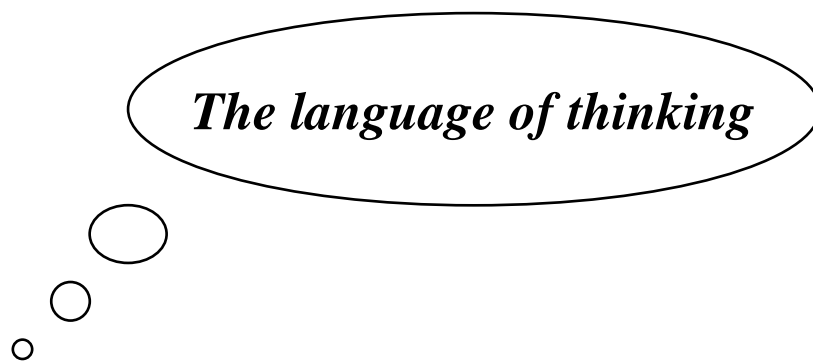


To M. Forrester
Psychology of Language
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Everybody knows that we think.

Probably nobody knows what thinking is.



“Bees do a particular kind of dance to inform the other bees that they have located a source of nectar. Birds and fish adopt particular postures or gestures to indicate particular intentions. Apes and monkeys alter their cries in accordance with a set series of situations which have meaning to others in the group. But only man has evolved a system of words to symbolise objects, actions, thoughts, and the relationship between them.¹” Human language uses words as tools that permit the diffusion of ideas, knowledge and experiences across space and time². Human beings find in speech the most powerful means to communicate with other people. Moreover they use the “same” words to represent and to reason about their world when they think. It does not mean that language and thinking are the same thing, as I will try to explain during this essay, but that there are important relations between these two entities that however remain independent. Language and thinking are central human activities and they are certainly two of the most complex and difficult human faculties to analyse and to understand. Questioning if thinking is possible without language is an example of this complexity and of the interest of this topic. I will not be able to give a definite answer to the previous question and I sincerely do not think that such an answer is possible. In this essay I will discuss some points that I consider interesting. The difficulty of this issue forces me to reduce the field of my analysis and to give precise definitions of language and thinking. There are,

¹ George and Muriel Beadle, *The language of life*, 1966.

² Michael A. Forrester *Psychology of language*, 1996.

in fact, a lot of definitions and from each of them it is possible to reach divergent and logical conclusions.

I will consider *language* as the “whole body of words and method of combination of words used by nation, people or race: [...] words and their use.”³ For “words” I do not mean only the written or spoken words, but also any iconic, indexical and symbolic sign or gesture that is used to represent a concept. I consider the word “dog”, and the sign that mute people use to represent this animal, exactly the same thing, the same “word”. I will consider some gestures, as the ones used to offend the others and to swear as real words. This is because I consider language primarily the symbolisation of concepts, independently from what is used in this symbolisation process. I consider the symbolisation as the basis of any communication and the concepts as the basis of any thought.

Looking for a definition of *thinking*, if we look at the dictionary “to think” is to “consider, be of opinion: form conception of: exercise mind in active way, form connected ideas: consider a matter, reflect.”⁴ Thinking enables us to derive conclusions, of what we do not know yet, on the basis of what we already know. To derive a conclusion means to make an inference, that can be informally defined as something that has not explicitly stated but that follows from explicit information⁵. Thinking permits us to find the solution of a problem when it is not an immediate solution, to make deductions and induction about what happened or to anticipate in what it is happening. Thinking, in this essay, will be considered especially as the process that permits us to organise and to give a meaning to concepts that we always represent with words. The “independence” between language and thinking does not derive from the theoretical possibility to represent the concepts with something different from words (I defined words any representation of concepts) but it derives from the different processes that speech and thoughts followed. I claimed, in fact, that thinking is the process to give meaning to words, I did not claim that it is words.

Before explaining why language is “not interrelated” with thinking, I want to reflect on the fact that both of them live and move in the same mental space and time, that is *memory*. For “not interrelated” I mean that “thought and words” are not connected by a primary bond.⁶ The connection between language and meaning, in fact, changes and grows in the course of the evolution of thinking and speech. Why, then, do language and thinking seem so close to one another nearly the same entity? The problem is that it is not so clear if the meaning of a word is a phenomenon of speech or a phenomenon of thought. A word deprived of meaning is only an empty

³ Oxford Illustrated Dictionary, 1970.

⁴ Ibidem.

