

THE COLLECTED WORKS OF
L. S. VYGOTSKY

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Including the Volume *Thinking and Speech*

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Chapter 7

THOUGHT AND WORD

*I forgot the word that I wanted to say,
And thought, unembodied, returns to the hall of shadows.*
O.E. Mandelshtam, *The Swallow*

1

Our investigation began with an attempt to clarify the internal relationships between thought and word at the most extreme stages of phylogenetic and ontogenetic development. In the prehistoric development of thinking and speech, we found no clearly defined relationships or dependencies between the genetic roots of thought and word. Thus, the internal relationships between thought and word with which we are concerned are not primal. They are not something given from the outset as a precondition for further development. On the contrary, these relationships emerge and are formed only with the historical development of human consciousness. They are not the precondition of man's formation but its product.

With the anthropoids -- the ultimate development of the animal world -- we find forms of speech and intellect that are phenotypically similar to their counterparts in man. However, they are not connected with one another in any way. In the initial stages of child development, we can clearly identify a preintellectual stage in the formation of speech and a pre-speech stage in the development of thinking. Once again, the connection between thought and word is neither inherent or primal. This connection emerges, changes, and grows with the development of thought and word.

As we tried to show at the outset, however, it would be incorrect to represent thinking and speech as processes that are externally related to one another, as two independent forces moving and acting in parallel with one another or intersecting at specific points and interacting mechanically. The absence of a primal connection between thought and word does not imply that this connection can arise only as an external connection between two fundamentally heterogeneous forms of the activity of consciousness. On the contrary, the basic methodological defect of nearly all studies of thinking and speech -- that which underlies the fruitlessness of this work -- is the ten-

dency to view thought and word as two independent and isolated elements whose external unification leads to the characteristic features of verbal thinking.

We have attempted to demonstrate that those who begin with this mode of analysis are doomed to failure from the outset. To explain the characteristics of verbal thinking, they decompose the whole into the elements that form it. They decompose verbal thinking into speech and thinking, elements that do not contain the characteristics inherent to the whole. This closes the door to any real explanation of these characteristics. We have compared the researcher who takes this approach to one who decomposes water into hydrogen and oxygen in the attempt to explain why water extinguishes fire. As we noted, this researcher would find to his surprise that oxygen sustains combustion while hydrogen is itself combustible. We also argued that decomposition into elements is not analysis in the true sense of the word but *a process of raising the phenomenon to a more general level*. It is not a process that involves the internal partitioning of the phenomenon which is the object of explanation. It is not a method of analysis but a method of generalization. To say that water consists of hydrogen and oxygen is to say nothing that relates to water generally or to all its characteristics. It is to say nothing that relates to the great oceans and to a drop of rain, to water's capacity to extinguish fire and to Archimedes's law. In the same way, to say that verbal thinking contains intellectual processes and speech functions is to say nothing that relates to the whole of verbal thinking and to all its characteristics equally. It is to say nothing of relevance to the concrete problems confronting those involved in the study of verbal thinking.

From the outset, then, we have tried to frame the entire problem in a new way and apply a new method of analysis. We attempted to replace the method based on decomposition into elements with a method of analysis that involves partitioning the complex unity of verbal thinking into units. In contrast to elements, units are products of analysis that form the initial aspects not of the whole but of its concrete aspects and characteristics. Unlike elements, units do not lose the characteristics inherent to the whole. The unit contains, in a simple, primitive form, the characteristics of the whole that is the object of analysis.

We found the unit that reflects the unity of thinking and speech in the *meaning* of the word. As we have tried to show, word meaning is a unity of both processes that cannot be further decomposed. That is, we cannot say that word meaning is a phenomenon of either speech or thinking. The word without meaning is not a word but an empty sound. Meaning is a necessary, constituting feature of the word itself. It is the word viewed from the inside. This justifies the view that word meaning is a phenomenon of speech. In psychological terms, however, word meaning is nothing other than a generalization, that is, a concept. In essence, generalization and word meaning are synonyms. Any generalization -- any formation of a concept -- is unquestionably a specific and true act of thought. Thus, word meaning is also a phenomenon of thinking.

