THE MECHANISM OF SPEECH.
A TRANSLATION WITH CRITICAL INTRODUCTION
OF CHR. B. FLAGSTAD'S PSYCHOLOGIE DER
SPRACHPAEDAGOGIK, CH. II A.

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PREFACE

Apart from the problem of transferring concepts from one language into another, I had to face the additional difficulty of the nature of the technical terms used. It is often hard to draw the line between the terms employed in psychology and words of more general meaning.

To Dr. J. Lassen Boysen, Professor of Germanic Languages, my sincere thanks are due for valuable suggestions and kind assistance.

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INTRODUCTION

Under the heading "Mechanism of Speech," Chr. B. Flagstad in his book: *Psychologie der Sprachpädagogik*, Ch. II A, deals in a stimulating and thorough manner with the real problems of language that center around the ways in which sound elements are combined into words, phrases, and sentences. In discussing such a difficult topic it is natural that there had to be taken into consideration all those factors which could help to understand the special object of the author's efforts namely, their relation to pedagogy. It is a fact that writers on this subject often can not resist the temptation to wander away from the linguistic domain in order to lose themselves in logic, psychology, or even pure speculation. This can not be said of our author, although he does not fail to realize the importance of linguistic psychology and historical grammar. In other words, Flagstad constantly bears in mind the central region of his subject: words, phrases and sentences.

In order to land in the midst of the author's problems, we need only to ask this simple question,
which many an educated person, who thinks he knows
his grammar, would not hesitate to answer immediately:
What are words, phrases, and sentences? Although it is
true that any formal definition is subject to the law
of imperfection (if I may call it so), such definition
is nevertheless a necessity and should not be purposely
evaded or replaced by circumlocutions, as some theorists
are inclined to do.

The definitions given by such authorities as
Wundt, Paul, Sweet, Delbrueck, etc., are collected and
discussed by Noreen.¹ Therefore I refrain from quoting
them here verbally. It will, however, be of interest
to glance rapidly over the opinion of a more recent
linguist on word definitions and compare it with
Flagstad's definition which reads as follows: "The
word is a combination of sounds which is based solely
on acoustic associations without intervention of semant-
ic associations, and which is formed under the influence
of, and as the expression of, a concept without any
conscious activity whatsoever to combine or classify."²

With the following four elements in mind: (1)
the speaker, (2) the listener, (3) the thing spoken

¹Noreen-Pollak: Einführung in die Wissenschaft-
liche Betrachtung der Sprache, p. 434 ff.
²See p. 3, below.
of, and (4) the actual symbol or word, Gardiner finds it easy to give, not indeed a quantitative, but at any rate a qualitative definition of the word. Gardiner's definition of a word reads as follows:

"A word is an articulate sound-symbol in its aspects of denoting something which is spoken about."³

When reading this definition Flagstad would probably refer us to this statement of his on definitions in general: "The definitions which are generally given are too indefinite, or they are based on terms just as vague as those to be defined."⁴

Noreen points out that the term "word" has been explained now from the phonologic viewpoint, now from the semasiologic viewpoint. In his opinion, the definition should be given from the morphologic viewpoint.⁵

Whoever reads and compares the numberless definitions of the term "word" formulated by numberless writers can say this much with certainty: There are practically as many opinions on the definition of a word as there are writers on the subject, and the perfect definition—if such a definition is at all

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⁴See p. 46, below.
possible—has still to be found.

In order to show that ready-made words are not stored up in the speaker's brain, and that the arrangement of the sounds in the brain requires an effort, Flagstad calls attention to abnormal conditions in which speech is disturbed. Bloomfield, however, cautions against relying too much on the physiologist in matters of speech-mechanism. This author says: "Many injuries to the nervous system will interfere with speech, and different injuries will result in different kinds of difficulty, but the points of the cortex are surely not correlated with specific socially significant features of speech, such as words or syntax; this appears plainly from the fluctuating and contradictory results of the search of various kinds of 'speech centers.'"6

In speaking of compound nouns Flagstad expresses himself very cautiously when he states that in a compound noun it is by no means impossible that the meanings of the component parts are "continuously instrumental in the composition of the sounds in question, as, indeed, they are originally responsible for the combination."7 Once more our first question is:

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6 Bloomfield, Leonard: Language, p. 36.
7 See p. 11, below.
What is a compound noun? Is it felt as ONE word or two or more words? To decide this question, Jespersen makes use of grammatical (syntactical) criteria, and suggests the following: "We should never forget that words are nearly always used in connected speech, where they are more or less closely linked with other words: these are generally helpful, and often quite indispensable, to show the particular meaning in which the given word is to be understood." In another place the same author says: "A term is wanted for a combination of words which together form a sense unit, though they need not always come in immediate juxtaposition and thus are shown to form not one word but two or more words." The problem is made still more difficult by the fact that every language (at least the Indo-Germanic languages) has its own rule as to what shall or what shall not constitute a compound word. Numberless investigations have been made. An especially good presentation of the problem is given by Darmesteter.

The author does not fail to draw pedagogical conclusions from the theories he has developed. Apart from the fact that Flagstad, an experienced pedagogue

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8Jespersen, Otto: The Philosophy of Grammar, p. 95.
9Ibid., p. 95.
himself, has put his pedagogical theories to a practical test, the reader is likely to agree with the following important points which are stressed in connection with words: (1) In languages that are to be used orally the greater or lesser facility with which words are formed, asserts itself directly through the greater or lesser rapidity in speaking and the sureness in articulating: (2) In the case of a language that one desires merely to read or at best to understand by ear the supposition that the degree of fluency with which the word elements are joined is of little importance, is not justified, (3) all linguistic comprehension presupposes co-operation on the part of the reader or the hearer, (4) to understand a foreign language it is not sufficient merely to know the words and combine them with the right ideas, but the sound elements of each individual word must be combined with such fluency that this combination, where it is to the point, is not pushed aside by competitive ideas because of accidental circumstances, and (5) the best means to strengthen the association of sounds naturally is to speak the words aloud. 11

11See pp. 13, 14, 16, below.
It is realized by all linguists and grammarians that it is almost next to impossible to draw the line of demarcation between compounds and phrases, especially since the term "phrase" is used in a different way by various writers. According to Jespersen, recent grammarians "indulge in curious exaggerations and misconceptions" connected with the problem here discussed. "The peculiar nature of phrases," Flagstad says, "lies in the fact that the individual members can not be replaced by others of the same meaning; and we can not possibly give another reason for this restriction of linguistic freedom than that of custom." 13

Whoever learns a foreign language can not fail to experience how cumbersome it is to find his way among the endless number of phrases, but he will likewise experience how impossible it is to make any headway in a foreign language without sufficient familiarity with at least the most common phrases. Although it is true that the so-called set phrases (which, in fact, are so difficult to distinguish from compound words) consist of originally separate words, and have in the course of time become "mechanized elements" in speech

13 See p. 17, below.
(to use an expression of Gardiner), Flagstad points out that a speaker must nevertheless be careful, because there exists always the possibility that he is likely to extend the application of a phrase "beyond its natural area."\textsuperscript{14} The expression "natural area" in this connection is not quite clear to me. I would prefer to speak of the area of a phrase as "conventional." Furthermore, I should like to ask Flagstad whether he knows for sure what a person "actually thinks" when he uses a phrase, even a stereotyped expression. A set phrase may be as full of meaning as any, though the original meaning has faded.

Flagstad's suggestion of analyzing phrases in foreign language teaching is, according to my opinion, not only important but an absolute necessity.

Of still greater importance are the author's remarks on so-called "good translations," which he calls the worst practice, so far as the strengthening of the acoustic units of the foreign tongue is concerned. Here we are dealing with a subject which no language teacher can afford to dodge. I do not deem it necessary here to argue with those "educators" (mostly laymen,\footnote{\textsuperscript{14}See p. 19, below.}
I hope) who really believe that in modern language teaching we should faithfully imitate the child's way of learning its mother tongue, although I do not mean to say that we should not apply to language pedagogy whatever lesson we can learn from such observation. This is what our author adopts as the most practical method in dealing with foreign phrases in modern language instruction: "Children...learn such expressions of the mother tongue [that is, phrases] to a great extent as acoustic units...But in the artificial acquisition...it would be a roundabout method not to take advantage of this fact. On the other hand, it must certainly be admitted that a method in which translation is made the chief means of instruction, and in which connected speaking or reading aloud is neglected, is only slightly conducive to the acquisition of phrases."¹⁵ This viewpoint harmonizes with the principles of the "direct method" as set forth by Prokosch. Prokosch says: "The new material (sounds, words, phrases and sentences) must be presented orally, and by means of well-directed, systematic practice, all hesitation and indecision must be overcome."¹⁶ It seems to me that when Flagstad

¹⁵See p. 23, below.
uses the expression "good translation," he is thinking of the practice in German secondary schools, where, indeed, the teacher insists on the pupil's capability of rendering a good idiomatic translation into the native tongue. What Flagstad omits to mention is the fact that the teacher is required to make sure that the pupils are able, if advisable, to give first a literal translation. The advantages of the literal translation must be upheld in spite of certain disadvantages because it necessitates a careful grammatical analysis. A superficial translation should by no means be tolerated, because it encourages superficial thinking, and leads to the "butchering up" of the native tongue. Is the influence of the foreign tongue really so strong that the English-speaking pupil runs the risk of becoming "Germanized" or "Frenchified" by taking a few weekly lessons in those languages? I do not think so, especially since the set of native habits is otherwise so hard to break. It is simply a case of mental sluggishness on the part of the pupil, "Denkfaulheit" as the German pedagogue calls it. From the very beginning the teacher should counteract such evil practices by assuring himself that the pupils have the right conceptions, and in cases where the pupils' vocabulary and imagination are not sufficient, by teaching them the intelligent use of a good dictionary.
The importance of the acoustic-motor association holds for grammatical endings, too, as Flagstad, supported by Nauser, correctly observes. That a person who is not a native German or, at least, one reared in a German environment ever succeeds in completely mastering the extremely difficult grammatical endings of that language, is indeed a very rare case, according to our author.

Since we are here not so much interested in theories concerning grammatical endings as in the principles according to which such grammatical endings should be taught, we might as well directly turn to the author's opinion on grammatical drill. Evidently Flagstad opposes our modern theorists who are not in favor of such drills, basing their argument on the fact that the pupils associate no meanings with "mechanically repeated" forms (principal parts of the verb, declination and conjugation paradigms, etc.) "No matter how sound this idea seems to be," our author remarks, "one is nevertheless in practice driven back to drills in inflection... By means of drills in inflection—even if the pupil does not associate any meaning with the words—one succeeds in training him in acoustic associations which, it is true, obtain their proper meaning only by being fused with definite concepts, but
which certainly prepare to bring about this fusion by producing a certain fluency in connecting sounds.\textsuperscript{17} There is no doubt that Flagstad means to have accidence taught in conformity with the principle of proportion. The necessity of grammatical drill is also emphasized by Otto. This pedagogue insists on mechanic-imitative exercises (mechanisch-imitative Uebungen) in order to acquire the correct use of grammatical endings.\textsuperscript{18} Another source of valuable information on this point can be found in Aronstein, who gives a systematic presentation of the problems of the language teacher. Evidently this author is also opposed to the modern theorists when he writes as follows: "These exercises (declension, conjugation, and comparison) are nevertheless useful and necessary in order to determine the place of a word in the linguistic system, and in order to mechanize or make automatic its application by 'hammering' them into the brain of the pupils (einpauken)."\textsuperscript{19}

Although it is evident that vigorous and energetic articulation of the foreign sounds on the part of the

\textsuperscript{17} See pp. 34–35, below.
\textsuperscript{18} Otto, Ernst: \textit{Methodik und Didaktik des neusprachlichen Unterrichts}, p. 34.
\textsuperscript{19} Aronstein, Philipp: \textit{Methodik des neusprachlichen Unterrichts}, p. 34.
language teacher, as well as on the part of the student, is to be insisted on, it, nevertheless, often occurs that neither teacher nor student practices what they realize is important. That a beginner may occasionally become disgusted with the many inflectional endings, especially the student of German, is understandable; but it can not be excused that a teacher, in order to cover up his somewhat misty conception of the grammatical endings, consciously or unconsciously adopts a lax or hurried articulation, or that he passes over the same tendency in his pupils. To discuss here the numerous opinions for and against grammatical drill would be beyond the purpose of this introduction. May it suffice to refer to a few standard works, where the reader can find a more thorough discussion of the topic. 30

30 Atkins, Henry Gibson: The Teaching of Modern Foreign Languages, Ch. IV.
Hanschlin, Charles H.: Methods of Teaching Modern Languages, Ch. IX.
Jespersen, Otto: How to Teach a Foreign Language (Translated by Sophia Yule Olsen Bertelsen), Ch. IX.
From the discussion of words and phrases Flagstad turns to the larger divisions of speech: sentences. Wundt's statement that a sentence represents a combination of words is attacked by our author because of the fact that a single word can also assume the role of a sentence. All writers who try to answer the question what a sentence is, agree with Flagstad in saying that it is not easy to answer that question satisfactorily. Jespersen calls certain definitions merely "bogus definitions" in which technical words are used to conceal the want of clear thought."21 It will be of interest to pick out some of the numerous definitions of "sentence" and compare them with Flagstad's, which reads as follows: "A sentence is a word or a combination of words which can not be further resolved into units of the same kind, and which corresponds to an arbitrary (though often naturally presented) sector of consciousness, and which indicates by a correct form that the speaker desires to have the logical relation (shown by the grammatical construction) between concepts (expressed or understood) accepted as valid."22

22See pp. 55-56, below.
In other words, if a word or a combination of words does not satisfy all these given conditions, it can not be called a sentence. Interjections, for instance, can not be sentences (though to all intents and purposes they seem to be sentences), for the reason that they do not correspond to clear concepts, and can not enter into grammatical combinations. It would indeed be ideal if all sentences were based on CLEAR concepts!

But if we admit that a word can be at the same time a sentence, the distinction between the two disappears. This argument is met by Gardiner, who asserts that the terms "word" and "sentence" refer to totally different aspects of linguistic phenomena (a rat can be a rodent from one point of view, and a nuisance from another). If Gardiner thinks he is justified in defining terms from different aspects, one might as well define the term "sentence" from the viewpoint of the speaker and, on the other hand, from the viewpoint of the hearer. Gardiner's own definition reads as follows: "A sentence is an articulate sound-symbol in its aspects of embodying some volitional attitude of the speaker towards the listener."23

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A well-written discussion of opinions on the sentence is given by Buehler. According to Gardiner, this writer starts from the view that speech has three functions, namely, self-expression (Kundgabe), demand for response (Auslosung), and description (Darstellung). He shows, however, that none of these functions alone yields a satisfactory definition of the sentence, though this must necessarily be defined, not in reference to its mode of origination, but in reference to its purpose. Buehler therefore finds the essence of the sentence to lie in its possession of what is common to the three functions of speech, namely, purpose (Sprachzweck) or sense (Sinn). Now Gardiner believes that the former term, when analyzed further, leads directly to his "volitional attitude" of speaker to listener, though Buehler fails, as Gardiner remarks, to recognize the absolute indispensability of the listener to language-theory.

Flagstad points out that the theory of sentence definition leads to important pedagogical consequences. He insists on an absolutely clear conception of the sentence, in order to prevent wrong pedagogical

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procedures. Wundt's conception that the idea is present in all its entirety before the sentence presents itself, is not satisfactory to Flagstad, because it is lacking in clearness concerning the nature of the preliminary idea. The question must be answered: How are the elements of the sentence put together? Another weak point of Wundt's theory consists, according to Flagstad, in the fact that it is based almost entirely on introspection.

