Lecture 10: Thinking & Speaking

"Each word is ... already a generalisation. Generalisation is a verbal act of thought and reflects reality in quite another way than sensation and perception reflect it."

Lev Vygotsky: Thinking and Speaking, 1934. Retrieved 03/24/2008 from http://www.marxists.org/archive/vygotsky/works/words/vygotsky.htm

We have traced the development of human understanding of Language from the ancient times all the way through the Middle Ages, the Renaissance, and the 19th century, up to the beginning of the 20th century, when Saussure for the first time in history clearly defined the object of linguistic enquiry: the living structure of symbols that is being continuously created by the speech community and is learned by each individual in the process of social interaction.

The highlights of de Saussure's theory include:

- \Rightarrow Distinction between the articulatory / acoustic aspects of language and <u>its essence</u>: the *word* (i.e., the combination of the idea and the vocal sign);
- ⇒ Language is an INTEGRATED structure of Linguistic Signs (functioning as a WHOLE, constantly changing, and self-regulating);
- ⇒ Language is a social product; as such, it is much like any other social institution, and should be studied in that context
- \Rightarrow The sound image <u>linked</u> to an idea that is what is <u>essential</u> to language
- \Rightarrow

Today we will take a closer look at this living structure and at how it makes thinking and speaking possible (i.e., we will examine the *relationship* between Language and Thought).

Theories about the Relationship between Language and Thought

We have defined thinking and speaking as *connecting* ideas. However, we are all aware that thinking is not the same as speaking. How is thinking different from speaking? From antiquity and up until recently, many scholars have tried to explain the relationship between them. Most of their theories oscillated between 2 extreme views:

- 1. That speaking and thinking are two sides of the same coin: in other words, that thinking is the same as speaking (i.e., psychological linguistics: thought is "**speech minus sound**")
- 2. That there is nothing in common between thinking and speaking (i.e., some American psychologists and reflexologists consider thought a *reflex* inhibited in its motor part)

If we take thought to be '*speech minus sound*," then the question of a relationship between the two loses all meaning (no relationship can exist within one and the same thing).

The opposite view makes thought and speech independent from each other, "pure," and studies each apart from the other; the relationship between them seems then to be merely a mechanical, external connection between two distinct processes. Dividing **verbal thinking** into two separate, basically

different elements makes the study of the intrinsic relations between language and thought impossible.

All these *methods of analysis* make the mistake of dividing the complex psychological structure of Language - one WHOLE! – into its PARTS. Compare it to the chemical analysis of water into hydrogen and oxygen, neither of which possesses the properties of the whole, and each of which possesses properties not present in the whole. If we apply this method in looking for the explanation of some property of water – say, why it extinguishes fire, for example, we will find that hydrogen burns and oxygen sustains fire! These discoveries will not help us much in solving the problem.

We cannot analyze **verbal thought** into its components, **thought** and **word**, and study them in isolation from each other. In the course of analysis, the original properties of verbal thought have disappeared. We are left searching for the mechanical interaction of the two elements, but where are the properties of the WHOLE?

Instead of examining and explaining the process of interaction between thinking and speaking, these methods produce generalities pertaining to all speech and all thought. It ignores the oneness of the living union of sound and meaning that we call **word**. The word is broken up into two parts, which are assumed to be held together merely by a mechanical bond.

This separation of sound and meaning, common in classical phonetics and semantics, has not been able to give us the right answers. Lev Vygotsky, a brilliant Russian psychologist, proposed another type of analysis, which he called *analysis into units*.

Word = Speech + Thought

By *unit* he meant that object of analysis which, unlike parts/elements, retains all the basic properties of the whole and which cannot be further divided without losing those basic properties:

"Not the chemical composition of water but its molecules and their behaviour is the key to the understanding of the properties of water. The true unit of biological analysis is the living cell, possessing the basic properties of the living organism.