Word meaning, then, is a phenomenon of both speech and intellect. This does not, however, represent a simultaneous and external membership in two different domains of mental life. Word meaning is a phenomenon of thinking only to the extent that thought is connected with the word and embodied in it. It is a phenomenon of speech only to the extent that speech is connected with thought and illuminated by it. Word meaning is a phenomenon of verbal thought or of the meaningful word. It is a unity of word and thought.

No further evidence is needed to support this basic thesis. Our experimental studies have consistently supported and justified it. They have shown that by taking word meaning as a unit of verbal thinking we create the potential for investigating its

development and experimental stages. The subsequent conclusion, the finding that word meaning develops and changes is our main contribution. It is our main contribution to the study of the development of constancy of word meaning as a foundation for previous research.

From the perspective of meaning is associative in perceptual development, word meaning reminds an infant of the word and changes once it has been reinforced or weakened by the same type of objects, or contrasted with other objects. In other words, the word meaning changes. It cannot, however, be said to require that it cease to exist. In perspective, the development of word meaning -- becomes a process of change.

This is expressed in the development of adult speech. Having a word meaning that is connected with sound-form and its object (semantics) has a most abstract -- are a connection that unite for meaningful speech. We have seen his coat of arms and remember its meaning. There is nothing unique about it. It does not pose the question of the development of the word reduced to changes in the word may initially develop through the processes of another, may initially develop of the meaning of the object content of the word might change through linguistic. Linguistic meaning changes, that is, to higher and more complex organization of reality in the process of the historical development of the word.

This associative process of development of the meaning of the word is a process of change. The development of the word meaning and quantitative changes

development and explaining its most important characteristics at the various developmental stages. The primary result of this work, however, is not this thesis itself but a subsequent conclusion that constitutes the conceptual center of our investigation, that is, the finding that word meaning *develops*. The discovery that word meaning changes and develops is our new and fundamental contribution to the theory of thinking and speech. It is our major discovery, a discovery that has allowed us to overcome the postulate of constancy and unchangableness of word meaning which has provided the foundation for previous theories of thinking and speech.

From the perspective of traditional psychology, the connection between word and meaning is associative; it is a connection established as a result of a repeated coincidence in perceptual consciousness of the word and the thing the word designates. The word reminds an individual of its meaning in the same way that a person's coat reminds him of the person. From this perspective, word meaning cannot develop or change once it has been established. Associations that connect word and meaning can be reinforced or weakened. It can be enriched through connections with other objects of the same type, extended in accordance with similarity or contiguity to a wider circle of objects, or contracted as this circle of objects narrows or becomes more restricted. In other words, the association may undergo a series of quantitative and external changes. It cannot, however, change its internal psychological nature. This would require that it cease to be what it is, that it cease to be an association. From this perspective, the development of the meaningful aspect of speech -- the development of word meaning -- becomes inexplicable and impossible.

This is expressed in linguistics and in the psychological study of both child and adult speech. Having assimilated the associative conception of the word, the field of linguistics that is concerned with the study of the meaningful aspect of speech (i.e., semantics) has continued to view the word as an association between the word's sound-form and its object content. Word meanings -- from the most concrete to the most abstract -- are assumed to have a single common structure. Since the associative connection that unites the word and its meaning constitutes the foundation not only for meaningful speech but for processes such as being reminded of a person because we have seen his coat there is nothing unique to speech as such. The word forces us to remember its meaning in the same way that one thing reminds us of another. Because there is nothing unique in the connection of the word with its meaning, semantics cannot pose the question of the development of the meaningful aspect of speech, the question of the development of word meaning. The entire process of development is reduced to changes in the associative connections between words and objects. The word may initially designate one object and then become connected with another through the processes of association. The coat, being transferred from one owner to another, may initially remind us of one person and subsequently of another. The development of the meaningful aspect of speech is reduced to the changes that occur in the object content of words. The notion that the semantic structure of word meaning might change through the historical development of language is completely foreign to linguistics. Linguistics cannot perceive the possibility that the psychological nature of meaning changes, that linguistic thought moves from primitive forms of generalization to higher and more complex forms, that the very nature of the reflection and generalization of reality in the word changes with the emergence of abstract concepts in the process of the historical development of language.