Since the sentence plays such an important part in speech, the language teacher must take this fact into consideration when he begins instructing the pupil in the use of the foreign tongue. Now the question arises: Shall he insist that the pupils express themselves in sentences at the very outset? The following statement of our author answers this question in the negative: "The sentence is neither the starting-point for the natural speech acquisition of the child, nor can the artificial speech acquisition of the pupil begin with the learning of sentences." 26 Flagstad continues: "The pupil may perhaps commit to memory a series of words which constitute a sentence in the objective

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26 See p. 82, below.
sense, but not so from the subjective standpoint of the pupil, because he is lacking the current of concepts which make this very word combination necessary as an expression of thought. Does Flagstad mean to say that there is any harm in having the pupils memorize a certain number of regular sentences even in the early stage of learning? Those sentences, in my opinion, could serve as models even if the otherwise necessary clear conceptions should not yet be present. The methods which require the beginner to express himself in the foreign tongue without having any grammatical notions whatsoever, relying solely on imitation of the instructor, are rejected by Flagstad as irrational, not to say impossible.

Another important point that has to be considered in this connection is the fact that the result of such irrational demands will be that unlimited mistakes will be made, and that the evil practice is likely to become habit-forming.

Flagstad's emphatic statement "that natural sentence construction reposes on grammatical notions" unconsciously applied, I should like to add, is directed against the misconception that the mother tongue is spoken "without grammar," and that grammar is only a
product of speculation.\textsuperscript{27} It is a strange and regrettable fact that many psychologists, whenever they discuss grammatical categories, fall into the mistaken conception of thinking of grammar only as the formation of rules and definitions. They fail to see, as Flagstad rightly points out, that the systematic facts of grammar correspond to something real. He maintains that unconsciously even the most primitive people are grammarians. The groping efforts of children (which lead often to missteps), when gradually building up their linguistic system, may likewise serve to throw light on this point.

The theory of sentence formation leads to the question: How shall the instructor of foreign languages proceed to teach his pupils how to form sentences in the foreign tongue? In the first place, he should never forget the sound principle of proceeding "from the simple to the complex."

Before going more deeply into this difficult matter, the author gives an explanation for the well-known fact that quite often pupils, in spite of a thorough knowledge of grammatical rules, violate these rules consistently, when they have to speak or write the foreign

\textsuperscript{27}See p. 84, below.
language. The cause, according to Flagstad, is the overtaxing of the attention of the pupil, who is anxiously concerned about the content of the sentence as well as its linguistic form. The following remedy is suggested: "Translation from the mother tongue of sentences which are prepared in accordance with grammatical considerations."28 Whether such sentences should be connected is said to depend on the grammatical points the teacher wishes to stress.

Since our author admits that this remedy has been often attacked recently, it will be of interest to look into the "how" and "why" of the opposition. In Kittson, the author of a well-known book on language teaching, we read as follows: "To set our pupils to translate English into French and German as a means of teaching them those languages is to put in their way those very difficulties from which it should be our aim to deliver them. It is to increase to a maximum the temptation to error. If there is anything at all certain about modern language teaching, it is this, that most of the mistakes made by the learner are due to the interference of his mother-tongue."29 In another place the same

28See p. 86, below.
writer says: "The objection has been advanced against "direct" work that it is not a sufficiently rigorous discipline, since it allows the pupil to avoid the difficulties of the language."\textsuperscript{30}

At this point I think it necessary to call attention to the fact that Flagstad does not say that translation is the ONLY practical means toward sentence construction. This is quite often overlooked by the opponents of the translation-method. Jespersen gives a clear conception in which translation can be and really is used. He sums up as follows: "(1) Translation INTO the native tongue is a means of getting the pupil to understand the foreign language...(2) Translation into the native tongue is a means of testing whether the pupil understands...(3) Translation FROM the native tongue is a means of giving the pupil practice in producing something in the foreign tongue. (4) Translation from the native tongue is a means of testing whether the pupil can express himself in the foreign tongue."\textsuperscript{31}

\textsuperscript{30}\textit{Ibid.}, p. 129.
\textsuperscript{31}Jespersen, O.: \textit{How to Teach a Foreign Language}, (Translated from the Danish), p. 56-58.
Palmer refers to the exclusion of translation as an "uneconomical and unnatural principle."

Atkins maintains that "translation from a foreign tongue into English, coupled with an independent study of the native tongue, is both a useful and a necessary exercise."

It is significant that the "reformers" at first condemned translation altogether, but in the course of time became more moderate. However, the "direct" method still insists on reducing translation to a minimum.

May these samples suffice to show that the opinions on the value and amount of translation differ considerably. It is to be noticed that there are many language teachers who emphasize that no translation FROM the native tongue should be attempted in the elementary stages, that is, before the new speech habits are sufficiently formed.

Language teachers know only too well what Flagstad means when he complains that the pupils in translating into the mother tongue often fail to form a picture of the content. From my own experience I have learned that

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32 Palmer, Harold E.: The Scientific Study and Teaching of Languages, p. 93.
33 Atkins, Henry Gibson: The Teaching of Modern Foreign Languages, p. 125.
they sometimes indulge in the wildest guess-work.
When I assigned my students (second-year German) the translation of a simple description of the North Sea into English, a few students turned in NOT A TRANSLATION, but a vivid description of the Ocean, which I presume, they had seen at Galveston. Among many other things not mentioned in the original, they had introduced beautiful palm trees, huge crowds of white and black people in the latest bathing suits, ships loaded with cotton, etc. That was apparently the result of my urging them "to use their imagination." I grant that Flagstad realizes how difficult it is to control one's own thoughts. Now then, is it within the teacher's power to prevent, for instance, the pupil from thinking of "knife," when he sees the word "Messer" in print? Honestly, I do not know.

Since every intelligent person aims at fluency of speech, it is natural that he likewise should not lose sight of such ideal when struggling with a foreign tongue. Before suggesting means for creating favorable conditions to the formation of sentences (it is understood that fluent speech is expressed in sentences), Flagstad investigates such conditions as are unfavorable in that respect, and their possible elimination. Anacoluthon and contaminations are, the author points
out, by no means limited to uneducated persons. A very good definition of contamination illustrated by abundant examples is given by Paul. We read: "By contamination I understand the process by which two synonymous forms force themselves simultaneously into consciousness, so that neither of the two makes its influence felt simply and purely: a new form arises in which elements of the one mingle with elements of the other."³⁴ Already the earliest linguistic monuments of the Indo-Germanic languages contain examples of the phenomenon of contamination.

Flagstad maintains that in order to be able to overcome speech-disturbances, the speaker must remove the sources of such disturbances. He lists the disturbing elements in two categories, namely, "(1) those which lie in the nature of the complexity of the conceptual life, and (2) those which are a consequence of the intervention of the emotions."³⁵

The fact that a good thinker is not necessarily a good speaker is obvious, but, as Flagstad points out, it is not always recognized that a good speaker need

³⁵See p. 90, below.
not always be a good thinker. Our complex modern life demands, however, that an educated person should be able to express himself fluently and intelligently not only on ordinary topics, but also on topics which presuppose difficult mental work. Concerning the latter case the author calls attention to the two factors that have a direct bearing on a smooth operation of the mechanism of speech, namely: "(1) the consumption of the speaker's energy by the speech-activity during the act of speaking, and (2) the necessity of frequent changes of the planned linguistic expression in accordance with the continual transformation of the total notion into general concepts." As the best road to eloquence, Flagstad recommends a thorough, if necessary, repeated, elaboration of original thoughts; then the natural result will be that "verba sequentur."

Speaking of the relation of the actual expression of the sentence to the mental preparation for the sentence, Pillsbury distinguishes at least three cases: "(1) one, in which expression and thought are a unit; (2) a second, in which thought and speech are distinct, but the utterance comes a sufficiently long time after

\[36\] See pp. 90-91, below.
the thought to give full development to a whole thought before expression; and (3) the third, in which speech merely lags behind thought, and one is thinking of what is to be said a little later, as one speaks a sentence that has been formulated earlier.37

If we admire fluent, correct speech in the mother tongue, how much more should we admire a like fluency and correctness in a foreign tongue! Although the difficulties must be fully realized (and this is not always done) it is by no means impossible to accomplish such an ideal, as the author tells us. It occurs, however, not infrequently that mastery of a foreign language is obtained at the expense of one's native language. Carlyle, for instance, is said to have become influenced by his preference for German language and literature to such extent that his English suffered considerably.

The author's statement that "in the elementary stage of language instruction the difficulties are legion"38 will, I believe, not be contested.

According to Flagstad, it is a necessity that when guiding the pupil in sentence construction, the

38See p. 92, below.
teacher should realize the following two points:

"(1) to accustom the pupil to keep the notion un-
contaminated, possibly by having recourse to his imag-
ination, so that a graphic picture of the notional content
is called forth, and (2) to accustom the pupil to pro-
nounce the sentence as a unit without his reflection on
the details during the utterance." 39

The soundness of this principle is obvious, but
putting it into practice is quite a different thing.
This is what the author suggests: He starts out to
say that language instruction should be based not solely
on translation and grammar, because in that case the
pupil is induced to devote too much attention to gram-
matical considerations, so that when called upon to
express himself in the foreign tongue, he is bound to
lose sight of his very purpose which is to express him-
self fluently in complete sentences. There should be
no reason for the teacher's becoming alarmed over the
numerous errors which are a natural consequence of the
application of the above-given rules, provided the
pupil shows an earnest willingness to profit from his
mistakes.

39 See p. 92, below.
As indicated above, Flagstad does not wish to do away with translations. What he wishes to emphasize is that translations and grammatical exercises should be supplemented by appropriate exercises in composition, conversation, reading aloud, and dictation. It should be borne in mind that the "importance of having a clear conception of the sentence before its expression is begun" applies with equal force to written exercises.

Because of the fact that the influence of the emotions on speech progress is so universally known, the author feels justified in treating this subject only briefly. Among the many factors which are likely to intrude upon fluent speech utterance, the fear of committing mistakes is frequently overrated, Flagstad maintains. Occasionally we meet with a rather curious disturbing influence, namely, the elation over the fact that "a sentence has been started so nicely." Since the fear of mistakes in its turn leads to lack of confidence, Flagstad is very anxious for the teacher to avoid making the pupils self-conscious; on the contrary, the teacher should endeavor to create in the classroom an atmosphere of ease and cheerfulness. Qualities such as Flagstad deems indispensable for the successful

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40See p. 94, below.
41See p. 95, below.
language teacher, namely, authority, a sense of humor, a pleasing voice, careful and vigorous articulation, and a happy disposition, are included in the definition of PERSONALITY.

In our modern age, it must be said that there exists the danger of creating in the pupils' minds the idea that mastery of a language can be accomplished in a playful way, and that a few colloquial phrases spoken in the foreign tongue will qualify a person as a linguist. I rather feel inclined to have even the beginner realize that language study is a serious and tremendous enterprise, but all along carries sufficient recompense for energy exerted. For further particulars on the influence of the emotions on the learning process, I refer to some standard works on language teaching mentioned in footnote 20, p. xvii.

In speaking of the educational value of language study, the author rightly emphasizes the significant fact that language instruction, in addition to its importance to pedagogy in general, greatly helps to develop social poise. Flagstad finds it hard to believe that "doubts have been expressed (even by German pedagogues)" as to the educational value of modern languages.

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42See p. 101, below.
It can be noticed today that the time of heated controversy on this issue is a matter of the past, and that even non-linguistic circles no longer ridicule the ancient view of identifying language with logic.

In Flagstad's opinion, it is not so much the knowledge of foreign languages and literature that is of such educational value for the pupil, but rather the means of gaining such knowledge.

So far, Flagstad deals in the main with the mechanism of speech as it concerns the speaker, but now he turns his full attention to the listener and the reader. The question must be answered: How is it possible for the listener or the reader to form a state of consciousness that corresponds to that of the speaker or the writer, respectively? It has been shown that when a person speaks, he is not stringing one concept to another, but he is analyzing a compound idea, so that it will be articulate. The speaker or the writer must adapt his analysis to the symbols at his disposal, and the listener or the reader must put these symbols together. Flagstad maintains that understanding would not be possible without supplementation and anticipation on the part of the hearer or the reader. A similar view is expressed by Pillsbury, who says that reading is "a process of reconstructing the meaning of the
author on the basis of a few unseen symbols in the light of the knowledge of the reader and in terms of the purpose that may be guiding him at the moment." 43

In another place the same author says: "It is probable, too, that just as sentences are appreciated as wholes in reading, they are also appreciated as wholes in listening... The process and laws of supplementing also hold for listening." 44

Foreign language students who aim only at a so-called reading knowledge, do well to bear in mind what Flagstad states in the concluding sentence of his discussion on the mechanism of speech: "Assurance in reading a language is based on a DIRECT consciousness of what the language permits and what the language demands." 45

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44 Ibid., p. 146.
45 See p. 105, below.
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MECHANISM OF SPEECH

1. UNITY OF WORDS
   a. Definition of a Word—Combination of Elements—
      the "Ego" of the Word—

      The use of speech is based on a combination of
      sound elements according to certain laws which are
      applicable to each language. The combinations which
      take place are, for the most part, brought about with-
      out direct intervention of the consciousness. In
      connection with the train of thoughts which one strives
      to express, a series of sounds presents itself to the
      consciousness—sounds which necessarily must be directly
      connected with one another. Often these sounds but
      gradually reach our consciousness while we are speak-
      ing, although, as to their sequence, they may from the
      outset presuppose one another in their connection.
      An activity is expressed here which, according to a
      term coined by Hermann Paul, is founded on a "vocal
      mechanism" (sprachlicher Mechanismus). The mechanical
      operation manifests itself in combining the sound
      elements into groups, or units, of greater or lesser
      fixity, with a greater or lesser tendency to repeat
      themselves in the same form as words, stereotyped
      expressions (phrases), or sentences.
THE WORD—DEFINITION OF A WORD—

The closest linking of sound elements into a unit is represented by the word. THE WORD IS A COMBINATION OF SOUNDS WHICH IS BASED SOLELY ON ACOUSTIC ASSOCIATIONS, AND WHICH IS FORMED UNDER THE INFLUENCE OF AND AS THE EXPRESSION OF A CONCEPT WITHOUT ANY CONSCIOUS ACTIVITY TO COMBINE OR CLASSIFY WHATSOEVER.

The conscious intervention of the will confines itself to the general resolution of wishing to communicate a content of consciousness, by virtue of which resolution matters then take their course. As to thinking in words, it is scarcely permissible any more to speak of a general impulse of the will. The word images directly follow the thoughts as the latter develop, or under certain circumstances fail to occur without our ordinarily being conscious thereof.

However, that we are not at liberty to think of words as absolute units which we keep stowed up somewhere in the brain, but that before the apperception of the word an effort to arrange the sounds is being made, is proved by the fact that the sounds may be disarranged, a circumstance which causes a "slip of the tongue" (which may also be called a "slip in thinking") as, for instance, "Tessler and Gell" instead of "Gessler and Tell." This phenomenon, which is often found in the state of fatigue or absentmindedness, does not
appear in an entirely arbitrary manner; but one may establish certain principles, according to which the sounds within a somewhat longer combination influence one another, so that their normal relationship thus sometimes becomes upset.¹

The details on this point, however, are of no importance in this connection. What is important here is purely the fact that the parts of the word are not linked to one another with absolute fixity, and that there is a certain amount of effort required in bringing about the combination. The ease and the assurance with which the effort is being made is necessarily dependent upon the degree of previous practice.