What is the unit of verbal thought that meets these requirements? We believe that it can be found in the internal aspect of the word, in *word meaning*. Few investigations of this internal aspect of speech have been undertaken so far, and psychology can tell us little about word meaning that would not apply in equal measure to all other images and acts of thought. The nature of meaning as such is not clear. **Yet it is in word meaning that thought and speech unite into verbal thought.** In <u>meaning</u>, then, the answers to our questions about the relationship between thought and speech can be found"

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A word does not refer to a single object but to a group or to a class of objects. Each word is therefore already a generalisation. Generalisation is a verbal act of thought and reflects reality in quite another way than sensation and perception reflect it. Such a qualitative difference is implied in the proposition that there is a dialectic leap not only between total absence of consciousness (in inanimate matter) and sensation but also between sensation and thought. There is every reason to suppose that the qualitative distinction between sensation and thought is the presence in the latter of a *generalised* reflection of reality, which is also the essence of word meaning: and consequently that *meaning is an act of thought* in the full sense of the term. But at the same time, meaning is an inalienable part of word as such, and thus it belongs in the realm of language as much as in the realm of thought. A word without meaning is an empty sound, no longer a part of human speech. Since word meaning is both thought and speech, we find in it the unit of verbal thought we are looking for. Clearly, then, the method to follow in our exploration of the nature of verbal thought is semantic analysis the study of the development, the functioning, and the structure of this unit, which contains thought and speech interrelated.

This method combines the advantages of analysis and synthesis, and it permits adequate study of complex wholes.

Role of Signs & Generalisation (=Analysis) in Human Communication

Understanding between minds is impossible without some mediating expression. In the absence of a system of signs, linguistic or other, only the most primitive and limited type of communication is possible. Communication by means of expressive movements, observed mainly among animals, is not so much communication as a spread of *feeling (affect)*.

Rational, intentional conveying of experience and thought to others requires a mediating system, the prototype of which is human speech born of the need of intercourse during work!

Real communication requires **meaning** (= *generalization*) as much as signs. According to Edward Sapir's penetrating description, **the world of experience must be greatly simplified and generalised before it can be translated into symbols**. Only in this way does communication become possible, for the individual's experience resides only in his own consciousness and is, strictly speaking, not communicable. To become communicable it must be included in a certain category which, by tacit convention, human society regards as a unit.

True human communication presupposes a generalising attitude, which is an advanced stage in the development of word meanings. Human communication is possible only because man's thought reflects conceptualised reality. That is why certain thoughts cannot be communicated to children even if they are familiar with the necessary words. The adequately generalised concept that alone ensures full understanding may still be lacking.

The conception of **word meaning** as a **unit of both generalising thought and social interaction** is of incalculable value for the study of thought and language.

Traditional linguistics, with its conception of sound as an independent element of speech, used the single sound as the unit of analysis. As a result, it concentrated on the physiology and the acoustics rather than the psychology of speech. Modern linguistics uses the **phoneme**, the smallest indivisible phonetic unit affecting meaning and thus characteristic of human speech as distinguished from other sounds.

A dynamic system of meaning which unites emotion and thought

Unit analysis demonstrates the existence of a **dynamic system of meaning in which the affective and the intellectual unite**. It shows that every idea contains a transmuted affective attitude toward the bit of reality to which it refers.

Animal Intelligence and Speech Vs Human

In the animal world, the path toward humanlike intellect is not the same as the path toward humanlike speech; **thought and speech do not spring from one root**.

Man and animals have all forms of intellectual activity in common, only the developmental level differs: Animals are able to reason on an elementary level, to analyze (cracking a nut is a beginning of analysis), to experiment when confronted with problems or caught in a difficult situation. Some, e.g. the parrot, not only can learn to speak but can apply words meaningfully in a restricted sense: When begging, he will use words for which he will be rewarded with a tidbit; when teased, he will let loose the choicest invectives in his vocabulary.

It goes without saying that animals do not think and speak on the human level, but there are no good reasons to deny the presence in animals of embryonic thought and language of the same type as man's, which develop, again as in man, along separate paths.' An animal's ability to express himself vocally is no indication of his mental development.

In the child, too, **the roots and the developmental course of the intellect differ from those of speech** – initially, thought is nonverbal and speech nonintellectual. At a certain point the two lines of development meet, **speech becoming rational and thought verbal**. The child "discovers" that "each thing has its name," and begins to ask what each object is called.

'Inner speech' develops through a slow accumulation of functional and structural changes, that it branches off from the child's external speech simultaneously with the differentiation of the social and the egocentric functions of speech, and finally that the **speech structures** mastered by the child **become the basic structures of his thinking**.