This associative perspective on word meaning also leads to the view that the development of the meaningful aspect of speech in ontogenesis is impossible and inexplicable. The development of word meaning in the child is reduced to purely external and quantitative changes in the associative connections that unite word and meaning,

to the enrichment or reinforcement of these connections. The notion that the structure and nature of the connections between word and meaning might change during the development of the child's speech -- the fact that they do change during ontogenesis -- is inexplicable from the associative perspective.

Finally, this perspective leads to the notion that there is nothing in the verbal thinking of the adult other than an unbroken, lineal, associative movement from the word to its meaning and from the meaning to the word. The understanding of speech is conceptualized as a chain of associations that arise in the mind under the influence of familiar word forms. The expression of thought in the word is conceptualized as the reverse movement along this same associative path, beginning this time with the representation of objects in thought and moving to their verbal designation. These kinds of mutual connections between two representations are always insured by associations. At one point, the coat may remind us of the person who wears it, while at another the form of the person may remind us of his coat. Thus, there is nothing in the understanding of speech nor in the expression of speech in thought that is new or unique when compared to other acts of remembering or associative connection.

The inadequacy of associative theory was recognized and demonstrated (both experimentally and theoretically) some time ago. This has not, however, influenced the associative understanding of the word and its meaning. The Wurzburg school considered its main task to be that of demonstrating that thinking cannot be reduced to an associative flow of representations, that the movement, cohesion, and recall of thoughts cannot be explained in associative terms. It assumed the task of demonstrating that the flow of thought is directed by several unique laws. However, the Wurzburg school not only failed to reanalyze the associative perspective on the relationship between word and meaning but failed to see why this kind of reanalysis was necessary. Instead, it separated speech and thinking, granting to God what is God's and to Caesar what is Caesar's. It liberated thought from all images and from everything sensual. It liberated thought from the power of associative laws, transforming it into a purely mental act. In the process, it returned to ideas that have their roots in the pre-scientific spiritualistic conceptions of Augustine⁷⁵ and Descartes.⁷⁶ The final product was an extreme subjective idealism that surpassed even that of Descartes. In Kulpe's words: "We not only say: 'I think therefore I am.' We argue that 'the world exists only as we establish it and define it'" (1914, p. 81). Since thinking belonged to God it was granted to God. As Kulpe himself recognized, this opened the door for the psychology of thinking to move toward the ideas of Plato.

Having liberated thought from any sensual component and returned it to a pure, unembodied, mental act, these psychologists simultaneously tore thinking from speech and assigned the latter entirely to the domain of associative laws. Thus, the connection between the word and its meaning continued to be viewed as a simple association. The word was seen as the external expression of thought, as its clothing. The word had no place in the inner life of thought. Never have thinking and speech been as isolated from one another in psychological theory as they were in the Wurzburg epoch. The process of overcoming associationism in the domain of thinking led to its reinforcement in the domain of speech. As Caesar's, speech was granted to Caesar.

Psychologists who have extended this line of thought within the tradition of the Wurzburg school have not only failed to transform it but have continued to deepen and develop it. Having demonstrated the complete inadequacy of the constellational theory of productive thinking (ultimately, the inadequacy of the associative theory of productive thinking), Seltz replaced it with a new theory that deepened and strengthened the gap between thought and word that was inherent in the works of this tradition from the outset. Seltz continued to analyze thinking in and of itself, estranged

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To clarify the concept again use the example of

from speech. He concluded that man's productive thinking is identical in its fundamentals to the intellectual operations of the chimpanzee. To the extent that the word introduced nothing new to the nature of thought, thinking remained independent of speech.

Even Ach, who made special studies of word meaning and who first made the move toward overcoming associationism in concept theory, was unable to go beyond a recognition that determining tendencies were present alongside associative tendencies in the process of concept formation. He did not escape from the earlier understanding of word meaning. He identified the concept with word meaning, excluding any potential for change and development in concepts. Ach assumed that once meaning emerged, it remained unchanged and constant. He assumed that the development of word meaning is finished at the moment of its formation. The psychologists Ach criticized assumed the same thing. Thus, though Ach and his opponents differed in their representations of the initial moment in the formation of word meaning, both assumed that the initial moment and end point in the process of concept development coincide.