Certain types of aphasia are explained by Grashey in a way which must interest us here, because he starts from the ratio between the duration of an object-perception and the time required for the formation of the corresponding word image. Since, as Grashey assumes, the single parts of an object have no relation to the single parts of the corresponding word, the whole object should call up the whole word, and vice versa. Therefore the image of the object should be retained long enough to complete the whole word. "If, for instance, the object-image lasts 0.06 seconds, and if

0.3 seconds are used for the completion of the word image, the latter can not arise. Likewise, only the word image in its entirety can bring forth the picture of the object and must last until it is fully completed. However, the image of the object is formed instantaneously (a word not to be understood in the strict mathematical sense); consequently, the word image, if the duration of the two kinds of images has been reduced to 0.06 seconds, can produce the picture of the object, but not vice versa. A sick person who's imaginative power, as a consequence of his condition, is temporarily very much limited, is quite able to imagine the form of a dog when he hears the word 'dog'; but when the image of a dog rises up before his mind, he is not able to find the corresponding word." It seems to us that this points to a matter of importance. But one may say Grashey is scarcely justified in taking into account only the time which is required to utter or to think a word, two processes which, according to his assumption, are believed to require the same length of time. The deciding factor is without doubt the time which precedes the speaking of the word or the emergence of the word image in consciousness,—and during which we become disposed to speak or to think the word. By the term "completion of the word" ("Fertigstellung des Wortes") Grashey means that the speaking and the
thinking of the word must be carried through to the end. But speaking or imagining a word is not likely to be carried out in such a way that the elements of the word are linked together gradually and in the same sequence as they are thought or spoken. This is shown by the phenomenon which we call "a slip of the tongue." The word is imagined or spoken whenever our consciousness is so disposed through an activity whereby the elements are arranged. This activity with sufficient practice may be performed far more rapidly than the imagining and speaking acts themselves, because it is not bound to a definite sequence, but is simultaneous --and because in this case we are concerned only with the introduction to a series of activities—not with the activity itself. The same relation may be observed more distinctly when a compound motory typographic image ("Schreibbewegungsbild") is being arranged. We can decide in an instant to write down a word and thereafter without directing our attention to it, carry out the actual writing purely mechanically, a procedure which takes up much more time. But as applied to the command of a language, the time element is of no decisive importance. With some practice one will be able to write down words in a foreign language just as easily and quickly as in one's own, for it is not the execution of the writing process that gives us trouble
but the arrangement of the foreign words that has preceded. Therefore, with a certain degree of practice, one can write a foreign language apparently with the same facility and speed as one's native tongue; whereas one can not speak it with the same degree of fluency, the greater slowness in the arrangement of the word images being of no consequence as compared with the time which, on the whole, is required for the writing. In the spoken language, where the habitual speed is so much greater, the difficulty in the arrangement of the words will, for one thing, exert itself more strongly; for another, the speed with which the preliminary word-patterns are executed (which, of course, depends on practice) will be found to be somewhat less than in the mother tongue. This is even truer the more the pronunciation deviates from the habitual one; whereas, concerning the written language, one may, as a rule, use previously practiced movements.

Bongers and Wernicke have said, in opposition to Grashey, that we do not at all—as Grashey seems to assume—think or speak under the influence of the letters (which, however, is said to be the case in reading and writing). They say that our consciousness of words as made up of single sounds is only a result of drill in reading and writing; that for our direct consciousness the word exists only as a unit; that consequently
the relation which Grashey assumes to exist between the image of an object and the formation of the word by means of a successive stringing together of the sounds cannot be valid; that, on the other hand, Grashey's theory of the relation of the spoken to the written word may be useful. But if we shift the constructive effect which Grashey has in mind to a stage previous to the speaking of the word or to the appearance of the conscious word image, the above-mentioned objections diminish in importance. It seems to be necessary, it is true, to assume that the formation of the word is based on a unity of concept, a something which is determined by the mutual relationship of the word constituents, the "ego" of the word, which is essentially different from conceiving the individual sounds successively. But this concept, or rather sensation, is not yet the word itself but only a preliminary condition to its formation and a corrective for the word which has been formed. This sensation, that is, our being conscious of the existence of a word in our mind, presents itself isolated; when we have, as we say, the word on the tip of our tongue; and it manifests

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itself in a quick sense of recognition as soon as we then actually speak or think it. Our consciousness, as a rule, does not become aware of the effort which takes place in order to meet the demands from this sensation of a unit, so that only the finished word appears before our consciousness, that is to say, as an indivisible unit. But this must not by any means be understood, as Bongers maintains, to mean that one is never able to observe a successive formation of the word. It happens quite often, on the contrary, that we commence speaking a word before the elements are completely arranged, and as a consequence thereof, only by shifting and supplementing do we arrive at the form which answers the demands of the unitary sensation. The opinion that the individual sound elements of the words are only a result of teaching is likewise improbable. Children who are still learning how to speak often confuse some sounds of the words they have heard, in the following way: They begin with the final sound or shift whole syllables, saying perhaps "Sys" instead of "Lys" or "Poleverstej" for "Leverpostej."3

3Unfortunately, the author had no opportunity to collect samples from German children.
b. Successive Formation—The Initial Sound—

Compounds—Semantic Associations—

If the question arises as to the nature of the combination which holds the sound elements together, we can speak in regard to every non-compound word only of an association which is based on the acoustic-motor qualities of its elements. The word "horse," for instance, is a series of sound elements of which one habitually calls up the other under the influence of the concept of a certain animal. Each single sound element can be the starting point for the formation of the whole word; but, as a rule, it is the initial sound, because the latter is most closely connected with the concept and thus serves as the starting-point for the whole word. This can easily be seen when we are using words of a language in which we possess less practice. If we ask a person who has acquired a slight knowledge of French what the word for horse is, and if he cannot recall it immediately, he may nevertheless often hit upon it, when he only hears the initial letter "ch." He is less likely to succeed if one of the other sounds of the word is supplied. Therefore, when the teacher, as it sometimes happens in an examination, wishes to investigate how matters stand in regard to a word which apparently has slipped
the pupil's mind, he really ought not suggest the initial sound, as is usually done, but rather the final one.

Speaking, however, of compounds whose several component parts arouse independent associations of meaning, as for instance, Germ. "Hufeisen," it is by no means impossible that these meanings (in our example, the conceptions of "Huf" and of "Eisen" in their practical relationship) are continuously instrumental in the combination of the sounds in question, as, indeed, they are originally responsible for the combination. But this need not necessarily be the case. The concept of "Hufeisen" can easily be analyzed semantically as well as phonetically. In practice, however, such an analysis need not occur at all. The word as a whole can originate as the direct general concept of the object itself. It is, however, not always easy to determine what kind of association takes place. As a matter of fact, new compounds can be formed quite arbitrarily by using existing ones as a pattern. This is done with a view to denote the modification of one concept and not of several concepts. Strictly speaking, we are permitted to speak of a single word only when we are actually dealing with a fixed conceptual modification which calls up a series of sounds whose
combination is not dependent on single conceptual
determinations any more, but is based on acoustic-
motory associations. As long as both ways of forming
compounds suggest themselves, we are often wavering
in our conception, a condition which expresses itself
in doubts as to orthography.

Also in words which are not based on compounding,
the syllables, meaningless in themselves, may for the
time being enter into vague semantic associations as
long as the words have not become firmly embedded in
our vocabulary. If we try to impress on our memory a
somewhat longer word of an otherwise foreign tongue,
we discover that this may be done with less difficulty
if we listen to the faint voices of the syllables. This
help toward a preliminary fixation is worthy of notice,
although, in the end, it is the intensity of the purely
aural association which matters.

c. Practice in Word Formation--

Now from the pedagogical point of view, it is
of the greatest importance to bear in mind the simple
fact THAT THE WORD, ALTHOUGH IT MOSTLY ENTERS OUR
CONSCIOUSNESS AS A UNIT, IS NEVERTHELESS BASED ON A
COLLECTING AND COMBINING OPERATION. Because we remain
unconscious of this activity, we may easily feel inclined to disregard it entirely as something that is settled once and for all, provided that the word has really been assimilated. But from the fact that the activity does not make itself directly known, one is not entitled to draw the conclusion that it always takes place with the same facility, and that the process could not be affected by the speaker. Every activity is benefited by exercise. Therefore, if a word is not considered as a given unit but as a result of an activity by which a unity is brought about, it can be seen that the mastery of words may be of a very relative value. In practice this is a point which is difficult for many pupils to understand. In languages that are to be used orally, the greater or lesser facility with which words are formed, asserts itself directly, however, through the greater or lesser rapidity in speaking and the sureness in articulating. The ability to combine sound elements and the ability to articulate evidently influence each other, each requiring a certain amount of effort in itself. In this case, therefore, the importance of practice in speaking words is clear enough. But in the case of a language which one desires merely to read or at best to understand by ear, the supposition that the degree of fluency with which
the word elements are joined is of little importance, could appear to be rather justified. Yet this is not the case; for all linguistic comprehension presupposes cooperation on the part of the reader or the hearer. For visual images to be conceived simultaneously, it is necessary, as has previously been shown, that a known sound-image be in readiness. The more difficult it is to call up the acoustic image, the greater is effort thus required for the reading. Even more plainly the corresponding relation manifests itself if one is listening to oral speech where the possibility to stop and repeat, which the visual image admits, does not exist. Understanding, indeed, really occurs thus: from a range of ideas which suggest themselves according to the situation and the context of what has already been recognized, we select those whose phonetic expression seems to us to correspond to the sounds heard. Now, if we really conceived all sounds exactly as they are spoken, an immediate comprehension would result. On the one hand, however, not all the sounds reach our consciousness; and on the other hand, the acoustic impression in itself is of a subjective and constructive nature. The series of impressions which really reach the ear offers possibilities for associations in various directions—associations which may
displace the corresponding ideas. To what extent that which is actually spoken reaches or does not reach the hearer’s consciousness, thus partly depends on the readiness with which are combined the sound elements, which in the hearer’s consciousness were to correspond to what is spoken. A word whose elements have not previously been connected at all in consciousness, or only faintly, may therefore easily be displaced by accidental better-known acoustic combinations, or it may not be understood at all. This becomes very distinctly manifest in names. When, for instance, one listens to a clergyman reading out in church a list of several persons, giving their professions, their first names, and their family names, one understands everything but the family names, provided the latter are not of the most usual type. Now, we are acquainted with most names which occur in our native tongue, inasmuch as we have heard or read them at least at some time or other. But there are many which we have seldom had an occasion to pronounce. The phonetic association, as a consequence thereof, is relatively loose and may easily be disturbed by accidental circumstances, or it asserts itself too slowly. Dealing with names of a foreign tongue which are not previously known to us, we are often not even
able to understand them at all, in spite of direct communication from a very near point.

Thus it is important to bear in mind the following: To understand a foreign language it is not sufficient merely to know the words and combine them with the right ideas, but the sound elements of each individual word must be combined with such fluency that this combination, where it is to the point, is not pushed aside by competitive ideas because of accidental circumstances.

The best means, however, to strengthen the association of the sounds is naturally TO SPEAK THE WORDS ALOUD. It is true that the association is also strengthened by hearing, reading, and thinking. The result in the latter cases is bound to be of less value, because the motor activity and the acoustic impressions have been reduced, or are absent. Indeed, one might say that even from the reciting of absolutely disconnected words or of words to which just then no meaning is attached, a certain benefit may be derived, inasmuch as the acoustic images, as such, are strengthened in their internal connection, a circumstance which may later be of some advantage in mastering the language.
2. **UNITY OF PHRASES**

a. **Origin of Phrases**—

But what is said here of single words applies also to the numerous fixed word combinations which are called **STOCK PHRASES**. We shall henceforth call them **PHRASES** for the sake of brevity. The peculiar nature of these combinations lies in the fact that the individual members cannot be replaced by others of the same meaning, and we can not possibly give another reason for this restriction of linguistic freedom but that of custom. So one says, for instance "zutage treten," "zutage foerdern," but "an den Tag kommen," "an den Tag bringen." Although in this case "an" and "zu" obviously have the same meaning, it is not permissible to use them interchangeably. One always says "die Oberhand gewinnen," but "ueberhandnehmen."

Neither the substantives nor the verbs can here be used interchangeably, though they are logically quite equivalent. In Danish the same substantive ("Oberhaand") is used here in the two corresponding phrases. To the German "gewinnen," it is true, the Danish "faa" corresponds, and "nehmen" is replaced by the completely equivalent "tage." But a logical necessity to use the two verbs "gewinnen" and "nehmen" cannot be inferred
from this. Such combinations are subject to mere chance. Thus the German says "sich Muehe geben," but "sich Luft machen," whereas the Dane uses the corresponding verbs exactly in inverted order. ("goere sig Ulejligheid," but "give sig Luft").

Such restrictions of the free usage of words abound in every language. Herein lies the chief difficulty in the learning of a foreign language, far more than in the grammar which is dreaded so much. But herein lies, at the same time, a condition for the development of the language to a sensitive and dependable instrument for the conveyance of thought. By these fixed combinations the active cooperation of the listener, which is necessary to comprehension, is considerably facilitated; the sources for errors become reduced, and the rapidity of conception is accelerated. Listening, for instance, somewhat absent-mindedly to a public speaker, one may believe that one has heard the following nonsensical words: "Diese Idee gehört zum festen STALL unserer Gedankenwelt."

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4The following ENGLISH example may serve as an illustration: "to keep silent" and "to hold one's tongue." Here the two expressions have approximately the same meaning, but the verb-members can not by custom be interchanged. TRANSLATOR.
The unusualness of this combination suddenly attracts our attention and in reflecting on the words they correct themselves automatically to: "gehört zum festen BESTAND." If the speaker had used the phrase: "gehört zum EISERNEN Bestand" a misunderstanding would scarcely have occurred at all, because the word "eisernen" permits, in this connection, hardly any other association except "Bestand."

b. **Change of Meaning in Phrases**—

Such phrases evidently originate in such a way that, after frequent repetition, the connection between the individual words, which was originally based on the meaning of the words, turns into an acoustic-motor association; or in such a way that the phonetic association gains, at any rate, such importance that the individual words cannot be replaced any longer by synonyms. It is to their sound—not to their meaning—that they owe the place they occupy. An expression fused in this way, irrespective of the special meanings of the elements, can then represent an idea, even in such cases where, according to its original meaning, it would be unsuitable. Thus the French "adieu," for instance, has been reduced to a general farewell-greeting, in which it is no longer necessary to think of a god to whose protection one commends somebody.
Whenever consciousness in cases of distraction omits to exert its checking power, there come into being those well-known droll expressions of which so many examples exist. They originate, however, not only by extending the application of a phrase beyond its natural area, but also by weakening words which often appear as members of acoustic-motoric associations in their meaning, and thus easily get into similar combinations where they do not belong. "Den Thron besteigen" and "die Krone auf seinem Haupte sehen" mean really nothing else but the taking over of the government. Thus it may happen that it is said of somebody: "Er hoffte den Thron auf seinem Haupte zu sehen." The expression "die Krone auf seinem Haupte sehen" is in itself peculiar, for the historian hardly ever imagines that the ruler is standing in front of a mirror. But the word "sehen" forms a part of so many standing phrases that the significative power of such phrases has been weakened. A similar case is presented, for instance, by the verb "finden." It may occur that a speech begins thus: "Detlev von Liliencron FAND seine Wiege in Amerika," in which case the original meaning of "finden" has indeed entirely

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disappeared. Sometimes a further development reveals the absolutely mechanical character of a common phrase. From the expression "über einen Kamm schneiden" originates, for example, the phrase "einen über den Habsuchskamm schneiden," that is, to consider him greedy.—From this example it may also be seen that the members of a phrase, although they themselves are not called forth by clear conceptions, are nevertheless able, once they are there, to create through some sort of reflection new (mostly vague) ideas. The word "Kamm" seems here vaguely felt as an indication of classification. Sometimes it may also be seen how the disjointed members of a merely acoustic association series react on the imagination of the speaker, determining the coming expressions in a way which is incompatible with the original meaning of the phrase. Speaking of a horse race, a newspaper says, for instance, as follows: "Das fiskalische Gestuet ist in der beneidenswerten Lage, immer ein zweites Eisen im Feuer zu haben, das dem ersten an Schärfe nur selten nachsteht." What is meant by the main clause is

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6I have no personal knowledge of the existence of this phrase in my native tongue, nor have I been able to find evidence of its existence in German dictionaries. However, it is not impossible that the phrase exists in German dialects. TRANSLATOR.
that the stud-farm is able to send two horses to a race and has consequently two chances to win. This has evidently no longer any connection with the blacksmith's idea who has two irons in the fire at the same time, that is, who pursues two objects simultaneously. The notion of purpose has been replaced by the notion of means, and the original association of ideas is thus dissolved. But this reveals itself also in the relative clause. It is indeed unlikely that the writer thought of a red-hot iron, since a red-hot iron is not exactly characterized by sharpness. — Although this careless application of phrases may sometimes lead to logical nonsense, it represents, nevertheless, a process which is indispensable for linguistic development, as indeed language progress is after all mostly based on carelessness and lack of intelligence.

