

THE COLLECTED WORKS OF  
L. S. VYGOTSKY

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Including the Volume *Thinking and Speech*

Edited by  
ROBERT W. RIEBER

*John Jay College  
and the Graduate Center  
City University of New York  
New York, New York*

and  
AARON S. CARTON

*State University of New York at Stony Brook  
Stony Brook, New York*

Prologue by  
JEROME S. BRUNER

Translated and with an Introduction by  
NORRIS MINICK

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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. Mandelstam, *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 finding. It is our main finding that word meaning is our main finding of constancy and stability of foundation for previous

From the perspective of meaning is associative in perceptual meaning reminds an individual of the past change once it has been reinforced or weakened of the same type, or contrast of objects, or contrast. In other words, the changes. It cannot, however, require that it cease to exist. In perspective, the development of word meaning -- becomes

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

This associative development of the meaning is a variable. The development 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 Augustine<sup>75</sup> and Descartes.<sup>76</sup> 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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from speech. He comes mentally to the intellect introduced nothing into speech.

Even Ach, who move toward overcomes recognition that determine in the process of construction of word meaning. He is a trial for change and when emerged, it remained word meaning is finalized assumed the same representations of thought that the initial moment

We find the same temporary structural psychology attempt to overcome indecisive resolutions attempted to remove not to subordinate both but only failed to advance backward in comparison

First, this new relationship speech. The relational analogy, as a reduction condition, researchers compare analogous to the intellect. They argued that the relational significance in the condition of attaining fruit for tool. The connection is associative connection. step forward. However, we quickly find the down by associative psychology

The word and the ever, this structure is There is nothing that is and some fruit or a word accordance with the same among other things. In the general structural other things? What does How does the word relate word? All these questions of the unique character of these particular connections characteristic of the new psychology

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