We find the same thesis concerning the theory of thinking and speech in contemporary structural psychology. This tradition has made a more profound and consistent attempt to overcome associative psychology. Therefore, it has not been limited to the indecisive resolutions of the question characteristic of its predecessors. It has attempted to remove not only thinking but speech from the domain of associative laws, to subordinate both to the laws of structural formations. However, this tradition not only failed to advance in its theory of thinking and speech but took a profound step backward in comparison to its predecessors.

First, this new theory preserved a fundamental break between thinking and speech. The relationship between thought and word was represented as a simple analogy, as a reduction of both to a common structural denominator. Within this tradition, researchers conceptualized the origin of true meaningful words in the child as analogous to the intellectual operations of the chimpanzee in Kohler's experiments. They argued that the word enters the structure of things and acquires a certain functional significance in the same way that the stick entered into the structure of the situation of attaining fruit for the chimpanzee and acquired the functional significance of a tool. The connection between the word and meaning is no longer thought of as an associative connection. It is represented as a structural connection. Of course, this is a step forward. However, if we carefully consider the foundations of this new perspective, we quickly find that this step forward is an illusion, that we remain in the rut laid down by associative psychology.

The word and the thing that it designates form a single unified structure. However, this structure is analogous to any structural connection between two things. There is nothing that is unique to the word. Any two things, whether they are a stick and some fruit or a word and the object it designates, merge into a unified structure in accordance with the same laws. Once again, the word turns out to be just one thing among other things. It is a thing which is united with other things in accordance with the general structural laws that unite all things. What distinguishes the word from other things? What distinguishes the structure of the word from other structures? How does the word represent the thing in consciousness? What makes the word a word? All these questions remain outside the researcher's field of view. The rejection of the unique character of the word and its relationship to meaning, the dissolving of these particular connections into the sea of all structural connections, is no less characteristic of the new psychology than it was of the old.

To clarify the concept of the word's nature in structural psychology, we can once again use the example of the man and his coat. That is, we can use the same example

we used in clarifying the concept of the connection between word and meaning in associative psychology. The word reminds us of its meaning in the same way that the coat reminds us of the man on which we are accustomed to seeing it: this thesis preserves its force for structural psychology. Here, the coat and the man that wears it form a unified structure, a structure which is entirely analogous to the word and the thing it designates. The fact that the coat may remind us of its owner and that the man's form may remind us of his coat are once again explained in this new psychology through a single set of structural laws. The principle of association is replaced with the principle of structure.

Like the principle of association, this new principle is extended to all relationships, extended universally and without differentiation. Representatives of the old psychology argue that the connection between the word and its meaning is formed in the same way as the connection between the stick and the banana. Is this not the same connection that we have discussed in our example? In the new psychology, as in the old, any possibility of explaining the unique relationships between word and meaning is excluded. There is no fundamental distinction between these relationships and other object relationships. In the twilight of universal structural relations, all cats are gray. As had earlier been the case in the twilight of universal associative connections, it is impossible to distinguish them.

Ach attempted to overcome the concept of associations by using the concept of the determining tendency. Gestalt psychology made the same attempt, relying on structural principles. In both cases, however, two basic features of the old theory were preserved. First, Ach and the Gestalt psychologists preserved the concept that the connections between word and meaning are fundamentally identical to the connections between other things. Second, they preserved the notion that the word -- by its nature -- does not develop. The concept that the development of word meaning is completed at the moment the word emerges is as basic to Gestalt psychology as it was for traditional psychology. This is why the succession of research traditions in psychology -- while producing sharp advances in areas such as perception and memory -- appear to be ceaselessly marking time or revolving in a circle in their treatment of the issue of thinking and speech. One principle is replaced by another and the new is in radical opposition to what has preceded it. In their understanding of the relationship between thinking and speech, however, the old and new are like identical twins. In the words of the French proverb, the more things change the more they stay the same.