c. Analysis of the Phrase—

Now, whereas, language instruction should on the one hand strive toward the end that phrases, like single words, form an acoustic-motor unit as compact as possible; yet, on the other hand, the meaning of the individual members should not be disregarded. In regard to the acquisition of a foreign language, this latter
consideration is all the more important, since here it is more difficult to know where lies the boundary-line in the usage of a compound expression. One is therefore most likely to avoid errors by adhering as closely as possible to the original meaning. Furthermore, to start from the simple original meaning of the word is the best method, for the time being, to impress the phrase on one's mind until it has become a sound-unit. If, for instance, one wants to remember the German expression, "Es liegt auf der Hand," one should imagine the thing as if it were actually lying in the palm of the hand. A German, of course, does not do that, and after a time the pupil himself will not do so either. If, on the other hand, a German were to remember the Danish expression "Det ligger snublende nær" (literally: "it lies so near that one may stumble over it," that is, something is obvious), he ought to think of actual stumbling or tripping. It is clear that in such cases a literal translation gives the best guarantee for the understanding of the original meaning of the words. A peculiar stimulation is given to the brain by the odd and droll elements which the foreign phrase may contain for us if it is translated literally into our native tongue.
d. The "Good" Translation—

As an objection it might perhaps be said that such breaking up of phrases is not the natural way to acquire them. Children, it is true, learn such expressions of the mother tongue to a great extent as acoustic units, and thus, especially at the age from three to six, make the funniest mistakes. But in the artificial acquisition, since our own language furnishes an illustration of the point, it would be a roundabout way not to take advantage of this fact. On the other hand, it must certainly be admitted that a method in which translation is made the chief means of instruction, and in which connected speaking or reading aloud is neglected, is only slightly conducive to the acquisition of phrases. Experience seems fully to confirm the fact that even extensive reading is only of little avail under these circumstances. For one thing, the acoustic association is indeed less likely to be brought about; and for another, too much emphasis is placed in most cases on the questionable theory of a GOOD translation. Viewed in the light of the present case, a good translation is the worst of all, because it diverts the attention from the very relationship of the words that are to be acquired. Pedagogically speaking, it is therefore a better translation to have the Greek commanders die
"after they in regard to the heads had been chopped off" instead of having them simply beheaded. Through the so-called good translations, one learns at best to "butcher" the mother tongue with fluency, since, in such cases, one is after all without being fully conscious of it, still under the influence of the foreign tongue. But in learning a foreign language, it is important to base the acoustic practice on the best possible conception of the relations of the words to one another.—A literal translation, of course, may be easily pushed to the point of complete caricature. E. Sallwuerz, for instance, tells of a German pedagogue who insisted on a literal translation with such consistency that he had the French sentence "Je ne lui ai pas donné beaucoup de pain" translated in the following way: "Ich nicht ihm habe Schritt gegeben Schoen­sclag von Brot." In this case we are dealing with meanings to which the words are no longer entitled, and there is no reason to revive such meanings. A literal translation, of course, should be made use of only if, in so doing, the actual meaning of the words is made to stand out. But, as a matter of fact, it need only be done until the pupil has familiarized himself with the phrase in question.
3. GRAMMATICAL ENDINGS

a. Nature of Grammatical Endings—

A third case (besides the single word and the phrase) in which the acoustic-motory association is of great importance, is the GRAMMATICAL ENDINGS. One easily gets the direct impression that grammatical endings, to a large extent, ought to be looked upon as an unnecessary burden to the language. One succeeds, in many cases, in making oneself completely understood without using endings, or, at any rate, correct endings. This may well be the experience of Danes when using German. W. Nausteser, who has discussed the nature of grammatical endings, makes the following statement:

"Inflection is a linguistic ornament which corresponds but poorly to certain conceptual relations, which in themselves are already known to us."7 This statement, however, does not by any means hit the nail on the head; for the very same thing may be said of every part of a linguistic expression. Language cannot create within us something entirely new, but can bring to consciousness only *relations of the concepts which in themselves are

7 Das Kind und die Form der Sprache, p. 8.
already known to us, "we ourselves being accustomed to accompany there relations with certain speech-sounds which we recognize in the utterances of the speaker. Furthermore, the inadequacy of this phonetic notation, does not make itself felt more strongly in an ending than in a whole word. Whether a sound is more or less sonorous is, as far as the sound is concerned, of no consequence when it is functioning as the expression of a concept, for it has, of course, under all circumstances only purely mechanical relations with the concept. Nauseester continues: "Whenever we speak naturally, we think only of the word stems, joining them together in a way we deem correct and expedient. All inflectional endings issue without our being conscious of them. He knows how to select his words, we say of him whose oratorical gift we wish to praise. Surely no one has ever been known to be praised for his skill in supplying endings (above all, inflectional endings) with which we are here concerned." This point of view seems absolutely wrong to us. In using the expression "to select one's words," one evidently means by "words" the concepts expressed by means of the words. The very same main idea may variously split up into subordinate ideas; and these can be expressed only by very definite words. Furthermore, the real facts of the case are that it is quite often the grammatical correctness of the
speaker that is praised, because it is not given to everybody to speak grammatically correctly. In a language like German, for instance, where the inflectional endings play such an important part, it is really an art to master them; and it is necessary for most public speakers to put forth no small amount of effort toward that end—if they reach that stage at all. Add to this the fact that the contrast between stem and inflectional endings assumed by Nausester does not exist at all. Observation of natural speech shows that both stems and endings appear with equal spontaneity as a direct result of the state of consciousness. In case a speaker is not fully master of the language, the lack of sureness manifests itself above all in his use of inflectional endings, which then often calls for reflection and comparison. Here, then, one may speak of a selection.

What Nausester says of inflectional endings applies, as mentioned before, to all word classes. All natural speech is an unconscious activity, in so far as it is not based on a conscious selection. When once the mental content we wish to express is given, it is usage that determines what impulses are to be expressed and by what means this is to be done. The linguistic expression, therefore, does not originate from a desire to express such and such an impulse, but from a compulsion. At all events, this is a point of view of extraordinary importance for the grammatical phase of
language instruction, a subject to which we shall return later. But for the time being, our sole object is to establish the fact that the grammatical endings, in their conscious or unconscious application, are put on an equal footing with the remaining parts of the language in natural speech. The question, however, which interests us here is whether the grammatical endings always correspond to definitely evoked impulses of the state of consciousness to be expressed, and if so, must thus be directly called forth by the latter.

b. Loss of Meaning of Certain Endings—

For a large part of the inflectional endings, it seems to be necessary to answer this question in the negative. In comparing two grammatical endings which can possibly express the same concept, as, for instance, in Danish "Vi er" and "vi erer" (we are), it is impossible to see that the latter form should express more than the former. The notion of plurality does not occur twice in the second case. With no more justification can it be maintained that the notions of the first and the third persons occur twice in each of the phrases "I have" and "he has." Furthermore, the historical development of the grammatical endings shows that they are inclined to lose their original meanings, a
circumstance which evidently can only be brought about by their gradually being reduced to mere acoustic supplements, which can no longer be related to outstanding impulses of the state of consciousness, but only to consciousness in a general way. After having lost their original meaning by this process, the grammatical endings may again be taken out of the combination which caused such change, and may be used in new combinations with their faded or changed meanings. In the combination "Jeg er" (I am) "er" indicates the singular of the present indicative form. But since "er" entered into an acoustic association with "jeg," the form "er" resulted with mechanical necessity from the "jeg" without it being necessary for the singular meaning to make itself felt. "Er" thus becomes finally a mere indication of the present tense and can then also be used after the plural forms of the personal pronouns "Vi," "I," and "De." Thus new acoustic associations are formed beside the older ones, for instance, "vi er" beside "vi ere," and enter into competition with these. But now the older forms are less capable of competition than the new ones. They indicate, it is true, the same relationship as the latter, not only no better, but even worse. There is indeed a tendency in languages, when linguistic expressions (in this case, the first person singular and the first person plural)
contain a contrast, to connect the concept of the common base of the contrasts with the corresponding elements of the linguistic expressions; and to connect the concepts of the contrasting elements with the non-contrasting linguistic elements, as is shown, for example, by the historical developments of the numerals in various languages. But the plural form "vi ere" as compared with the singular form "jeg er" responds to this tendency in a smaller degree than the form "vi er," because it disturbs the homonymous expression of the common base without expressing the concept of plurality more distinctly than has already been done by means of the pronoun.

c. Acoustic Supplements—

It is not the place here to go more fully into particulars about these theories, as they lead to questions of purely linguistic interest. What we are concerned about, is as follows: The inflectional endings form with the stem ONE word, that is, each inflectional form owes its origin, during the act of speaking, to a series of acoustic-motor (not notional) associations; the individual parts, therefore, can be

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8 Examples can be found in Thumb, A., and Marbe, K.: Experimentelle Untersuchungen, p. 54 ff.
attributed only to definite concepts through reflection and comparison. An inflectional form, however, is indeed originally the expression of a state of consciousness analyzed by means of several concepts, and the ending is thus, at any rate, indirectly connected with the corresponding concept. But in the course of development it may come about that the endings are withdrawn from any influence of the concepts, and become mere phonetic consequences of other sound elements (of a pronoun or a preposition, for example). They lose in this manner their logical necessity and can be dropped in the course of time either through a gradual weakening of the sounds, or by being crowded out, as in the above-mentioned example, by shorter forms of like value. But if one asks in a particular case how far such a development has progressed, there need not be at all a universally valid reply. The feeling for grammar is indeed very differently developed according to the individual. Just as a child sometimes acquires a whole combination of words downright acoustically, and consequently uses that combination without being clearly conscious of the meaning of the individual words (whereas a grown-up person attributes a definite meaning to each word), it is likewise quite possible that a grammatical ending has still a meaning to one person, and none to another. Furthermore, the question
can not be answered by giving a classification of the endings. Thus, for instance, the dative terminations in German originate doubtlessly from a definite grammatical notion if the word in the dative case is found as an indirect object beside a direct object. But it may certainly be called in question whether the relationship that exists between an intransitive verb governing the dative case ("danken," "dienen," etc.), is actually different from that which exists between a transitive verb and its object. To one who originally learned the language by the method of grammatical reflection, it may, in fact, appear as if there must be a notional difference. When asking a linguistically trained German, however, a question on this point, one is very likely to receive a shake of the head for an answer. That the dative used with such verbs cannot be changed in the passive voice into a subjective nominative case, does not mean anything in itself. It is quite well possible that this may have remained from an older linguistic condition. If, on the other hand, the dative terminations used with these verbs do not correspond to the notion of a dative, these terminations are maintained only on account of acoustic traditions. It must be expressed this way and not otherwise, for that is the way one has always said it. It would indeed be quite in accordance with this theory to say that these terminations cause,
in grammatically sensitive persons, through reflection, conceptions of a corresponding grammatical relationship. Something similar applies, doubtless, if the dative is governed by a preposition, in which case it seems impossible to associate any notional modification with the dative. With prepositions of substantival origin which govern the genitive case, there is evidently a transition between the concept of ownership-relation and a mere acoustic relation (for example, German "anstatt des Koenigs" and "statt des Koenigs"). In considering those prepositions which govern now the dative case, and now the accusative case, it is necessary, however, to assume always definite notional modifications as the basis for the use of the different cases, although acoustic habits may be of some assistance.

d. Transitions from Notional to Acoustic Associations and vice versa—Practice in Inflection—

Even if it can not be decided with finality in each particular case whether the appearance of definite inflectional forms is due to mere acoustic reasons, or to corresponding impulses of consciousness, or depends on both influences, one must, of course, reckon with the existence of acoustic associations; and thus language instruction should strive for the realization of such associations to the greatest possible extent.
On the other hand, one can not, of course, draw the conclusion that the acoustic association, as such, should be acquired from the very beginning. The individual word, as a rule, can be acquired in no other way; we must repeat the phonetic association until it coheres "unconsciously," for the separate sounds give the memory no clues. But this does not apply to the members of grammatical combinations. Nevertheless, there are forms where mere acoustic drill has been made use of with some justification, namely, by means of the systematic mechanical repetition of declension and conjugation paradigms.

But such drills are not very popular with our modern theorists. The question is asked what benefit one could expect to derive from senseless "rattling off" of inflectional forms. For one thing, the words never occur in this order; for another, the pupils, as we know from experience, associate no concepts with such mechanically repeated word forms. But the aim of language instruction is after all to associate sounds with meanings.

No matter how sound this idea seems to be, one is, nevertheless, in practice, always driven back to drills in inflection. Now, then, are these drills of no more significance than the proverbial straw to the drowning person? By no means! From the viewpoint in question
the following can be said: By means of drills in inflection—even if the pupil does not associate any meanings with the words—one succeeds in training him in acoustic associations, which, it is true, obtain their proper meaning only by being fused with definite concepts, but which certainly prepare to bring about this fusion by producing a certain fluency in connecting sounds. Such readily formed sound-combinations stand a good chance to survive when they enter into competition with others lying close at hand. In fact, in drilling a pupil in grammatical forms, one may also make use of theoretical hints by calling his attention to the fact, for instance, that the second person singular of a verb in German usually ends in -st. This may be of some help to the beginner. But mastery of the language requires that the pronoun "du" should produce directly the concept of -st as a supplement, and this is aimed at by drills in conjugation. This is felt all the more when we contrast these endings with those of the remaining personal pronouns. The usefulness of the well-known practice of naming the principal parts especially of the irregular verbs is open to question for the reason that in this case it is often quite evident that the pupil does not associate the slightest meaning with the words. Immediately after a pupil has correctly conjugated the verb "nehmen," for instance,
the same pupil translates a sentence given in the native tongue as follows: "Ich habe den Stock genommen." The teacher makes him conjugate once more, and the result is: "Ich habe den Stock genommen." Hereafter forms like "genahmt," "genenmt," "genehmnen" may be created, so that the pupil's knowledge in conjugation seems to be of no value at all. Such cases, as a matter of fact, occur quite frequently, and one has been inclined to infer from them the absolute uselessness of such exercises. However, one is only justified in inferring that verb forms acquired in this way actually benefit the pupil only through applications in which they assume a meaning.9

But as a basis for suitable exercises, the mere existence of firm sound images is important. Experience of teachers of German in Danish schools abundantly confirms this fact.

9 A step has already been taken in this direction if one accustoms the pupil while he is conjugating to insert certain adverbs of time, as, for instance, "heute," "gestern," and others.
e. **Syntactical Phenomena**

In regard to the syntactical phases, on the other hand, it will only very rarely be possible, on account of the complicated nature of the cases, to start from mere acoustic combinations, even in cases where such combinations may be of paramount importance to him who has mastered the language. For prepositions which always govern the same case, one might, in fact, use some sort of inflectional pattern, as, for instance, "ohne den Mann, ohne die Frau, ohne das Haus, ohne die Männer," etc. But for prepositions which govern different cases, that would, of course, be impossible. From the standpoint of instruction, it will therefore be best to associate from the beginning the grammatical endings as much as possible with concepts of meaning (or, at any rate, with grammatical notions) in order to make correct formations of sentences possible from the very outset, in which case, indeed, the acoustic associations gradually assert themselves automatically to a suitable degree. Without syntactical analysis faulty habits are likely to be formed. If, for instance, Danish pupils in German often make the mistake of putting every noun that follows the verb in the accusative case, while they refuse to put a substantive which precedes the verb in the nominative case, this error is not due to false analysis, but to acquired notions of sound and
rhythm. They are used to hearing the "der" before the verb, and the "den" after the verb. The following error, "Sie wollte ihm nicht ZUR Manne," originates evidently from the mere acoustic association between the "r" of the dative feminine article and the final "-e," the characteristic of so many feminines.