How do we learn to think?

Thought development is determined by language, i.e., by the linguistic tools of thought and by the socio-cultural experience of the child. Essentially, the development of inner speech depends on outside factors; the development of logic in the child is a direct function of his socialized speech. The child's intellectual growth is contingent on his mastering the social means of thought, that is, language.

If we compare the early development of speech and of intellect – which, as we have seen, develop along separate lines both in animals and in very young children – with the development of inner speech and of verbal thought, we must conclude that the later stage is not a simple continuation of the earlier. *The nature of the development itself changes, from biological to socio-historical*.

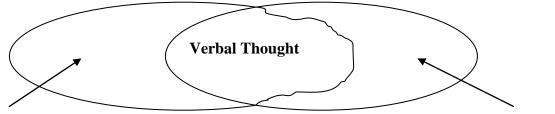
Verbal thought is not an innate, natural form of behavior but is determined by a historicalcultural process and has specific properties and laws that cannot be found in the natural forms of thought and speech. Once we acknowledge the historical character of verbal thought, we must consider it subject to all the premises of historical materialism, which are valid for any historical phenomenon in human society. It is only to be expected that on this level the development of behavior will be governed essentially by the general laws of the historical development of human society. The problem of thought and language thus extends beyond the limits of natural science and becomes the focal problem of historical human psychology, i.e., of social psychology.

Thought & Word

There is no specific interdependence between the genetic roots of thought and of word: **the inner** relationship is not a prerequisite for, but rather a product of, the historical development of human consciousness.

In animals, even in anthropoids whose speech is phonetically like human speech and whose intellect is akin to man's, **speech and thinking are not interrelated**. A prelinguistic period in thought and a preintellectual period in speech undoubtedly exist also in the development of the child. Thought and word are not connected by a primary bond. A connection originates, changes, and grows in the course of the evolution of thinking and speech.

Schematically, we may imagine thought and speech as two intersecting circles. In their overlapping parts, thought and speech coincide to produce what is called **verbal thought**:



Non-intellectual Speech

Non-verbal Thought

Verbal thought, however, does not by any means include all forms of thought or all forms of speech. There is a vast area of thought that has no direct relation to speech. The thinking manifested in the use of tools belongs in this area, as does practical intellect in general.

Nor is there any reason to derive all forms of speech activity from thought – we can speak without thinking! O No thought is involved when you silently recite a poem learned by heart or mentally repeat what someone said. There is also "lyrical" speech, prompted by emotion. Though it has all the earmarks of speech, it can scarcely be classified with intellectual activity in the proper sense of the term.

We are therefore forced to conclude that **fusion of thought and speech**, in adults as well as in children, **is a phenomenon limited to a circumscribed area**. Nonverbal thought and non-intellectual speech do not participate in this fusion and are affected only indirectly by the processes of verbal thought.

This new approach replaces *analysis into elements* by **analysis into** *units*, each of which retains in simple form all the properties of the whole. This unit of verbal thought is *word meaning*.

The meaning of a word represents such a close amalgam of thought and language that it is hard to tell whether it is a phenomenon of speech or a phenomenon of thought. A word without meaning is an empty sound; meaning, therefore, is a criterion of "word," its indispensable component.

The meaning of every word is a generalisation or a concept. And since generalisations and concepts are undeniably acts of thought, we may regard meaning as a phenomenon of thinking. It does not follow, however, that meaning formally belongs in two different spheres of psychic life. 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 illumined by it. It is a phenomenon of verbal thought, or meaningful speech – a union of word and thought.

Earlier, the bond between word and meaning was viewed as an associative bond, established through the repeated simultaneous perception of a certain sound and a certain object. A word calls to mind its content as the overcoat of a friend reminds us of that friend, or a house of its inhabitants. The association between word and meaning may grow stronger or weaker, be enriched by linkage with other objects of a similar kind, spread over a wider field, or become more limited, i.e., it may undergo quantitative and external changes, but it cannot change its psychological nature. To do that, it would have to cease being an association. From that point of view, any development in word meanings is inexplicable and impossible – an implication which handicapped linguistics as well as psychology. Once having committed itself to the association theory, semantics persisted in treating word meaning as an association between a word's sound and its content. All words, from the most concrete to the most abstract, appeared to be formed in the same manner in regard to meaning, and to contain nothing peculiar to speech as such; a word made us think of its meaning just as any object might remind us of another. It is hardly surprising that semantics did not even pose the larger question of the development of word meanings. Development was reduced to changes in the associative connections between single words and single objects: A word might denote at first one object and then become associated with another, just as an overcoat, having changed owners, might remind us first of one person and later of another. Linguistics did not realize that in the historical evolution of language the very structure of meaning and its psychological nature also change. From primitive generalisations, verbal thought rises to the most abstract concepts. It is not merely the content of a word that changes, but the way in which reality is generalised and reflected in a word.