In its theory of speech, the new psychology retains the thesis of the old; it preserves the concept that thought is independent of word. In its theory of thinking, however, it actually takes a significant step backward. First, Gestalt psychology tends to reject the notion that there are laws that are specific to thinking as such; it tends to merge the laws of thinking with general structural laws. The Wurzburg school raised thought to the rank of a purely mental act, leaving the word in the domain of unchanging sensory associations. As we said, this was its basic flaw. Nonetheless, the Wurzburg school was able to differentiate the laws that govern the coupling, movement, and flow of thoughts from the more elementary laws that govern representations and perceptions. This psychology was more advanced than Gestalt psychology in this respect. Reducing the domestic chicken's perception, the chimpanzee's intellectual operations, and the child's first meaningful word to a common structural denominator, Gestalt psychology has not only erased any boundary between the structure of the meaningful word and the structure of the stick and banana -- it has erased the boundary between the highest forms of thinking and the most elementary perception.

If we summarize this modest critical outline of the basic contemporary theories of thinking and speech, we find two basic theses inherent to them. First, none of these

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theories has grasped what is most basic and central to the psychological nature of the word; none has grasped what makes the word a word and without which it would no longer be one. All have overlooked the generalization that is inherent in the word, this unique mode of reflecting reality in consciousness. Second, these theories consistently analyze the word and its meaning in isolation from development. These two points are internally linked. Only an adequate conception of the word's mental nature can lead us to an understanding of the possibilities that exist for the development of the word and its meaning. These features are preserved at each stage in this sequence of research traditions. To this extent, they merely repeat one another. Thus, the conflicts among the various research traditions in the contemporary psychology of thinking and speech are reminiscent of Heine's humorous poem where he tells of the reign of the old and venerable Template (Schablon) who was killed by a dagger raised against him:

*When they had finished with the coronation,
The new heir to kingdom and throne
Seemed to those who called him New Temmplate
Like the Old Template they'd already known.*

2

The discovery of the changeable nature of word meanings and their development is the key to liberating the theory of thinking and speech from the dead end where it currently finds itself. Word meaning is inconstant. It changes during the child's development and with different modes of the functioning of thought. It is not a static but a dynamic formation. To establish the changeable nature of meaning, we must begin by defining it correctly. The nature of meaning is revealed in generalization. The basic and central feature of any word is generalization. All words generalize.

It is important to emphasize, however, that the fact that the internal nature of word meaning changes implies that the relationship of thought to word changes as well. To understand the changeable and dynamic relationship of thought to word, we need to take a cross-section of the genetic scheme of changes in meaning that we developed in our basic research. We need to clarify *the functional role of verbal meaning in the act of thinking*.

We have not yet had the opportunity to consider the process of verbal thinking as a whole. However, we have brought together all the information necessary to outline the basic features of this process. At this point, we will attempt to outline the complex structure of the actual process of thinking, the complex movement from the first vague emergence of a thought to its completion in a verbal formulation. For this purpose, we must move from a genetic to a functional plane of analysis. That is, we must now analyze not the development of meanings and their structure, but the process through which *meanings function in the living process of verbal thinking*. If we succeed in this, we will have shown that with each stage in development there exists not only a specific structure of verbal meaning, but a special relationship between thinking and speech that defines this structure. Functional problems are resolved most easily when we are studying the higher, developed forms of some activity, where the whole complexity of the functional structure appears in a well articulated, mature form. Therefore, we will consider issues of development only briefly, turning then to the study of the relationships of thought to word in the development of consciousness.

When we attempt to realize this goal, a grand and extraordinarily complex picture emerges before us, a picture that surpasses in subtlety the architectonics of researchers' richest expressions. In the words of Tolstoy, "the relationship of word to

thought and the formation of new concepts is the most complex, mysterious, and delicate process of the spirit (1903, p. 143).