The manner in which the native uses his language, whether notional or acoustic impulses are decisive in the individual cases, whether he even observes grammatical rules, or is not acquainted with them at all, can, of course, be of importance only in regard to the AIM that is to be striven for by language instruction; but it cannot serve, as people sometimes seem to believe, as a standard for the INSTRUCTION of foreigners. In theory one can scarcely dispute this. But in practice one often meets hazy notions of the uselessness of grammatical instruction, notions which originate from the in-part, correct assumption that the native tongue is spoken correctly without a knowledge of grammar. The want of grammatical knowledge, however, is not identical with the want of grammatical notions. But even in cases where these are not wanting, it is very risky to depend on the ear exclusively, for the acoustic associations can be brought about only by means of much practice. Language instruction can not count on even
approximately as many repetitions as natural acquisition of language. An effort should therefore be made to enable the pupil to form, as soon as possible, correct associations, even though it be by ways different from those pursued with complete mastery of the language. Thus, in the end, the natural relationship between concepts and phonetic habits will be established in the quickest way.

f. **Grammatical Instruction**

What we consider characteristic of the word—the formation of a unit merely acoustically connected under the influence of a concept—is indeed also of importance for the formation of set phrases, and for the use of the grammatical endings. To measure the extent of this importance more closely is not easy, partly because transitions from conceptual to acoustic associations and vice versa, may take place, and also because the establishment of conceptual combinations may be facilitated by means of previously practiced phonetic associations. But, at any rate, there is a factor of great importance involved in regard to linguistic fluency—a factor which is brought out in exercises that make the phonetic elements stand out in their combinations as distinctly as possible. The best way to achieve this is
through SPEAKING ENERGETICALLY AND EXPRESSIVELY, OR THROUGH READING ALOUD. Of what importance the energy of the articulation and the vigor of the voice is, can easily be fully understood from the tendency of words and sentences to appear spontaneously after especially energetic reading aloud.

4. UNITY OF SENTENCES

a. Wundt on the Origin of the Sentence—

A unity somewhat similar to the one which appears in the word with its inflectional endings, and in phrases, manifests itself also in the larger divisions of speech called SENTENCES. Wundt describes the feeling for this discernment very aptly as follows: "The very moment I begin a sentence the whole of it exists already as a general concept in my consciousness. But only its main outlines are usually somewhat more definitely fixed; all its constituent parts are as yet obscure and appear as individual words only as they become crystallized into clear concepts. The process is similar to the one that can be observed when a complex picture is suddenly illuminated, in which case the observer has at first only a general impression of the whole, but then he fixes his eyes successively upon the particular parts, always relating them to the
whole." To this statement Wundt adds the following:

"After all, the everyday experience that a speaker can carry through a compound sentence from beginning to end without previously having reflected on it in any way, can obviously only be explained by this relationship. We would be entirely at a loss to understand this fact if we, as in mosaics, should have to join the sentence together from separate, originally isolated, word formations."\(^{10}\) By way of precaution, however, we suggest supplementing the last sentence as follows: "If we should have to join the sentence together while speaking, etc."

b. **Psychological Presuppositions—Definitions of the Sentence—Sentence and General Concept—Logical Relations of the Sentence Members—Logic and Grammar—Parts of Speech—**

For just as we have to imagine an organizing activity as preceding the utterance of each individual word, by means of which activity the sound elements are combined into the unit that arises in our consciousness, so we also have to assume a corresponding activity in

\(^{10}\) *Die Sprache*, I, p. 602.
regard to the whole sentence. In case of a sentence, we are more easily made directly aware of this activity, because of the greater length of time it takes for the projected sentence to materialize in speech. In beginning a sentence, one has a definite, though, in regard to details, somewhat vague conception of the sentence plan; the beginning words may be conditioned on words which are spoken only much later. But the unity which appears in the sentence must evidently be of a somewhat different nature from that which constitutes the word. The unity of the word is based on the acoustic-motor association of elements, none of which in itself is associated with meaning; it is only in their combined form that they represent the expression of a concept. The sentence, however, is composed of parts with independent meanings (words), the combination of these parts offering unlimited possibilities and depending in each particular case on the state of consciousness to be expressed. The number of words, properly so-called, is at any given time a limited one in each language; the number of sentences, an absolutely unlimited one. Therefore, even if in every instance a sentence, no less than a word; appears as a given construction necessarily forming a complete and coherent unit, yet the psychological presuppositions must be of an entirely different nature. These associations
that go to produce the sentence must be rooted in the relations of the individual concepts to one another; it is the MEANING of the individual sound groups (words) which determines the nature of their combinations, not merely an acoustic-motory habit. At all events it must be admitted that word formation and sentence construction overlap. There is no doubt that vague efforts to form words according to conceptual considerations make themselves felt in the relationship of stem to inflectional endings, or of the individual constituents of a compound word to one another. On the other hand, whole sentences acquire the character of words through frequent repetition, the true connecting link between the parts finally being formed by sound associations.

It is assumed here, as in our quotation from Wundt, that a sentence represents a combination of words. The term "sentence," however, can not be limited to a combination of words; a single word, likewise, can assume the role of a sentence. "Amavi" is a sentence just as well as "I have loved"; the imperative "Go!" is felt as a sentence. The fact that a sentence, even though it consists of several members, appears in consciousness as a simultaneously given unit can not be the decisive factor in the definition of a sentence. But the question as to what a sentence is,
is not easy to answer satisfactorily. The definitions which are usually given are too indefinite, or they are based on terms just as vague as those to be defined. Thus H. G. Wiwel says, for instance: "A combination of words to which a word of this peculiar type (namely, a verb) gives this peculiar stamp of compactness and completeness, is called a sentence in grammar."\textsuperscript{11} Not very different from this definition is the one given by Delbrueck: "A sentence is an utterance in articulate speech which appears to the speaker and to the hearer as a coherent and complete entity."\textsuperscript{12} These definitions do not state what is after all the something which causes the feeling of a coherent, complete entity and whose non-existence does away with this feeling. That a verb does not, of and by itself stamp a combination of words as a sentence, obviously stands to reason. Others look for the gist of the matter in the relations of the concepts to one another. Thus we read in Suetterlin: "A sentence is the expression of a concept, a cluster of concepts, or of two clusters of concepts in articulate speech-utterance, the expression appearing to the speaker and to the hearer as a coherent and complete entity."\textsuperscript{13}

\textsuperscript{11} Synsamlede for danske Skoleslaere, p. 24.
\textsuperscript{12} Grundfragen der Sprachforschung, p. 136.
\textsuperscript{13} Ibid., p. 137.
This definition, strictly speaking, does not express more than that given by Delbrueck, since every linguistic phenomenon is bound to be an expression of our concepts. By bringing the latter to prominence, Sætterlin probably wishes to indicate that the reason it seems natural to consider the statement a coherent and complete entity must be found in the nature of the underlying conceptions. Wundt, however, puts the main stress on the unity of the concepts by saying: "A sentence is the linguistic term for an arbitrary resolution of a general concept into its logically related components."\textsuperscript{14} This definition, which has been compared to "the egg of Columbus," has, indeed, this in common with the method of the great discoverer: that it does not at all solve the given problem. For even if it should be possible to define the term "general concept" satisfactorily, and furthermore, if it were correct that such general concept is at the bottom of every sentence, still we do not know what a sentence itself is. Then, of course, the question must arise: What does make a combination of words the expression of a general concept?

Nevertheless, we shall look a little more closely

\textsuperscript{14}Grundfragen der Sprachforschung, p. 140.
into this question and investigate if, perchance, Wundt's definition does not in some way help to understand the nature of a sentence.

At the bottom of speech molded into sentences there is, it is true, a grouping of the content of consciousness into total concepts, each of the latter forming an interrelation of special importance, and each having its center in some concept characterized by feeling. We dwell successively on certain sectors of our conceptual world. While these sectors are detained, they become illuminated by the analyzing force of our attention, and they can bring about the formation of a sentence or a combination of sentences. The relative compactness of the total concept underlying a sentence, appears most plainly if the speaker has been led, by another external impression or a casual thought association, into a sphere entirely different from the one in which his thoughts had previously moved. Let us think, for instance, of Holberg's Vielgeschrey, as, he, busily engaged in dictation, is by a casual glance through the window made to cry out: "The deuce, there the chickens are again in the kitchen!" In connected train of thoughts, however, the various general concepts glide more into one another, and it is thus not always possible to draw sharp boundary-lines. If Vielgeschrey adds to his quoted outcry the following: "She is a h...
of a woman—that cook of mine!;" he has passed into
another total concept, in which, of course, the faults
of the cook are the most important thing; but in which,
evertheless, the invasion of the chickens into the
kitchen is still included, though more hazily than in
the first sentence. Furthermore, it is not always
easy, during the analysis itself, to preserve the
separate total concept as a complete and definite
entity; it is likely to change its character, partly
by the analysis itself15 which induce the original
train of ideas to enter into new relations to one
another, and even to break up their unity, and partly
by additional associations. Therefore, the term
"total concept" (or, as Wundt says, general concept)
can not mean a link in the process of conception, a
link which, of inner necessity, forms a unit in contrast
to other similar links, and which, as such, would be the
conditions for the formation of a sentence. It is true
that a grouping of the content of our consciousness,
a grouping resulting from the very nature of that
content, is necessary for a thinking person (as con-
trasted with a free play of helter-skelter associations);

15Cf. Hoeffding, H.: Det psykologiske Grundlag
for logiske Domme, p. 346.
this is true, moreover, even if we do not speak or think at all in sentences. On the other hand, it is also possible that the effort to form sentences can react upon the grouping of the concepts so that in such cases the sentence would underlie the formation of a general concept, and not vice versa. In fact, in translating, it happens quite frequently that one is obliged to increase or reduce the number of sentences, the content of the concepts not being changed in this manner, although one may well speak of a new grouping. But even this is not always necessary. Within sentence units, especially within such as contain participial constructions or relative clauses, one is fully justified in speaking of several total concepts. It is true that these general concepts can be looked upon as subordinated to a higher unit, but they are nevertheless not absolutely different from such a higher unit, and can at any time arbitrarily be replaced by independent main clauses. The most diffusive digressions can be inserted into the compact structure of a sentence without intruding on its character.—But still hazier becomes the relation of the total concept to the sentence if one bears in mind that a sentence often necessarily presupposes two total concepts which cancel each other. This applies not only to negative sentences, but also to many futurity sentences in which we think
of a change of the present state. The words, "The child that crawls about there on the bench will fall down before long," contain two total concepts distinctly opposite, and even the omission of the relative clause does not alter the case, for its content must necessarily exist as a conceptual group in our consciousness. Now, if one should assert that two originally independent total concepts must have fused here into one concept, the vagueness and arbitrariness of the term "general concept" would thus stand out more clearly.

Hence, to define a sentence as the expression of a general concept leads to nothing. But what are the facts about the "logical relations"? Is it here, perhaps, where the key lies? Scarcely! Likewise, in the expression of the logical relation of the concepts to one another, we find nothing that necessarily leads to such compact sectors of speech that, as a matter of fact, constitute a sentence.

Each linguistic utterance presupposes certain logical operations. It is not sufficient that a mere analysis of the content of consciousness (the result of the operation of the attention) take place, whereby the impulses of consciousness, in contrast to one another, are emphasized. In order to speak even a single word, there must be judgment pronounced by which the identity of an impulse appearing in the consciousness
is established with a named common concept. When a
certain flower calls up the word "rose," it is indeed
not the direct impression that is so named, but it is
the agreement of this impression with a concept already
existing that is expressed. When declaring ourselves
"speechless" in the face of some strange phenomenon,
we mean to say that we can not identify this phenomenon
with any sort of concept known to us, that is, we can
not arrive at a selective judgment. But in the course
of speech one ordinarily comes to this judgment so
rapidly that one does not become conscious of it.
One becomes conscious of it only in cases in which
there is a doubt in regard to the correct naming of a
phenomenon or concept.

Besides the judgments on which the application of
the individual words is based, there are, for a coherent
linguistic expression, one or several additional judg-
ments necessary in order to reunite the concepts,
which were separated in the analysis of the conscious-
ness, with the relationship harmonizing with the total
concept. The constituent parts must be put, to use
Wundt's expression, into their logical relationships.
When I speak, for example, the sentence: "The horse
is black," the relationship between the named concepts
must first be established by means of two judgments:
(1) the horse is one existing somehow at the present time, (2) the existing horse is a black one. It will be natural to say that these two judgments are sub-
sumptions. It is true that from the viewpoint of logic a name may be insignificant, but from the psychological-
grammatical point of view this denomination may have some value, because it enables us to indicate that the movement takes place from a given concrete concept (the subject) to a more abstract classification which includes the former (the predicate). The grammatical subject is the relatively concrete concept which, after being identified and named conformably to the idea, is later fixed as falling within the range of one or several relatively abstract concepts. Likewise so, if two concepts seemingly of equal concreteness are given as subject and predicate. If one says, for instance: "That boy there is Fritz," Fritz is the relatively abstract concept that includes an endless number of different forms of manifestations of the same person. Evidently one is justified in saying of a linguistic expression that its members appear in their logical relation to one another. It is the very purpose of grammatical constructions to render possible the discernment of the logical relations through forms and combinations in accordance with certain laws. The forms themselves, considered from the viewpoint of logic, do not matter; and they result from an accidental psy-
chological process. Grammar and psychology are related to each other in so far as the grammatical forms, by means of which the logical association of ideas is expressed, are developed on the basis of practical-psychological relations. But the grammatical aspect, on the other hand, is contrasted with the psychological aspect in so far as grammar concerns itself only with the elucidation of the logical relations. What is the starting concept in grammar (subject), need not be such in the psychological sense. On the contrary, often a contrast arises, so that the grammatical predicate does not coincide with the so-called "logical predicate." One uses the badly chosen term "logical predicate"—(One should rather say "psychological" or "predicate of interest"16) to denote what the speaker wishes to assert in regard to something which he is concerned to communicate. Because of the fact that grammar is not sufficient for the purpose, understanding must be furthered here by accentuation of the psychological predicate. Occasionally the word order, too, is of

16H. Hoeffding says: (Det psykologiske Grundl. for log. Domme, p. 377.) "The logical predicate is the psychological TERMINUS AD QUEM." Since he makes the following statement (p. 387.), "The difference between subject and predicate ceases to be of interest as soon as the judgment is formulated with sufficient distinctness," it would seem advisable to drop the term "logical predicate" entirely.
importance in such cases.

After all it is not of the least interest grammatically why an utterance is made to which the speaker really wishes to call our attention. The grammatical requirements are complied with as soon as the LOGICAL relations of the concepts stand out distinctly. Whether I say: "The horse is BLACK," or "The HORSE is black," is entirely of logical insignificance, the relationship between the concepts "horse" and "black" remaining the same. From what point of view the establishment of this relationship interests me is only of psychological significance. The relation of subject to predicate as fixed in the sentence is, in the grammatical sense, no doubt based on a hardening of originally freer forms of expression, such hardening being caused by a desire to find a means of elucidating the logical relations of the concepts. Therefore it is natural that the two sciences, logic and grammar, have been closely related from the beginning, and that the logical necessity of the existing grammatical constructions has been exaggerated. This overestimation takes place if one forgets that the grammatical forms and constructions are based on an accidental selection of linguistic usage, and that it is quite possible, as far as logic is concerned, to replace such forms and constructions by entirely different ones, provided the latter bear the stamp of common validity.
The principal medium which serves sentence-construction first of all is the development of the parts of speech, a distinction being made between concepts more or less abstract, and between different kinds of abstractions. Thus it becomes less difficult to recognize the relationship between the various concepts which modify one another. Parts of speech are respectively developed which are best suitable for subjects (substantives); for predicates of substantives (verbs and adjectives); and for predicates of verbs and adjectives (adverbs); and such as, in their combinations with other parts of speech, render the latter suitable for predicates (prepositions); or which contain elements that determine the relations between words and sentences of their respective classes; or between sentences (conjunctions).