Example: concrete 'content' words, such as *back*, *head*, *cross*, etc., were reanalyzed (grammaticalized) into 'functional' words (in this case, *prepositions*, such as 'go back / ahead / across,' etc.). Tok Pisin examples: gutpla, tripla, etc.

Every thought is a generalization

The relation of thought to word is not a thing but a process, a continual movement back and forth from thought to word and from word to thought. In that process the relation of thought to word undergoes changes which themselves may be regarded as development in the functional sense. Thought is not merely expressed in words; it comes into existence through them. Every thought tends to connect something with something else, to establish a relationship between things. Every thought moves, grows and develops, fulfils a function, solves a problem.

It is important to distinguish between the *vocal* and the *semantic* aspects of speech. Since they move in reverse directions, their development does not coincide, but that does not mean that they are independent of each other. On the contrary, **their difference is the first stage of a close union**.

A child's thought, precisely because it is born as a dim, amorphous whole, must find expression in a single word. As his thought becomes more differentiated, the child is less apt to express it in single words but constructs a composite whole.

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. Thought undergoes many changes as it turns into speech. It does not merely find expression in speech; it finds its reality and form. The semantic and the phonetic developmental processes are essentially one, precisely because of their reverse directions.

Grammar precedes logic. The discrepancy does not exclude union but is, in fact, necessary for union.

In adults the divergence between the semantic and the phonetic aspects of speech is even more striking. Grammatical and Psychological subject and predicate are not the same:

For example, in the sentence "The clock fell," emphasis and meaning may change in different situations. Suppose I notice that the clock has stopped and ask how this happened. The answer is, "The clock fell." Grammatical and psychological subject coincide: "The clock" is the first idea in my consciousness; "fell" is what is said about the clock. But if I hear a crash in the next room and inquire what happened, and get the same answer, subject and predicate are psychologically reversed. I knew something had fallen – that is what we are talking about. "The clock" completes the idea. The sentence could be changed to: "What has fallen is the clock"; then the grammatical and the psychological subject would coincide.

Any part of a sentence may become the **psychological predicate**, the carrier of topical emphasis: on the other hand, entirely different meanings may lie hidden behind one grammatical structure. This often results in ambiguity, i.e. double meaning, when people see the psychological predicate differently. Examples:

Woman without her man is nothing : Woman! Without Her, Man Is Nothing We saw man eating rats

There is an interdependence of the semantic and the grammatical aspects of language:

In translating the fable "*La Cigale et la Fourmi*," **Krylov** substituted a dragonfly for La Fontaine's grasshopper. In French grasshopper is feminine and therefore well suited to symbolise a light-hearted, carefree attitude. The nuance would be lost in a literal translation, since in Russian *grasshopper* is masculine. When he settled for *dragonfly*, which is feminine in Russian, Krylov disregarded the literal meaning in favour of the grammatical form required to render La Fontaine's thought.

Tjutchev did the same in his translation of Heine's poem about a fir and a palm. In German *fir* is masculine and *palm* feminine, and the poem suggests the love of a man for a woman. In Russian, both trees are feminine. To retain the implication, Tjutchev replaced the fir by a masculine cedar. **Lermontov**, in his more literal translation of the same poem, deprived it of these poetic overtones and gave it an essentially different meaning, more abstract and generalised. One grammatical detail may, on occasion, change the whole purport of what is said.

Behind words, there is the **independent grammar of thought, the syntax of word meanings**. The simplest utterance, far from reflecting a constant, rigid correspondence between sound and meaning, is really a process. Verbal expressions cannot emerge fully formed but must develop gradually. This complex process of transition from meaning to sound must itself be developed and perfected. The child must learn to distinguish between semantics and phonetics and understand the nature of the difference. At first he uses verbal forms and meanings without being conscious of them as separate. The word, to the child, is an integral part of the object it denotes. Such a conception seems to be characteristic of primitive linguistic consciousness.