Before moving on to a schematic description of this process, we will state our leading concept. This central idea -- a concept we will develop and clarify in the following discussion -- can be expressed in the following general formula: The relationship of thought to word is not a thing but a process, a movement from thought to word and from word to thought. Psychological analysis indicates that this relationship is a developing process which changes as it passes through a series of stages. Of course, this is not an age related development but a functional development. The movement of thinking from thought to word is a developmental process. Thought is not expressed but completed in the word. We can, therefore, speak of the establishment (i.e., the unity of being and nonbeing) of thought in the word. Any thought strives to unify, to establish a relationship between one thing and another. Any thought has movement. It unfolds. It fulfills some function or resolves some task. This flow of thought is realized as an internal movement through several planes, as a transition from thought to word and from word to thought. Thus, the first task in an analysis of the relationship of thought and word as a movement from thought to word is to analyze the phases that compose this movement, to differentiate the planes through which thought passes as it becomes embodied in the word. To paraphrase Shakespeare, much opens up before us here of which "even wise men have not dreamed."

Our analysis leads first to the differentiation of two planes of speech. Though they form a unity, the inner, meaningful, semantic aspect of speech is associated with different laws of movement than its external, auditory aspect. The unity of speech is complex, not homogeneous. This differentiation in the movement of the semantic and sound aspects of speech is reflected in several factors related to the ontogenesis of speech development. In the present context, we will note only two major factors.

First, we know that the development of the external aspect of speech in the child begins with the initial single word utterance and moves to the coupling of two or three words, then to the simple phrase and the coupling of phrases, and still later to the complex sentence and connected speech composed of a series of complex sentences. Thus, in mastering the external aspect of speech, the child moves from the part to the whole. In its meaning, however, we know that the child's first word is not a one word sentence but a whole phrase. Thus, in the development of the semantic aspect of speech, the child begins with the whole -- with the sentence -- and only later moves to the mastery of particular units of meaning, to the mastery of the meanings of separate words. The child begins with the whole and only subsequently partitions its fused thought which is expressed in the one word sentence into a series of separate though interconnected verbal meanings. Thus, the development of the semantic and external aspects of speech move in opposite directions. The semantic aspect of speech develops from the whole to the part or from the sentence to the word. The external aspect of speech moves from the part to the whole or from the word to the sentence.

This alone is sufficient to demonstrate the necessity of distinguishing the development of the meaningful and the external aspects of speech. Movement along these two planes does not coincide; it does not merge into a single line. As this example indicates, it can follow lines that move in opposite directions. Of course, this does not imply a rupture in the relationship between these two planes of speech. It does not imply that they are autonomous of one another. On the contrary, the differentiation of these two planes is a first and a necessary step in establishing their internal unity. This unity presupposes that each of these two aspects of speech has its own movement and that the relationships between these movements are complex. We can analyze the relationships underlying the unity of speech only after we have differentiated the aspects

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Even at the outset, then, thought and word are not cut from a single mold. In a certain sense, one can say that we find more opposition than agreement between them. The structure of speech is not a simple mirror image of the structure of thought. It cannot, therefore, be placed on thought like clothes off a rack. Speech does not merely serve as the expression of developed thought. Thought is restructured as it is transformed into speech. It is not expressed but completed in the word. Therefore, precisely because of their contrasting directions of movement, the development of the internal and external aspects of speech form a true unity.

A second fact of no less importance characterizes a later phase of development. As we noted earlier, Piaget established that the child masters the complex structure of the subordinate clause (composed of conjunctions such as "because," "despite," "since," and "although") earlier than he masters the semantic structures that correspond with these syntactic forms. In other words, the child's grammar develops before his logic. Over the entire extent of the school age, the child uses conjunctions correctly and adequately in spontaneous speech in expressing causal, temporal, adversative, conditional, and other dependencies. He is not, however, consciously aware of the semantic aspect of these conjunctions nor is he able to use them voluntarily. Once again, then, the movements of the semantic and external aspects of the word in the mastery of complex syntactic structures do not coincide. Analysis of the word indicates, however, that this lack of correspondence does not exclude the unity of grammar and logic in the development of the child's speech. In fact, this lack of correspondence is fundamental to the internal unity of meaning and word that is expressed in complex logical relations.