A second medium is the inflection which is a secondary phenomenon based on acoustic-motor associations. On a still later development is finally based the fixed word order. By these media the predicative relations of the concepts to one another are made intelligible in the grammatical sense; then the logical relations follow naturally. The psychological relations must principally be indicated by means of the TONIC stress. By "grammatical predicate" we understand here—in accordance with the above-given definition of the grammatical subject—any modification of a relatively
concrete concept by a relatively abstract one, regardless of whatever special term the grammarians may employ. The object, for instance, is, according to this view, a predicate of the verbal concept.

c. A Definition of the Sentence—Vocatives—
Impersonal Sentence—Constructions—Principal and Dependent Clauses—Difference between Word and Sentence Formation—Speech and Consciousness—

Although the logical relations of the concepts are given expression in the sentence, nevertheless, this can not be the decisive factor in the definition of a sentence; for the same applies to utterances which are not sentences. The German words, "Das Rau fressende Pferd," do not constitute a sentence, though the logical relations of the concepts are clear, and one might very well speak of a "general concept." So far the words express the same as the sentence: "The horse eats hay." The only difference is that in the latter case we feel justified in assuming on the strength of the peculiar kind of the word combination that the speaker—with or without reason—wishes to establish this general concept as a fact.

According to our view, one should define a sentence as follows: A SENTENCE IS A WORD OR A COMBINATION OF WORDS WHICH CAN NOT BE FURTHER RESOLVED INTO UNITS OF
THE SAME KIND, AND WHICH CORRESPONDS TO AN ARBITRARY
(THOUGH OFTEN NATURALLY PRESENTED) SECTOR OF CONSCIOUS-
NESS, AND WHICH INDICATES BY A CORRECT FORM THAT THE
SPEAKER DESIRES TO HAVE THE LOGICAL RELATION (SHOWN BY
THE GRAMMATICAL CONSTRUCTION) BETWEEN CONCEPTS, EX-
PRESSED OR UNDERSTOOD, ACCEPTED AS VALID.

If the nature of a sentence is based to such
extent on constructive grammatical relationship, we can,
of course, speak of sentences only in such cases where
words, more strictly speaking, are under consideration,
that is, sound combinations corresponding to concepts.
Interjections may drastically indicate the relation of the
speaker to a consciousness; and, in practice, they
may sometimes render sentences superfluous. Neverthe-
less, they can not be regarded as sentences, since
they do not correspond to clear concepts and can not
enter into grammatical combinations. "Fie!" expresses
exactly the same as the sentence: "I experience aversion,"
but it can be called only an equivalent to a sentence.
Likewise, current combinations of several words which
defy grammatical analysis, as, for instance, "Himmel
Kreuz Donnerwetter Potz Sapperment!" can not be con-
sidered sentences. On the other hand, it is clear that
there must be a middle ground where the forms of free
utterances and the restricted forms of sentences over-
lap. The sentence form which is based on the system
of grammatical laws is the product of a long development from greater looseness and more imperfect means of expression, and we see no reason why one should insist on entirely displacing such conditions—an undertaking which will scarcely ever be possible. It is true that in a great many cases the importance of the missing sentence form is adequately replaced by the actual situation which renders a definite interpretation inevitable.

As border-line cases between sentences and indefinite exclamations, vocatives may be instanced. If one is not inclined to list these cases among ordinary sentences, the reason is likely to be found in the fact, at any rate in the Indo-Germanic languages, that the verb is generally of such predominant importance in regard to the sentence form that the latter appears to be tied up with the appearance of the verb, or, at any rate, with the possibility of its appearance. For one certainly consents to the fact that the verb must sometimes be added in one's mind, as for instance, forms of "esse" in many Latin sentences. To imperatives—even when they occur absolutely—it is not justifiable to deny the character of sentences. If one hesitates to do so in this case, it is done because in a sentence there is mostly more than one concept expressed, so that the subject as well as the predicate is expressly named.
Although the subject of an imperative is not expressed, the situation leaves no room for doubt. The imperative, as contrasted with interjections, actually denotes a definite relation of two given concepts to each other, indicating at the same time that the speaker attaches validity to this relation; consequently, it possesses the fundamental character of a sentence.

Moreover, the decision as to what utterances are entitled to the name "sentence," is rendered more difficult by the additional fact that speech often makes use of sentence rudiments which by frequent usage can assume the character of complete sentences. Thus the historical infinitive in Latin is unquestionably in its origin a rudimentary sentence form which has developed through the omission of the verb governing the infinitive, and which has retained the value of a complete sentence. On the other hand, a combination such as "mene incepto desistere victam" is felt to be elliptic, the thought not being satisfactorily complete without a supplementary concept on which the understanding is really based.

The fact that the decisive factor in the definition of a sentence is nothing but an effort to make clear the relation of the speaker to the content of his words, is perhaps best illustrated in the so-called impersonal sentence-constructions; for here one can not really speak of an analysis of a general concept, nor of a
distinction between subject and predicate. The word "Lightning" so far expresses exactly the same as the sentence "It lightens." One can not speak of a logical relation between "It" and "Lightens," since "It" corresponds to no concept whatever. The distinction between a subject and a predicate is in this case a GRAMMATICAL FICTION which is necessary for the purpose of being able to apply the sentence form. Thus the speaker succeeds in calling up in his listener not only the concept of an act of lightning—for which purpose the word "lightening" alone would be sufficient; but at the same time he makes it understood that he assigns reality to the appearance of the lightning at a given moment.

Now if we ask, according to this conception of the nature of a sentence, in what sense we can consider a sentence a "unit," we can think here of two conditions. On the one hand, a sentence constitutes a complete part of the speech, the members of this part (in case there is such arrangement) mutually conditioning or completing each other. The members belong together, forming a complete entity in order to make ONE definite impression, that is to say, the speaker wished to communicate something. In this sense, one could call a sentence a constructive unit of a communication. It is understood, of course, that then one can not speak
of principal and subordinate clauses as equivalent kinds of sentences. A subordinate clause indeed, is no sentence at all, but only a part of a sentence whose form approaches that of a complete sentence, and which, as a rule, has probably developed out of the sentence proper. A principal clause, moreover, is not a sentence which could result from a subtraction of the subordinate clauses of a period. If this were the case, the result would be nothing but a sentence fragment indicating a sentence plan. However, the latter must be filled out in order to merit the name of sentence in the true sense of the word.

Again in using the term "unity" of the sentence, one may think of the psychological process in the speaker's consciousness. It is the description of this "unit," as it is given by Wundt, that furnished the starting-point of our reflection on the sentence. By "unit" is meant here that the above-mentioned constructive unit appears in the speaker's mind as ready-made as if it were instantaneously. But this condition in itself would not be necessary at all, and, in fact, is found only where there is complete mastery of the language. The want of practice in the use of a language often makes the construction of sentences in it a most laborious mental task, even in cases where the words and grammar are known. Of course, where a speaker uses his native tongue, the construction of sentences
makes a direct connection with the thought, just as the word is directly connected with its concept. But still there must be a difference, and this difference consists in the fact that the sentence construction is based on the comprehension of the logical relation of the concepts, and on the employment of grammatical means for the purpose of denoting these relations; whereas words owe their origin merely to a series of acoustic-motor associations which we feel inclined to form under the influence of an idea. No matter how unconsciously the sentence may be constructed, the combination of the sound units must in the end hark back to the combination of concepts—real or grammatical. To form a sentence it is necessary to combine concepts and the corresponding words, and these are arranged with the help of grammatical notions, and must previously exist in order to be used as material in making the latter effective. However, the words reveal themselves only gradually to consciousness while the sentence is being spoken. That the sentence appears in our consciousness as a unit, accordingly, means that the work which can not be avoided in order to arrange the concepts and words in such a way as is necessary for the speech, is done so rapidly that the individual steps do not attract our attention and seem to require no measurable amount of time.
The sentence unit is, as shown, brought about in a different and more complicated manner than the word unit. But after that work has been done, there is no doubt that the sentence is related with the word in so far as in speaking the sentence there need no longer take place a close linking to the individual parts of the content of consciousness. The motory dispositions are brought about automatically. Most likely the ordinary procedure is this: In coherent speech, while we are speaking one sentence, we are already thinking out the plan for the following one. Frequently the realization of not having the next sentence ready sometimes even interferes with the completion of the sentence once begun. Fluent speech is based on the execution of a series of movements continually planned in advance, movements which during execution are practically left to themselves, that is, which are directed only from a motory center. As a matter of fact, the same thing takes place in all combined movements which are based on practice, as has previously been emphasized in regard to writing. Even actions which are far more complicated are sometimes carried out in the state of absent-mindedness without direct consciousness of their original import. Since, however, such actions are outside our control, they naturally may easily take the wrong course. In speech this manifests itself in "slips of the tongue,"
which occur frequently, especially in rapid speech, sometimes apparently without the speaker's being aware of it. If a German speaker says, for example, something like this: "Unsere Schule leidet meiner MANGL nach an zwei Missstaenden," this can hardly be explained by saying that the concept "Meinung" incorrectly calls up the word "Mangel." The latter word comes into existence either as a phonetic association to the verb "leiden" at a moment where the concept "Meinung" is no longer present to the speaker's mind, or else the word "Mangel" has been anticipated and is displaced from its proper position by "Missstaende."

Hence in a certain sense one might be justified in asserting that the speaker usually does not give any thought to what he says: speech is an act of thoughtlessness. This condition perhaps partly explains the inclination of attaching quite an exaggerated importance to speech in regard to thinking, and especially an inclination toward reducing the content of consciousness of abstract notions to the corresponding word. For if one reflects afterwards on what really happened in the conscious mind at the very instant when speech was pronounced, it may indeed appear as though there existed nothing to correspond to the meaning of the individual words. The assumption that a totality of elements of consciousness was at the bottom, must, however, be accepted as a fact. In fact the more concrete ones
of these elements can, comparatively speaking, easily be reconstructed. If some one said "bottle" or "glass," he had probably pictured a bottle or a glass in his mind, but with abstract expressions, it is not so easy to say that he must have had such a definite picture; and since he actually did not think of anything at the very instant of speaking the words, one is so much more easily led to believe that the word-picture, in itself, was the only point of the abstract concept he was conscious of. In such a way, probably—by failing to consider the interval between the formation of the sentence and its utterance—A. Messer arrived at the conclusion that, as a rule, words actually take the place of concepts in consciousness.17 The additional fact that the comprehension of the spoken sentence usually takes place so rapidly that the hearer does not become clearly conscious of the particulars, but only of the totality, is another factor that contributes to the overvaluation of the word as the representative of the content of consciousness. This can be seen from the frequent cases where, after hearing or even reading a sentence, we are not even able to give its form, but only its content; and therefore, in reproduction, analyze

the total notion in an entirely new way, employing entirely different words. Thus it becomes sometimes easier for us to understand the meaning of an utterance in a foreign tongue if we let the sentence affect us as a whole, without our making any attempt whatsoever to retain the individual words. In this case we are particularly lacking the necessary power and practice in order to reconstruct all at once the unity of the thought and to give an account of the particulars.

d. Pedagogical Consequences—

Some of the supporters of a radical reform in language instruction seem to be inclined to overempha-
size the unitary character of the sentence, and, in so doing, render the actual relation between sentence and word all the more obscure by considering the HISTORICAL development of this relation. In B. Eggert we read, for example: "THE SENTENCE IS THE PRIMARY, THE WORD THE SECONDARY CONCEPT. We do not form a sentence as a mosaic combination of individual words; but conversely, it is only through an analysis of the sentence that we arrive, in the course of natural language acquisition, at the imag-
ing of words. Only when we are accustomed, through frequent practice, to analyze the sentence by means of our intellect, are
we able to comprehend a word as an independent entity in form and meaning. To primitive man and to a child, the individual word is not yet a strictly defined concept. Just as many languages of primitive peoples associate a content of consciousness with one word, a content which in more advanced languages can be expressed only by means of lengthy sentence structures, likewise children, during the initial stage of language acquisition, use individual words in the sense of whole sentences. The first words of a child are really sentence words. The word-function of the word develops from its sentence-function. 18

Now, if this entire conception is correct, it must naturally have certain pedagogical consequences. But as may be concluded from our previous remarks, we can not agree with Eggert. The statements quoted from his book give rise, in fact, to various doubts. It is impossible, however, to touch here upon all points. Our main concerns are as follows: How is the formation of a sentence brought about, and what are the relation of the words to the sentence as a whole?

18 Der psychologische Zusammenhang, p. 13.
In this case we are concerned only with the relations which exist in the consciousness of the speaker. In what manner words and sentences have developed historically in their mutual relationship can not interest us here. It is true from the historical point of view also that we can not place the sentence before the word, yet nowhere have we found a satisfactory statement on this point from which can be seen what is really meant. As a matter of fact, the origin of language, after all, is still an unsolved problem. The only thing that can be safely asserted is that in the development of language there is a mutual correlation between the single word and the sentence as a whole. If, for instance, one must assume that the word "amavi" is the result of the fusion of a sentence consisting of several members, it is clear, on the other hand, that the formation of such new words in its turn renders possible new sentence forms. From this point of view one can regard "amavi" and similar words, in relation to the sentence, both as primary and secondary concepts. But this phase of the matter is, of course, not the decisive factor as to sentence formation in the practical use of the language, in which case speech operates only with given values which already exist. In so far as the speech of "primitive man" is held to indicate an
earlier stage in the evolution of linguistic consciousness as compared with that of civilized man, a reference to this fact is therefore of no significance from the pedagogical point of view. Likewise, the relation of the child to word and sentence is here of no decisive importance. Learning the language and using the language are two different things. We must ask: How does the adult person form sentences?

e. The Relation of Sentence to Word—

If we wish to answer this question quite honestly, we have to admit that we do not know. For where the speaker has perfect command of the language, the sentence is formed simultaneously, the particulars not being revealed to consciousness. We must confine ourselves to conclusions which can be drawn from the nature of the case. The above-mentioned passage from Eggert has one defect: The meaning of the first and most important sentence is not made absolutely clear. It seems to us that THE TERMS "SENTENCE" AND "WORD" ARE CONFUSED WITH THE CONCEPTS WHICH UNDERLIE THE SENTENCE AND THE WORD, RESPECTIVELY. If that be the case, Eggert's assumption is, as a matter of course, correct. For there can be no doubt that the unity of consciousness which underlies the sentence is not brought about
by a mosaic combination of individual concepts, but that the latter appear only against the background of a totality. But one can not, as has been shown in the foregoing look at the matter as though the formation of the sentence (that is, the comprehending of the elements of the phonetic expression) corresponded exactly to the rise of a relatively complete consciousness, and as though the two ran parallel to each other. A sentence unit corresponding in its nature to the unit which is found in consciousness, does not exist at all. A sentence is a series of sounds mechanically combined, sounds which form a unit in an entirely different sense from the unit which prevails in the consciousness on the whole, or in the individual general concepts.

f. Process of Sentence Formation—Heumann on Words of Children—

Now, if we wish to picture the process of sentence formation somewhat more closely, it seems as if it must take place in the following manner: The impulses which stand out distinctly in a given state of consciousness predispose us to select the words that will meet the situation. But these predispositions are not realized in the accidental order and form in which they were
originally brought about. The content of consciousness to be expressed arouses simultaneously certain habitual notions of viewing the impulses of consciousness in their mutual relationship, that is, certain general qualities are attributed to such impulses, qualities which in grammar are called subject, object, verb, reference, instrument, etc. The latter, in their turn react upon the word predispositions, so that these can now assert themselves as to the formation of definite sound associations in a more or less definite order, according to the nature of the individual languages. How much of the content of consciousness is to be put into the single sentence is pretty much dependent on free choice. The decisive factors here are not only the mutual relationship of the concepts to be expressed, but also the possibilities offered by the language in question, and other matters of no less importance are the amount of practice and the aptitudes and the habits of the individual speaker. A faulty speech-habit rather often met with is due to the tendency to plan sentences longer and more complicated than the speaker's mind is really capable of spanning.

If one should still maintain that the sentence precedes the word as a primary concept, this could only mean at the most that the grammatical associations appear earlier than the preliminary word-patterns. In general,
however, this is not likely to be true. The association of a single concept with the corresponding word is obviously of a more simple nature than the association with a comparatively abstract grammatical notion. However, it does not follow from this that this relation always need determine the sequence. In speaking, we are often at a loss for a certain word, although we are quite conscious of its grammatical role. In such cases it is often true that from the outset we have another word in mind, but as we see our way more clearly in the course of speech-utterance, it is rejected.