Simple experiments show that **preschool children "explain" the names of objects by their attributes**. According to them, an animal is called "cow" because it has horns, "calf" because its horns are still small, "dog" because it is small and has no horns; an object is called "car" because it is not an animal.

We can see how difficult it is for children to separate the name of an object from its attributes, which cling to the name when it is transferred like possessions following their owner. The fusion of the **two planes of speech**, **semantic** and **vocal** begins to break down as the child grows older, and the distance between them gradually increases. Each stage in the development of word meanings has its own specific interrelation of the two planes. A child's ability to communicate through language is directly related to the differentiation of word meanings in his speech and consciousness.

To understand this, we must remember a basic characteristic of the structure of word meanings. In the semantic structure of a word, we distinguish between referent and meaning correspondingly, we distinguish a word's nominative from its significative function. When we compare these structural and functional relations at the earliest, middle, and advanced stages of development, we find the following genetic regularity: In the beginning, only the nominative function exists; and semantically, only the objective reference; signification independent of naming, and meaning independent of reference, appear later and develop along the paths we have attempted to trace and describe.

Only when this development is completed does the child become fully able to formulate his own thought and to understand the speech of others. Until then, his usage of words coincides with that of adults in its objective reference but not in its meaning.

Inner speech is speech for oneself; external speech is for others. It would indeed be surprising if such a basic difference in function did not affect the structure of the two kinds of speech

The decreasing vocalisation of egocentric speech denotes a **developing abstraction from sound**, the **child's new faculty to "think words" instead of pronouncing them.**

Inner speech must be regarded, not as speech minus sound, but as an entirely separate speech function. **Its main distinguishing trait is its peculiar syntax. Compared with external speech, inner speech appears disconnected and incomplete**.

As egocentric speech develops it shows a **tendency toward an altogether specific form of abbreviation: namely, omitting the subject of a sentence and all words connected with it, while** **preserving the predicate**. This tendency toward predication appears in all our experiments with such regularity that we must assume it to be **the basic syntactic form of inner speech**.

Quite frequently, shortened sentences cause confusion. The listener may relate the sentence to a subject foremost in his own mind, not the one meant by the speaker. If the thoughts of two people coincide, perfect understanding can be achieved through the use of mere predicates, but if they are thinking about different things they are bound to misunderstand each other (Re: ambiguity, p. 7).

Between people who live in close psychological contact, such communisation by means of abbreviated speech is the rule rather than the exception.

A simplified syntax, condensation, and a greatly reduced number of words characterise the tendency to predication which appears in external speech when the partners know what is going on.

Communication in writing relies on the formal meanings of words and requires a much greater number of words than oral speech to convey the same idea. It is addressed to an absent person who rarely has in mind the same subject as the writer. Therefore it must be fully deployed; syntactic differentiation is at a maximum; and expressions are used that would seem unnatural in conversation. Griboedov's "He talks like writing" refers to the droll effect of elaborate constructions in daily speech.

Written and inner speech represent the monologue; oral speech, in most cases, the dialogue.

Dialogue always presupposes in the partners sufficient knowledge of the subject to permit abbreviated speech and, under certain conditions, purely predicative sentences. It also presupposes that each person can see his partners, their facial expressions and gestures, and hear the tone of their voices.

We have already discussed abbreviation and shall consider here only its auditory aspect, using a classical example from Dostoevski's *The Diary of a Writer* to show how much intonation helps the subtly differentiated understanding of a word's meaning.