⁵ Rosemary J. Stevenson *Language, Thought*, pag. 5, 1993.

sound, it has none utility. In the same way it is impossible to speak about “meaning” without a word that represents it. Vygotsky claims that “Word meaning is a phenomenon of thought only in so far as thought is embodied in speech, and of speech only in so far as speech is connected with thought and illuminated by it.⁷”

Now we are in a blind alley: to come out we have to reach a better definition of the distinction between words and meaning. I consider language the most powerful and often the only means that we have to represent, to manipulate and to communicate concepts. But language, concepts and consequently thought, are two distinct things. The meaning of concepts is not inside the words, but it derives from a complex process that we call thinking. The ideas of Chomsky can probably be helpful to clarify the difference between the “internal” and “external” aspect of the words. Firstly he speaks about two levels of language: deep structure and surface structure. The deep structure of language characterises the basic semantic relations of a sentence, the meaning that it expresses, while the surface structure carries all the information that is actually spoken. So, the passive form of a sentence presents two different surface structures but the same deep structure. The active and the passive sentences have both the same contents, the same message. Chomsky calls the tacit knowledge of the rules of a language (syntax), *competence*, while he calls the process that underlies the comprehension and the production of it *performance*. The meaning of a sentence, the semantic level, is given by thought and it differs from the surface aspect, the language. Starting from a limited number of deep structures it is possible, for example, to generate an infinite number of surface structures. The fact that we can only study the human performance does not mean that it could not be necessarily a phenomenon of something deeper. Vygotsky claims that “Thought is not merely expressed in words; it comes into existence through them.⁸” By doing so he accepts the Chomsky’s distinction between competence and performance, between deep and surface structure. Finally he accepts the distinction between thought and language but he reaches the same conclusion starting from a different point of view. In particular he analyses the development of these two human faculties in children. He finds two different planes of speech. Both the inner, meaningful, *semantic* aspect of speech and the external, *phonetic* one have their own peculiar laws of movement, even if they form a true, but not homogeneous, unity. In mastering external speech, that is the language used in order to communicate with other people, children start from one word, then connect two or three words. They start from simple sentences until they are able to formulate more and more complicated ones. For this reason, external speech proceeds from a part to the whole. On the other

⁶ Vygotsky, *Thought & Language*, pag. 119, 1962

⁷ Vygotsky, *op cit.* pag.120

⁸ Vygotsky, *op.cit.* pag.125

hand, in regard to the meaning, the first word represents the whole sentence for a child. Semantically, the child starts from the whole and only later acquires the separate semantic units, the meaning of the single words, and to divide his formerly undifferentiated thought into those units. “The structure of speech does not simply mirror the structure of thought; that is why words cannot be put on by thought like a ready-made garment.”⁹

At this point some more explanation is required about *inner speech*. Originally, inner speech seems to have been understood as verbal memory (the silent recital of a poem, for example). Then it was defined as “speech minus sound” (Muller) or “subvocal speech” (Watson). Differently from external speech, inner speech is speech for oneself, not for others. This fact implies that it is almost inaccessible to experiments. Piaget was the first to analyse the child’s egocentric speech but he remained blind to its connection with inner speech. According to him the egocentric speech is a direct expression of the egocentrism of child’s thoughts. The child does not try to adapt himself to the thinking of adults. Egocentric speech has no function in the child’s realistic thinking and activity and it disappears together with the child’s egocentrism. According to Vygotsky egocentric speech is a phenomenon of the transition from intersychic to intrapsychic functioning, from social activity to more individualised activity. The function of egocentric speech is similar to that of inner speech and it is “intimately and usefully connected with the child’s thinking.”¹⁰ Inner speech is then a specific formation, with its own laws and complex relations to the other forms of speech activity. It cannot be considered as speech minus sound, but as an entirely separate speech function, with its main distinguishing trait and its peculiar syntax. Compared with external speech, inner speech appears disconnected and incomplete. It is a speech almost without words. Inner speech, according to Vygotsky, works with semantics, not phonetics. “In inner speech words die as they bring forth thought.”¹¹ After their death only the *concept* of the words will remain. It will be part of the defined and organised structure that permit the orderly elaboration of concepts, that is thinking. The transition from inner to external speech is a complex, dynamic process involving the transformation of the predicative, idiomatic structure of inner speech into syntactically articulated speech intelligible to others. I cannot define precisely whether inner speech, uttered almost without words can be considered language or not. We can affirm that the structures in which concepts are organised are exclusively a part of thinking. Without this structures it is not possible to imagine any mental elaboration, any thoughts, any comprehensible language. Words are the unique tools that we have to represent the ideas, the same ideas that move, change and grow inside our brain. Words

⁹ Vygotsky, *op.cit.* pag.126

¹⁰ Vygotsky, *op.cit.* pag.133

¹¹ Vygotsky, *op.cit.* pag.149

allow us to communicate our thoughts to be conscious of them, to create virtual world. Furthermore words contribute in giving sense to thoughts that otherwise would be poor, incomprehensible, incommunicable and useless meanings.

So, if language needs the support of thought to be filled with meaning, thought needs language to achieve a visible form, to manifest itself. Words are necessary to communicate, to remember and manipulate the world represented within our minds. Language also represents an extremely powerful instrument: it is really our world, our knowledge, our dreams, and our thoughts. Is thinking possible without language? If we remove language it would be probably possible to maintain intelligent behaviours and other display of thinking. However it will never be possible to develop and to solve complex problems without such an effective means as language. A means that enables us to symbolise abstract concepts and to interchange information with extreme effectiveness.

Finally, I truly believe we should keep in mind that language and thinking are two different aspects of the same mental reality. They follow different rules and they have different characteristics even if they apparently speak the same “language”. “Apparently” because it will never happen that a word will remain on the tip of our tongue when we think.

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