In the first speech-utterances of a child the whole process probably occurs in a different manner than in the speech of adult persons. But what can be meant by saying that the first words of a child are "sentence words" (words, each of which forms a sentence)? It is strange that Meumann, to whom we owe this term, should want to express himself that way. For in his excellent treatise on "Die Entstehung der ersten Wortbedeutungen beim Kinde" Meumann cautions emphatically, and certainly with good reason, against interpreting the first childish words in analogy to the words of adults. According to Meumann, one can not speak of the meanings of children's words in the same sense as of those of adults, because the association of words with a strictly limited meaning, and the conscious-
ness of such limitation, can not be present at the outset. Children do not have the same conception of words as related to consciousness as do adults. If this is the case, however, it is just as impossible to apply the definition "sentence" to the first speech-utterances of children. For the sentence calls for much more abstraction than the single word, and even if children have become conscious of the word as the bearer of a definite meaning, it does not necessarily follow that they are able to form real sentences. It is a fact that two-year or three-year old children who understand very well the meaning of single words, and even comment on correct or incorrect usage of such words, content themselves often with merely stringing the words together. This, in the opinion of the adult who reads the child's thoughts, may indeed sufficiently substitute for a sentence; but for all that, the objective as well as the subjective characteristics of a sentence are lacking. Meumann can express himself in the above-mentioned way only for the reason that he, just like Wundt and Eggert (the latter's presentation leads back to the former), fails to make an adequate distinction between general concept (perceptive complex) and sentence as a sequence of words.\(^{19}\) It is true,

\(^{19}\) A quite consistent and therefore instructive confusion of these two different matters is found in Wegener, Th.: Untersuch. ueber die Grundfr. des Sprachlebens, p. 15.
however, that the words of a child are "sentence words" in the sense that a child contents itself mostly with a series of phonetically connected associations in cases where an adult would express his thoughts by means of a complete sentence.—But since a child does not make use of real sentences, one can not assert that word function has evolved from the sentence function. From the almost unlimited possibility of all sorts of associations which the single word of the child originally presents, there evolved quite obviously in the first place a precise notion of words. Not until then is an attempt made to express the complexity within the general concept by simply stringing several words together; but for the lack of grammatical notions and corresponding means of expression, the child must, for the time being, confine itself to that level which according to our opinion, must constitute, in adults, the elementary process in sentence construction; that is, the process during which the words that correspond to the chief impulses of the given consciousness, emerge in an accidental sequence. 20 In the adult

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person, however, one can speak only of word predispositions which undergo first a syntactical treatment before they are realized. In the word combinations of the child, this second stage is omitted; consequently, they do not result in a sentence for lack of the regular construction which directly indicates the relations of the concepts to one another and the attitude of the speaker to these. If, notwithstanding this, we understand the connection, it is because of the situation and our knowledge of the child in question. But just as practical necessity teaches the child the true nature of the word, so it also leads the child by degrees to the employment of syntactical means.

g. Wundt's Conception of Word and Sentence—

The above-mentioned passage from Eggert's explanation has been stressed for the reason that it contains some observations which are of certain importance to modern language pedagogy; and Eggert has not failed to draw the pedagogical conclusions immediately afterwards. Eggert's conception is based on Wundt, and the
error that we find in Eggert manifests itself likewise in Wundt's presentation, something which, on account of the importance of Wundt's works for modern language pedagogy, we shall prove a little later.

Wundt in Die Sprache (I, chap. V, 111, 5) refers to the old conception that the sentence is composed of originally independent words as one that has been abandoned by modern scientific grammar; he mentions also that the view of considering the word as a combination of syllables and letters has been discarded. Furthermore, he says that in the living language there often do not yet exist the boundaries which the literary language has established between the single words, and that where this literary fixation is lacking, the dividing line between word and sentence is often based merely on an arbitrary action on the part of the philologist.

Concerning the last part of the above quotation, we wish in the first place to point out the strange fact that the existence of the word as an acoustic-motory unit, which is after all above all doubt, appears not to have been taken into account; but that it is the literary language—(with what justification?)—which is held responsible for the demarcation of the
single words. Sometimes, of course, the philologist may be forced to a certain arbitrariness in distinguishing between word and sentence, for the simple reason that he does not completely master the languages which he examines. Where many languages are to be compared, such mastery is indeed a practical impossibility. A native, however, is naturally quite capable of drawing the correct boundary-lines in his mother tongue. Even though he may perhaps not be able to do so theoretically on account of not comprehending the nature of the question, in practice, however, he does, as is shown by the liberty with which he combines and transposes his words. In the mother tongue doubt can exist only where in the nature of the case it must exist, that is, where a purely acoustic-motoric combination is actually forming without complete loss of the independent meaning of the members in the speaker's mind. If "Amavi" has developed by uniting several words into ONE, there must have been a transition period in which both conditions could assert themselves in the speaker's consciousness (cf. above, p. 10). Wundt says: "If a Delaware Indian expresses the sentence, 'He comes in a boat and carries us across the river,' in a verbal construction beginning with the verbal stem and ending with the requisite personal
pronoun, we see in this combination another evidence of the fact that such a combination is but a single word."

Thus, by the fact that the pronoun (the subject) terminates the phonetical combination, the latter evidences itself as ONE word. It can not be easily seen what conception of the term "word" is at the bottom in this instance. A Latin sentence with similar meaning could, in fact, be formed without any difficulty, a sentence that would end with a subject pronoun. Should one then speak of a single word, too? It is quite possible that the Delaware Indians really have a word that corresponds to all these conceptions: coming in a boat and fetching a person from the other bank of a river; and that in their grammar it is possible to indicate by inflection person and number of both the subject and the object. (Indeed, one reads of things which seem still stranger.) But this can be ascertained only by proving that there exists in the consciousness of the Delaware Indians an actual phonetic unity whose single members can not be separated from one another in such a way that each member by itself corresponds to one or several of the aforesaid concepts, and consequently can appear in totally different combinations.

According to Wundt's conception, the word, as it occurs in advanced languages, has evolved from the sentence, and the part which, according to direct
psychological observation, both of them play in the
course of our notions are said to correspond exactly
to this historical relationship. In the following
statement Wundt confuses the content of the concepts to
be expressed, with the word and the sentence, respective-
ly. Thus we read: "In such a way the sentence forms
no less a notional unity than the word; indeed, the
former is, compared with the latter, the primary notion,
in so far as the content expressed in the sentence is
at each stage of the thinking process a clearly defined
whole in contradistinction to other similar contents;
whereas the word is more or less closely connected
with the other constituents parts." 21 In this case
the existence of the sentence and the word as phonetic
combinations has evidently not been taken into consider-
ation. If it is said further: "If we describe the
content of consciousness which corresponds to the sen-
tence as a general concept, then each word of the sent-
tence constitutes accordingly a single concept," then
it is quite obvious that Wundt is not at all speaking
of words and sentences, but only of concepts which are
expressed by words or sentences: the investigation has
completely turned away from the domain of language.

21Die Sprache, p. 602.
With this as a basis Wundt proceeds then to examine the cause of word isolation. How do we get from the sentence to the single word? Among the processes leading to this circumstance, Wundt mentions the "Formation of the general concept." The latter is supposed to be followed by a series of secondary associations of corresponding constituents of different general concepts. Then these constituents are made to stand out more distinctly against others with which they are more alternately connected. But where do these corresponding constituents come from? In our total concepts they are, of course, multifariously given; but in speech? The corresponding impulses of our consciousness, therefore, would from the outset have to be denoted, without previous analysis, within the phonetic combinations which correspond to the general concepts by corresponding sound elements. That would indeed be quite accidental. But if it is not to be a matter of chance, then the correspondence must after all repose on the consciousness of the individual elements. Hence the sentence would be composed of words. In that case there seems to be no intermediate thing.

The sentence, as it is found in advanced languages, evidently does not repose on the general concept in
itself, but on an analysis of the general concept. The case is not altered by the fact that the general concept itself represents a directly given unit, or by the additional fact that the analysis is likewise a simultaneous one, so that not only the general concept but also the linguistic expression appears, so to say, instantaneously in consciousness. Likewise, in the languages of primitive peoples we can hardly imagine the situation to be different. Even granting that the words of such less advanced languages may be "sentence words," that is, that they denote general concepts, it is nevertheless a fact that the boundary-line between "general concept" and "single concept" is absolutely a relative and arbitrary one. The general concept expressed by ONE word characterizes itself for this very reason as a single concept.

It is our opinion that thus there can be associated with the notion of the sentence, in the linguistic sense, only the conception of a long historical development. THE FORMATION OF SENTENCES IS THE CULMINATING POINT OF THE LANGUAGE, AND NOT ITS STARTING POINT. It is only through a confusion of the sentence content with the sentence as representing the combination of sound units (this combination being brought about according to definite laws, and each unit by itself
being already associated with signification) that another conception is possible. Therefore, the linguistic examination of the sentence does not begin with the formation of the general concept and the detachment of single concepts. Such investigation concerns itself only with the question as to how it happens that the names of the single concepts can combine themselves again into constructive units in such a manner as to lead back to general concepts in such combinations.

h. Significance of the Correct Conception of the Sentence Notion—

If we attach great weight to an absolute clearness on this point, it is for the reason that a vague conception can easily be decisive in WRONG PEDAGOGICAL PROCEDURES, or at any rate can cast a halo of unmerited scientific glory around such procedures. In that case the word becomes a "vocabulary," and the sentence, the living "natural" speech-utterance. If one can say that the word originates from the sentence, the odious vocabulary need not be placed foremost, and likewise neither the grammatical dress in which it appears. These things, of course, can be inferred from the sentence. Just teach the pupils to express themselves in sentences;
then, as a matter of course, the particulars will gradually reveal themselves! Eggert, for instance, says in regard to the above-mentioned condition: "Any fluent speech-activity occurs in sentences; the sentence forms the starting-point for natural speech acquisition, and it is in the sentence that acquired speech mastery finds its perfect expression." This assertion is, as to its first part, absolutely wrong, unless the words are to be understood in an entirely superficial sense. Neither is the sentence the starting-point for the natural speech acquisition of the child, nor can the artificial speech acquisition of the pupil begin with the learning of sentences. The pupil may perhaps commit to memory a series of words which constitute a sentence in the objective sense, but not so from the subjective standpoint of the pupil, because he is lacking the current of concepts which make this very word combination necessary as an expression of the thought. If the teacher had given the same words in reverse order, the pupil would have repeated them with the same satisfaction, since for him there exist, for the time being, only phonetic associations. It is therefore the task of instruction to impart to the pupil conceptions which directly induce him to give the expression a definite form. In order to attain this, it is in most cases best to use such notions (rules and
examples) which lead the pupil indirectly to definite forms of expression, until these have become an inner necessity. The battle-cry of the opposite procedure is as follows: "If only the pupil would use the language, the correctness would follow as a matter of course."

One should therefore let the pupils form sentences at random without their having the corresponding foundation for grammatical notions, a policy which would be expecting the impossible.

But can one not have the pupils form short sentences at the very beginning of instruction in foreign languages? Apparently they do not find that so difficult to do, after all. This is, however, explained by the fact that the pupils can rely to some extent on the linguistic instinct of their mother tongue. According as this instinct conforms with the structure of the foreign tongue, they can thus form sentences. But the actual facts of the case are that they only acquire new vocables.

1. Grammatical Notions in Practice—

The unconscious activity whereby words, phrases, and sentences are formed before they appear as units in consciousness, can be appropriately denominated (as previously mentioned) LINGUISTIC MECHANISM ("Sprachlicher Mechanismus"). The participation of the will in
speech-activity is mainly restricted to the starting or the stopping of this mechanism. The mechanism itself in regard to the purely acoustic-motoric combinations must be brought about by simply repeating the elements in proper order. The constructive units, on the other hand, must be prepared by practicing constructive conceptions, which can be done in various ways—in many cases, most simply by a theoretical comprehension of the nature and the import of these conceptions.

We wish to repeat here that natural sentence construction (apart from the concessions formerly made in regard to phonetic associations and dispositions there-to) must, as stands to reason, repose on grammatical notions. So, if it is said that the mother tongue is spoken "without grammar," and that grammar is only a product of a theoretical speculation on language, this is correct only is so far as grammar is thought of as a systematic arrangement of the grammatical material in the form of positively stated rules. The difference between direct fluent speech and speech based on the employment of rules is, therefore, only one of degree—not one of nature. The native expresses a relation by the dative, since the notion of relation asserts itself directly in the given connection because of practice, and associates itself quickly with the
corresponding termination. The foreigner who is only just learning the language must reflect longer and more thoroughly on the content of the sentence and on the single words in order to call forth the correct associations; and in so doing, he is aided by purely theoretical comprehension of the grammatical notions. But these very notions must, of course, be present in both cases, no matter whether one can denominate them or not. There is therefore no unbridgeable gulf between natural speech and that based on known rules; the latter, through practice, leads gradually to the former.

j. Translation—

Hence, according to our opinion, sentence construction must be carefully practiced by gradually progressing from the simple to the more complex. But in most sentences many different grammatical notions are made use of. The beginner's attention is consequently engaged in many directions, whereby errors are likely to be caused, even when he is thoroughly acquainted with the rules in question. Experience, especially with translations from Latin, confirms this sufficiently. In order to prevent the pupils from getting nervous or from losing interest in correctness, it is therefore of
importance at the beginning not to carry the drill in grammatical forms to excess. For this reason free conversational exercises are not very well adapted for laying a solid foundation to sentence construction, because the pupils labor under the double task of forming the content of the sentence, the "general concept," and of constructing the linguistic expression. In such cases they either continually use the very simplest sentences, or they talk at random without the slightest concern for a correct construction; the result being bad habits hard to stamp out afterwards. A very good remedy (though recently often attacked) against these abuses is THE TRANSLATION FROM THE MOTHER TONGUE of sentences which are prepared in accordance with grammatical considerations. Such sentences need by no means be connected with each other. Insisting on such connection is exaggerating the importance of a point of view which holds good with respect to other features of language instruction. By sacrificing the connection, one derives advantage from the fact that it is thus much easier to focus the exercise on definite points, and that one is able to realize a mass effect which is of really great importance in language acquisition. The main point, however, is that in translations the pupil is given the content; therefore he need not worry
about that, but just the same he can not dodge this content: he has to practice the very things the teacher deems expedient.—There is one mistake which, above all, has probably brought translations into ill repute, a mistake to which pupils almost as a rule incline, and which should be checked from the very beginning by the teacher: While translating, the pupil thinks of the single words of the sentence instead of the underlying unit of consciousness, whereby errors, especially an intermixing of the two languages, are caused. For this reason, the teacher, when going over the exercises, should, whenever possible, make the pupils close their books. Then it comes more natural to them to think of the content instead of the words. In fact, it may occasionally happen that, in translating, "a pen" is confused with "a knife," which indicates that the pupil has failed to form a picture of the content. As a remedy, however, the teacher can directly urge him to do so: he can direct the pupil to use his imagination.—Furthermore, of great importance for practice in sentence construction is fluent, connected READING ALOUD, if based on correct comprehension of the constructions. That this is the case should be ascertained by means of analyzing the sentences wherever they contain difficult points.—Likewise, the free oral or
written reproduction of a text, questions and answers, presents certain possibilities for practice in sentence construction and these exercises are the more valuable in so far as they consolidate what has already been gained and make it the pupil's own. Such exercises should therefore always be done in connection with the translation, but it would not serve the purpose to depend on them entirely. The fact that translations do by no means absolutely satisfy all requirements of language acquisition will be explained elsewhere.

The principle of progressing from the simple to the complex, in order to avoid an overburdening of the attention, is of special importance for the study of languages, because of a certain phase of the relationship which exists between consciousness and speech-mechanism; and an investigation of this relationship is not only of general interest, but also yields a profit to pedagogy.