Dostoevski relates a conversation of drunks which entirely consisted of one unprintable word: "One Sunday night I happened to walk for some fifteen paces next to a group of six drunken young workmen, and I suddenly realised that all thoughts, feelings and even a whole chain of reasoning could be expressed by that one noun, which is moreover extremely short. One young fellow said it harshly and forcefully, to express his utter contempt for whatever it was they had all been talking about. Another answered with the same noun but in a quite different tone and sense – doubting that the negative attitude of the first one was warranted. A third suddenly became incensed against the first and roughly intruded on the conversation, excitedly shouting the same noun, this time as a curse and obscenity. Here the second fellow interfered again, angry at the third, the aggressor, and restraining him, in the sense of "Now why do you have to butt in, we were discussing things quietly and here you come and start swearing." And he told this whole thought in one word, the same venerable word, except that he also raised his hand and put it on the third fellow's shoulder. All at once a fourth, the youngest of the group, who had kept silent till then, probably having suddenly found a solution to the original difficulty which had started the argument, raised his hand in a transport of joy and shouted ... Eureka, do you think? I have it? No, not eureka and not I have it; he repeated the same unprintable noun, one word, merely one word, but with ecstasy, in a shriek of delight – which was apparently too strong, because the sixth and the oldest, a glum-looking fellow, did not like it and cut the infantile joy of the other one short, addressing him in a sullen, exhortative

bass and repeating ... yes, still the same noun, forbidden in the presence of ladies but which this time clearly meant "What are you yelling yourself hoarse for?" So, without uttering a single other word, they repeated that one beloved word six times in a row, one after another, and understood one another completely." [*The Diary of a Writer*, for 1873]

Inflection reveals the psychological context within which a word is to be understood

In written speech, as tone of voice and knowledge of subject are excluded, we are obliged to use many more words, and to use them more exactly (Re: example of ambiguity, p. 7). Due to the speed of oral speech, we have no time for deliberation and choice. Dialogue implies immediate unpremeditated utterance.

Predication is the natural form of inner speech; psychologically, it consists of predicates only.

Three main semantic peculiarities of inner speech

With syntax and sound reduced to a minimum, meaning is more than ever in the forefront. Inner speech works with semantics, not phonetics. The specific semantic structure of inner speech also contributes to abbreviation. The syntax of meanings in inner speech is no less original than its grammatical syntax. Our investigation established three main semantic peculiarities of inner speech.

<u>The first and basic one</u> is the preponderance of the sense of a word over its meaning. The sense of a word is the sum of all the psychological events aroused in our consciousness by the word. It is a dynamic, fluid, complex whole, which has several zones of unequal stability. Meaning is only one of the zones of sense, the most stable and precise zone.

A word acquires its sense from the context in which it appears; in different contexts, it changes its sense (value). Meaning remains stable throughout the changes of sense. The dictionary meaning of a word is no more than a potentiality that finds diversified realisation in speech.

This enrichment of words by the sense they gain from the context is the fundamental law of the dynamics of word meanings. A word in a context means both more and less than the same word in isolation: more, because it acquires new content; less, because its meaning is limited and narrowed by the context. The sense of a word is a complex, mobile phenomenon; it changes in different minds and situations and is almost unlimited. A word derives its sense from the sentence, which in turn gets its sense from the paragraph, the paragraph from the book, the book from all the works of the author.

It has long been known that words can change their sense. Recently it was pointed out that sense can change words or, better, that ideas often change their names. Just as the sense of a word is connected with the whole word, and not with its single sounds, the sense of a sentence is connected with the whole sentence, and not with its individual words. Therefore, a word may sometimes be replaced by another without any change in sense. Words and sense are relatively independent of each other.

In inner speech, the predominance of sense over meaning, of sentence over word, and of context over sentence is the rule.

The Second semantic peculiarity of inner speech: agglutination / fusion of ideas

<u>The Third basic semantic peculiarity of inner speech</u> is the way in which senses of words combine and unite – a process governed by different laws from those governing combinations of meanings. When we observed this singular way of uniting words in egocentric speech, we called it **"influx of sense."** The senses of different words flow into one another – literally "influence" one another – so that the earlier ones are contained in, and modify, the later ones. Thus, a word that keeps recurring in a book or a poem sometimes absorbs all the variety of sense contained in it and becomes, in a way, equivalent to the work itself.

Hamlet, Don Quixot, - basis for metaphor!!! And grammaticalization

In inner speech, the phenomenon reaches its peak. A single word is so saturated with sense that many words would be required to explain it in external speech. No wonder that egocentric speech is incomprehensible to others. Watson says that inner speech would be incomprehensible even if it could be recorded. Its opaqueness is further increased by a related phenomenon which, incidentally, Tolstoy noted in external speech: In *Childhood, Adolescence, and Youth*, he describes how between people in close psychological contact words acquire special meanings understood only by the initiated. In inner speech, the same kind of idiom develops – the kind that is difficult to translate into the language of external speech.

