of the small child with primary stuttering or excessive non-fluency. Dr. Brown speaks for the majority of speech therapists in this article.

63. ADVISING PARENTS OF EARLY STUTTERERS * *By Spencer P. Brown*

* Brown, Spencer F., "Advising Parents of Early Stutterers," *Pediatrics*, August, 1949, pp. 173-75.

It is important to find out what explanations and theories the parents have to account for the speech difficulty. The most popular explanation is that the child "thinks faster than he can talk," and is usually offered with an air of pride in this evidence of the child's superior intelligence. A close second is that he "talks faster than he can think." "Nervousness" is another favorite theory. When this is given, one should seek the basis of the tensions and insecurities in the home that cause the "nervousness." Parents who proudly insist that their child is "high-strung" are especially likely to suffer themselves from anxieties and maladjustments of various sorts. Though most of the questions asked relate to the child, the real purpose of the history

is to secure an understanding of the parents. Needless to say, the child should not be present during the taking of the history.

Complete physical examination should be routine. It will not, of course, reveal the cause of the stuttering, but it enables the parents to accept positive reassurance that no organic abnormality is related to the stuttering.

Speech examination should be carried out in two parts: in the parents' presence and with the child alone with the physician. The behavior of the parents during the child's nonfluencies should be observed, and the child's reactions to their behavior. The presence of tension during repetitions should be noted, and whether there are other forms of interruptions such as tonic blocks, prolongations of sounds, and excessive use of "uh" or "ah." Facial grimaces and tension in parts of the body other than the speech mechanism should be watched for.

When examining the child alone, the physician should be as informal as possible. Since the child is already suffering from too much pressure on his speech, the physician must be careful not to appear to be forcing the child to talk. At the conclusion of the speech examination, the child should be given brief but firm reassurance, and then dismissed while the physician returns to counsel the parents.

The basis of the first counseling session following the history and examinations is a discussion of the theory of stuttering herein presented. At the Iowa Speech Clinic, this occupies approximately an hour. The development of speech is first discussed briefly, and the normality of repetitions in infant and preschool speech is strongly emphasized. The way in which diagnosing normal repetitions as stuttering leads to tension and anxiety is discussed.

Through all this discussion, care is exercised to allay parental guilt reactions. Many parents feel that they are being "accused" of causing their child's stuttering. One must tactfully point out that whatever mistakes the parents made were the result of genuine concern and a sincere but misguided attempt to "improve" their child's speech. Millions of others have made the same mistake. In the presence of what he regards as a defect in his child, any loving parent will try to do everything he can to correct it. He must not be permitted to blame himself for his misdiagnosis or his unfortunate "treatment." Only a few parents are trained in speech pathology.

If the child is showing little or no tension in his moments of nonfluency, the parents are advised that such interruptions are within or close to normal limits, and are in no sense a cause for concern. Strict injunctions are given against expressing any sort of disapproval of nonfluency. If the parents and others in the child's environment do not react at all to the repetitions, the child himself will eventually cease to react, and the repetitions will no longer be a problem to the child or to anyone else. More important than the elimination of the parents' overt reactions to non-fluency is the more fundamental business of changing their notion that their child's speech is abnormal. If they persist in their notion that the child "is not talking the way he should," their efforts to suppress overt disapproval of interruptions will be only temporarily and partially successful. The parents must unreservedly accept the assurance that their child's speech is essentially normal if they are to stop worrying about it.

This is by no means the same as telling the parents to "forget about it," or that the child will "outgrow" his nonfluency. Such ill-considered advice is too often given. But it fails completely to relieve the parents' concern. It does not alter their conviction that the child's interruptions are abnormal, for they have no basis on which to think otherwise. They cannot "forget it"—and they don't. Actually, we do not wish them to "forget" the interruptions. We simply want them to evaluate them properly. Further conferences and discussions are usually needed, and the parents are usually requested to make careful observations of conditions under which the child's nonfluencies occur. Eventually, of course, as a result of alleviation of anxieties, the parents cease to notice most if not all of the child's repetitions. This goal can only be approached gradually and indirectly.

If the history has disclosed parental over-solicitude, improper standards or methods of discipline, or other such problems, it is best to defer attempts to correct these until succeeding conferences, but they should not be ignored. Every effort should be made to render the child's home environment as favorable as possible.

Ideally, the parents should be seen several times at intervals of two to three weeks. After this, if no complicating problems require more frequent visits, several follow-up conferences at three to six month intervals are suggested. For the second conference, assignments are often given the parents. They are instructed to make detailed observations on the speech of children outside the family whom they regard as nonstutterers. They are asked to count the

repetitions heard in 5 or 10 minutes, for example. They may also be asked to observe nonfluencies in informal, extemporaneous adult speech. These assignments help to convince the parents of the soundness of the statements that have been presented to them.

Drug treatment is strictly contraindicated. Phenobarbital is frequently prescribed for stutterers, but from the foregoing discussion it is obvious that such medication is irrational and harmful. It tends to reinforce the parents' feeling that something is seriously wrong with the child. Quite apart from the theory and therapy herein presented, it may safely be said that none of the long list of drugs occasionally given to stutterers has any rational basis or any adequate proof of clinical effectiveness.

Like any other therapy, that outlined above has its failures. These almost always occur when the parents, for whatever reason, are unwilling or unable to accept the explanation given them. It is usually possible to predict after the first or second conference whether the parents are going to be able to stop their pressure on their child's speech and thus permit him to escape further difficulty. *Many* of these failures are the fault of the therapist. If he arouses serious guilt feelings in the parents, they may reject his explanation so as to escape the burden of guilt. But the most tactful and skillful physician will be unable to convince some parents.

It should be emphasized that this therapy is designed for those children who have not developed anxieties concerning their moments of nonfluency and marked muscular tensions during those moments. It is adequate treatment for these cases only. Children who have become confirmed stutterers—those in whom significant anxiety and tension are present—almost always benefit from improving the psychologic environment and elimination of expressions of parental disapproval of nonfluency. However, they almost always need additional treatment in the form of direct help from a speech correctionist.

64. REMISSION OF STUTTERING FOLLOWING TOTAL LARYNGECTOMY * *By V. O. Mabel Oswald*

* Oswald, Mabel V.O., "Oesophageal Voice Following Total Laryngectomy," *Report of the Conference on Speech Therapy*, 1948, p. 94.

Miss Oldrey: Have you ever had experience of total laryngectomy with a man who was a life-long stammerer?

Miss Oswald: No.

Miss Oldrey: We had a case. The first week, when we were trying to get the sound it was difficult, but as the man is learning to use the oesophageal voice the stammer is disappearing. He is 58 and has stammered all his life and never had any treatment for it.