5. UNFAVORABLE AND FAVORABLE INFLUENCES ON SENTENCE FORMATION

   a. Constancy of Consciousness—

   The speech-mechanism does not function in all individuals with the same degree of perfection.
This applies also to cases where only the mother tongue is involved. Ordinary speech of even the linguistically educated person is, as a rule, more or less anacoluthic, or it contains contaminations of various sentence constructions. It is true that ordinarily we do not pay special attention to this fact, but as soon as it renders itself too conspicuous in formal speech, we can not fail to notice it. Indeed, fluent, absolutely correct speech is admired as a rare gift, but more so as a special art than as an indication of general mental superiority. Sometimes the ability for fluent speech is even taken as a sign of a somewhat limited intelligence or a lack of conscientiousness. In many cases it is from the greater or lesser correctness of speech that one infers the mental condition of the speaker: enthusiasm becomes manifest in fluent speech; embarrassment in hesitating and contaminated speech; etc.

At the root of these conditions lies the relation of the operation of the speech-mechanism to the simultaneously appearing states of consciousness. A certain degree of harmony must be preserved here in order that the coherent speech can develop itself without hindrance on the basis of the unconsciously executed preparatory work of the speech-mechanism. It is true that the simultaneously appearing conception of the sentence unit, which indicates that the disposition to utter
the sentence is in existence, need not be retained
until this disposition has been realized in all its
details; and that will mostly not be the case. Yet
the completion of the sentence is conditioned on the
fact that the content of consciousness as a whole
remain constant until the planned section of the speech
is finished without the intrusion of unharmonious,
conceptual series. For, in the end, the "general concept"
underlying the sentence is really in its turn only a
link of a more comprehensive total notion, whose vague-
ness may become fatal for the single general concepts
by paralyzing the will in the execution of the sentence-
plan as laid out. This constancy now can obviously
depend on highly different conditions, and can, on the
other hand, be disturbed for quite different reasons.
The latter lie partly in the nature of the conceptual
life, partly in the intervention of the emotions.

b. Thinking and Speaking—Grammatical Doubts—

If DIFFICULT MENTAL WORK is performed simultaneously
with the speech-utterance, the operation of the speech-
mechanism is disturbed by two factors: on the one
hand, the speaker's energy is being taken up during
the speech-activity, and on the other hand, a continual
transformation of the total notion and of the general concepts is taking place, such transformation being the cause for changes in the planned linguistic expression. Disturbances of this kind arise frequently in persons who have some capacity for independent thinking, or else move in spheres where they are not quite at home, yet who, nevertheless, are not inclined to confine themselves to trite thoughts. The repetition of such thoughts is indeed the most approved road to eloquence. It is to a large extent on this method that the oratorical achievements of pulpit-orators and demagogues are based, the effect in that case sometimes being a purely acoustic-motory and grammatical-aesthetic one; whilst the thought content comes to take second place. But fluent speech can also be attained by a thorough previous elaboration of original thoughts, a procedure which renders it easy for the speaker to follow the old rule, "rem tenere," the natural result of which is that "verba sequuntur."

Naturally, in using a foreign tongue, the difficulties increase. But after the fluency of speech has attained a certain degree of perfection, it can in this very case be observed with particular clearness how the speech-mechanism performs its operations autonomously, and brings to light words, phrases, and sentence constructions which the speaker himself hardly believed
he had at his command. The reason for this occurrence is to be sought in the fact that the speaker, because of the feeling of not being able to express all that might occur to him, confines his ideas to the absolutely necessary, thus giving the speech-mechanism a freer reign. Yet it is clear that speech in a foreign tongue thereby loses to some extent its personal coloring, even though the expression may apparently be of equal richness.

In the elementary stage of acquiring a foreign tongue, the difficulties are legion. So there is need of accustoming the pupil to the following two things: (1) to keep the notion uncontaminated, possibly by having recourse to his imagination, so that a graphic picture of the notional content is called forth; (2) to pronounce the sentence as a unit without reflecting during the utterance on its details. Instruction solely based on translation and grammar is likely to lead to this bad practice: The speaker allows his thoughts to turn away from the main idea because of some grammatical consideration, so that the thread of the sentence construction is cut in two. A Dane who had received a thorough training in German grammar, was once asked by a German, with whom he was riding in a train, for some information about a certain monumental building that could be seen from the compartment window. The one
addressed knew all about the building; nevertheless, he could not form a sentence. For he was supposed to use the word "Stift," and unfortunately he did not know that this German word can be masculine, feminine [1], or neuter according as the circumstances may require. But at the very moment he was not able to recall all the circumstances connected with it, and when finally he had realized that he should say "das Stift," it was too late to turn his knowledge to account. The pupil must therefore be urged to appreciate the sentence as a unit. It is true that when the pupil complies with the teacher's request to pronounce a sentence without a break, errors may sometimes occur. However, in this case, a sentence without errors is not essential. The fear of mistakes is often exaggerated. A language can be learned only through innumerable mistakes; what really counts is the fact that a serious and special effort is made to correct these mistakes. An isolated error which may occur when an effort is made to speak fluently, indeed, often serves as a warning for the future. But the habit of reflecting—while speaking—on the correctness of what is being said can easily take root, and then becomes fundamentally injurious to fluency of speech. It is therefore quite natural that pupils who have been wholly trained
by conversational exercises based on reflection, may in spite of considerable knowledge feel absolutely incapable of using the foreign language for conversational purposes—may, even for writing; and that their actual mastery of the language seems to grow in the same proportion as their grammatical knowledge is buried in oblivion. This fact does by no means preclude the use of translations; the concomitant defects can be removed, as previously stated, partly by the manner in which the exercise is carried out, partly by additional parallel exercises of a different nature. The main point is that the grammatical reflection, which is to make ready for the simultaneous construction of the sentence, must have been completed (as well as the construction itself) when the utterance of the sentence is begun. The pupil must realize that he aims at the formation of a sentence, but not at the jerky enumeration of a series of words which constitute a sentence only when they are spoken fluently. In order to warrant the fact that the pupil really aims at fluency of speech, it is best to insist on his speaking sentences in such a way that they conform to the rhythmical and accentual principles of the language in question.

The rule that the sentence should be conceived and spoken as a unit, holds true, of course, not only for translations. It must also be followed in all exercises,
including written ones. The pupil must picture the sentence as a connected whole before he writes it down. Many of the mistakes that occur in written exercises are due to the fact that the pupil fails to do this. He starts out without having a clear conception of the conclusion, his attention, during the writing, being taken up by reflections on the form and meaning of the individual words.

c. **Self-Assurance—Cheerfulness**

THE INFLUENCE OF THE EMOTIONS on natural speech progress is so universally known that we need not dwell very long on this fact. The evil effects of grammatical reflection can be partly ascribed to fear of committing mistakes, the importance of linguistic errors being overrated. A feeling, though of a quite different nature, which, nevertheless, can exert a similar disturbing influence on the execution of a period, is, strange to say, the joy over the fact that such a nice beginning has been made. A painter can afford every now and then to step back from his easel in order to rejoice over his artistic creation which has been carried out successfully so far; a speaker who has a similar desire faces danger. Generally speaking, one can say that fluent speech involves the real necessity of a certain amount of self-assurance which never loses
sight of its goal, i.e., the expression of the thought, and which never flinches in its conviction that this is of like importance to the hearer. It can not be denied that fluent speech is therefore often met with in such persons who have extravagant ideas of their own importance, and that fluent speech is really one of the main characteristics of mistaken authority. But seen from the linguistic point of view, it is an advantage to become merged in the subject matter, undisturbed by reflections on one's own authority and one's own value. Now, a certain rational self-assurance is in all human beings derived from a mental condition which is called CHEERFULNESS. Wine loosens man's tongue for the very reason that it promotes cheerfulness. The fact that cheerfulness has a favorable influence upon the speech-mechanism must not be underrated. The splendid results which are universally conceded (even by his opponents) to the famous reform-pedagogue, Walter of Frankfort-on-the-Main, seems, as far as one can judge the matter without personal observation, to be connected with a certain kind of humor, a humor which does not hesitate to stimulate cheerfulness in the class-room, sometimes even at the expense of the

master. However, this practice ought not be suggested to every teacher; only few teachers possess sufficient authority to measure up to the requirements of such a situation. At any rate, this much can be said with certainty: a person of an extremely serious and gloomy disposition should never choose the profession of language teaching, although he may have a special liking for linguistic studies. It is to be regretted that a purely philological interest is not infrequently combined with too much dryness and reserve. The language teacher must be able to induce the pupils to talk, but this is not to be understood to mean that he should be given to verbosity.

If the teacher can not do anything favorable in regard to the stimulation of a cheerful atmosphere, he ought at least be careful not to make the pupils nervous or self-conscious. As a matter of fact, this applies to all subjects of instruction; as to language instruction, however, it is of particular importance that the pupil dare venture forth; for in this case the important thing is that the pupil should express himself. The teacher must therefore be patient and give the pupil time to finish speaking without interrupting him or completing the sentence for him; moreover, the pupil is thereby sometimes saved the trouble of saying the essential thing
himself. The feeling that somebody is waiting impatiently for us to complete our speech is bound to cause speech disturbances.

d. **Use of the Voice**—

An external means of favorably influencing the speech-mechanism is doubtlessly given by the proper use of the voice. A certain display of vocal power and a clearness of articulation help to calm nervousness, such nervousness being discharged in speech-activity, just as in other cases the outlet manifests itself in movements of the arms and legs, in manipulation of objects which happen to be within the speaker's reach, or in contractions of muscles and difficulty in breathing. At any rate, it is obvious that the more strongly and unhampered the speech-mechanism can exert itself outwardly, the more smoothly it will operate; for this means really only a greater devotion to the very notional orbit, the acoustic-motoric one,

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In order to put life into the conversation, it is less detrimental to the pupil if the teacher begins the sentence, a matter which is indeed somewhat more difficult to do because of the fact that a beginning must be chosen that enables the pupil to continue and complete the sentence in his own limited manner. In most cases the impatient teacher, after having begun the sentence, will have to finish it himself.
on which the mechanism is based to a large extent. People who become heated and at all costs intend to express their opinion, thus voluntarily raise their voice, not only in order to make themselves better heard, (they do the same also when nobody else is speaking), but also in order not to be thrown off their intellectual track. If one says in such cases that the voice is "raised," it can be said that this expression, strictly speaking, is not quite correct. The actual facts are more likely to be as follows: ordinary speech takes place under a trained modulation of natural power. To be able to restrain one's voice is something that has been acquired, a habit that not all of us acquire in the same degree. There are people who, without being aware of it, burst forth in a thundering voice as soon as they communicate merely a trifling matter which is of interest to themselves. The ability to control the voice in a higher or lesser degree is likewise one of the most striking characteristics of nationality. The linguistic expression can hardly be said to derive any benefit from a checking of the vocal power, a weaker articulation usually being caused by the latter. Therefore the instructor should not permit the pupils to speak in too low a voice, and likewise he should always insist on a distinct articulation. Apart from this, the latter is of course a matter of capital importance for other reasons.
There exists without doubt a relation between the importance of the vocal power and the articulation in reference to connected speech, on the one hand, and, on the other hand, the fact that, generally speaking, speech of the oratorical type is easier to handle than the ordinary type. Most people will, of course be inclined to deny this when it is applied to themselves. But the reason why oratorical performances are known to fail easily is to be sought in circumstances which have absolutely nothing to do with speech-activity; their oratorical failures must be blamed above all on fear of public criticism. Speaking from a purely linguistic point of view, it can hardly be doubted that it is easier to express oneself in formal speech, because of the fact that formal speech calls for a loud and distinct voice. It is easier inasmuch as formal speech, for one thing, is directly favorable to the operation of the speech-mechanism, and, for another, indirectly adds to the feeling of power.

e. Educational Value of Language Study——

While speaking of the importance of language instruction to pedagogy in general, we deem it therefore
necessary to emphasize once more (as we did in describing the purely phonetical phenomena) how much this instruction contributes to the strengthening of social poise. The necessity for clearness and distinctness in thought-expression finally creates in an individual the power to concentrate on the essential without allowing himself to be thrown off the mental track either by unwarranted fear or by lack of considerateness for others. It is of no little importance to emphasize this fact, because the fear has sometimes been expressed (even by German pedagogues) that language instruction, as such, might not be of direct educational value. Moreover, it would be hard to believe that the teacher of modern languages wishes to be considered a second-rate teacher; on the contrary, he too, desires to contribute to the mental culture of the pupils. Thus W. Rattke, for instance, asks that foreign language instruction in secondary schools should lay special stress on familiarity with the national characteristics and the culture of the foreign nation in question. He says: "For apart from the practical use to which the foreign language is put by some pupils in their later profession or business, one can truly say that it is indeed of no cultural value to know what phonetical symbols the French and English have for any concept"
WHATSOEVER. On the contrary, language ought to be considered as an expression of the cultural life of a nation, and language instruction ought to be utilized as cultural instruction."\textsuperscript{24} This statement matches the current popularity of "Land und Leute."\textsuperscript{25} Further statements of Rattke show that this author thinks of knowledge which lies outside of the purely linguistic domain; therefore he is particularly concerned about the selection of pieces for reading. As a matter of fact, the whole statement directly contradicts the one he makes on the following page of his book, where we read as follows: "The capability of expressing one's thoughts in a foreign idiom correctly and skillfully is indeed a quite admirable achievement, although it must be admitted that our schools are only partially successful in that respect. Such capability requires not only a certain control over the speech-organs, but it calls likewise for no small amount of mental versatility, clarity, and decision." But how can we harmonize this statement with the previous one in which Rattke tells us that he sees no value for the pupil in knowing how the French and the English express phonetically such
and such a concept? For, as a matter of fact, the point in question is not the mere possession of such knowledge but just as well the means which one has to employ to acquire such knowledge, and finally the mental work which one is induced to do in order to secure such knowledge... And the pupils of the secondary schools likewise cannot be spared this mental work, because on it depends not only the real formal education, the training of the intelligence, but also a certain training of the individual in his relation to his immediate environment. However, to most pupils this is perhaps of greater importance than the understanding of a foreign nationality, especially since such knowledge, if it is to be acquired by literary means, is bound to be a very limited one; and were it to yield good results, would require a deeper penetration into the study of the foreign literature. The fact that training in languages gives the student a certain polish has been universally acknowledged also outside of linguistic circles; but this, it should be borne in mind, is not a mere external accomplishment to be had for money, as many seem to think.

6. THE SIGNIFICANCE OF THE SPEECH-MECHANISM IN REGARD TO CONCEPTION—
If we speak of the development and cultivation of the speech-mechanism, one must not believe that this is meant to apply exclusively to the oral and written usage of the language, and not to the conception through the ear or to reading. In order to understand what we hear and read, it is necessary for us to be able to form a state of consciousness which corresponds to the one from which the speech-utterance or the text arose. Just as this state of consciousness and the corresponding linguistic expression form themselves in the speaker simultaneously and previous to the speech-utterance, the hearer or reader on his part does not delay the mental reproduction of the linguistic expression and the corresponding state of consciousness until he has heard or read the entire sentence. He sometimes rather anticipates the external stimuli. After having heard or read the subject the hearer or reader is at least prepared for the verb; from the verb the thought hurries on to the direct or indirect object. Prepositions stimulate the expectation for definite flectional terminations, etc. In set phrases the mere beginning calls forth the whole combination. Without this cooperation the conception of what is heard would be impossible, and the comprehension of what is read would be dependent on conscious construction, during which the reader would soon grow weary. Natural, immediate comprehension of
spoken and written sentences is conditioned on the capability of active sentence formation, as well as on the capability of forming sounds, words, and phrases. This capability is often better attained by independently practicing sentence construction than by mere observation. Therefore we must emphasize here once more that one is not justified in considering practice in the active use of a language as something entirely different from practice in the comprehension of the language. Any one who has witnessed the death-struggle of Latin in the Danish schools will have noticed how the abolition of translations into Latin prepared for its complete downfall; this fact was attested by the increasing difficulties in rendering written translations from Latin. Likewise, in Danish schools, the traditional instruction in Greek without any practice in sentence construction illustrates sufficiently what scanty linguistic gain is derived from this difficult subject. Assurance in reading a language is based on a DIRECT consciousness of what the language permits and what the language demands.