This lack of correspondence between the semantic and external aspects of speech emerges less directly but even more clearly in the functioning of developed thought. To see this, we must shift our analysis from the genetic to the functional plane. First, however, it is important to note that the facts which have emerged in our discussion of the genesis of speech allow us to draw several important conclusions concerning the nature of functional relationships. We have seen that the development of the meaningful and external aspects of speech move in opposing directions during the entirety of the early childhood period. It is, therefore, no surprise that we would never find complete correspondence between them at any point in the developmental process.

A more striking set of facts can be taken directly from the functional analysis of speech, facts that are well known to psychologically oriented contemporary linguistics. Of many relevant facts, the most significant are those which indicate a lack of correspondence between the grammatical and the psychological subject and predicate.

Fasler argues that it is wrong to use a grammatical framework in interpreting the meaning of linguistic phenomena, since the psychological and grammatical articulation of speech do not always correspond. Uland⁷⁷ begins the prologue to "Herzog Ernst Shvabskii" with the words: "A severe spectacle opens up before you." Grammatically,

can say only one thing: In its oscillation and in the incongruity of the grammatical and the psychological our normal conversational language is in a state of dynamic equilibrium between the ideals of mathematics and the harmony of imagination. It is in the state of continuous movement that we call evolution.

These examples demonstrate the lack of correspondence between the external and the semantic aspects of speech. At the same time, however, they show that this does not exclude their unity. On the contrary, it presupposes such a unity. This lack of correspondence does not interfere with the realization of thought in the word. Indeed, it is necessary for the movement from thought to word.

To clarify this internal dependency between the two planes of speech, we will give two examples of how changes in the formal and grammatical structure of speech lead to profound changes in its sense. Krylov, in the fable, "The Dragonfly and the Ant", substituted the dragonfly for La Fontaine's grasshopper while retaining the inapplicable epithet "the jumper." In French, the word grasshopper is feminine. It is, therefore, well suited to embody the image of a carefree attitude and feminine lightheadedness. In Russian -- because the grammatical gender of "grasshopper" is masculine -- this nuance of meaning critical to the illustration of frivolity would have disappeared had the fable been translated literally. Therefore, Krylov took grammatical gender over actual meaning -- substituting the dragonfly for the grasshopper -- while preserving characteristics of the grasshopper such as jumping and singing that are clearly not characteristic of the dragonfly. Thus, to adequately translate the sense of the tale, the feminine grammatical gender had to be preserved.

We find something similar in the Russian translation of Heine's poem, "The Fir and the Palm." In German, "fir" is masculine in gender. Thus, in German, the poem symbolizes love for women. To preserve the sense of the German text, Tiutchev substituted a cedar for the fir, since in Russian "cedar" is masculine. In contrast, by translating the poem literally, Lermontov lost this sense. As a consequence, his translation gives the poem a fundamentally different sense, one that is more abstract and generalized. Thus, a change in a single, seemingly insignificant, grammatical detail can lead to a change in the whole meaningful aspect of speech.

We can summarize what we have learned from this analysis of the two planes of speech in the following way. First, these two planes do not correspond. There is a second, inner, plane of speech standing beyond words. The independence of this grammar of thought, of this syntax of verbal meanings, forces us to see -- even in the simplest of verbal expressions -- a relationship between the meaningful and the external aspects of speech that is not given once and forever, a relationship that is not constant or static. What we do see is movement. We see a continuous transition from the syntax of meanings to the grammar of words, a transformation of sense structure as it is embodied in words.

Obviously, if the external and the semantic aspects of speech do not correspond, the verbal expression cannot emerge directly in its fully developed form. As we have seen, the semantic and the verbal syntax arise neither simultaneously nor together. Transition and movement from one to the other is inherent in the process. Moreover, this complex process involved in the transition from meanings to sounds itself develops. This development constitutes an important aspect of the development of verbal thinking. The partitioning of speech into semantics and phonology is not given at the outset. It arises in the course of development. The child must differentiate these two aspects of speech. He must become consciously aware of the different nature of each to permit the gradual descension that is presupposed in the living process of meaningful speech. In the child, we initially find a lack of conscious awareness of verbal forms and verbal meanings. The two are not differentiated. The word and its sound