It is evident that the transition from inner to external speech is not a simple translation from one language into another. It cannot be achieved by merely vocalising silent speech. It is a complex, dynamic process involving the transformation of the predicative, idiomatic structure of inner speech into syntactically articulated speech intelligible to others.

Definition of inner speech

Inner speech is not the interior aspect of external speech – it is a function in itself. It still remains speech, i.e., thought connected with words. But while in external speech thought is embodied in words, in inner speech words die as they bring forth thought. Inner speech is to a large extent thinking in pure meanings. It is a dynamic, shifting, unstable thing, fluttering between word and thought, the two more or less stable, more or less firmly delineated components of verbal thought. Its true nature and place can be understood only after examining the next plane of verbal thought the one still more inward than inner speech.

That plane is thought itself. As we have said, **every thought creates a connection, fulfils a function, solves a problem.** The flow of thought is not accompanied by a simultaneous unfolding of speech. The two processes are not identical, and there is no rigid correspondence between the units of thought and speech. This is especially obvious when a thought process miscarries – when a thought "will not enter words." **Thought has its own structure, and the transition from it to speech is no easy matter.**

Every sentence that we say in real life has some kind of subtext, a thought hidden behind it. In the examples we gave earlier of the **lack of coincidence between grammatical and psychological subject and predicate**

Thought, unlike speech, does not consist of separate units. When I wish to communicate the thought that today I saw a barefoot boy in a blue shirt running down the street, I do not see every item separately: the boy, the shirt, its blue colour, his running, the absence of shoes. I conceive of all this in one thought, but I put it into separate words. A speaker often takes several minutes to

disclose one thought. In his mind the whole thought is present at once, but in speech it has to be developed successively. A thought may be compared to a **cloud shedding a shower of words**. Precisely because thought does not have its automatic counterpart in words, the transition from thought to word leads through meaning. In our speech, there is always the hidden thought, the subtext. Because a direct transition from thought to word is impossible, there have always been laments about the inexpressibility of thought:

Direct communication between minds is impossible, not only physically but psychologically. Communication can be achieved only in a roundabout way. Thought must pass first through meanings and then through words.

We come now to the last step in our analysis of verbal thought. **Thought itself is engendered by motivation, i.e., by our desires and needs, our interests and emotions**. Behind every thought there is an affective-volitional tendency, which holds the answer to the last "why" in the analysis of thinking.

To understand another's speech, it is not sufficient to understand his words – we must understand his thought. But even that is not enough – we must also know its motivation. No psychological analysis of an utterance is complete until that plane is reached.

We have come to the end of our analysis; let us survey its results. Verbal thought appeared as a complex, dynamic entity, and the relation of thought and word within it as a movement through a series of planes. Our analysis followed the process from the outermost to the innermost plane. In reality, the development of verbal thought takes the opposite course: from the motive which engenders a thought to the shaping of the thought, first in inner speech, then in meanings of words, and finally in words. It would be a mistake, however, to imagine that this is the only road from thought to word. The development may stop at any point in its complicated course; an infinite variety of movements to and fro, of ways still unknown to us, is possible.

Only a historical theory of inner speech can deal with this immense and complex problem. The **relation between thought and word is a living process; thought is born through words.** A word devoid of thought is a dead thing, and a thought unembodied in words remains a shadow. The connection between them, however, is not a preformed and constant one. It emerges in the course of development, and itself evolves. To the Biblical "In the beginning was the Word," Goethe makes Faust reply, "In the beginning was the deed." The intent here is to detract from the value of the word, but we can accept this version if we emphasise it differently: In the *beginning* was the deed. The word was not the beginning – action was there first; it is the end of development, crowning the deed.

We cannot close our survey without mentioning the perspectives that our investigation opens up. We studied the inward aspects of speech, which were as unknown to science as the other side of the moon. We showed that a generalised reflection of reality is the basic characteristic of words. This aspect of the word brings us to the threshold of a wider and deeper subject – the general problem of consciousness. **Thought and language, which reflect reality in a way different from that of perception, are the key to the nature of human consciousness**. Words play a central part not only in the development of thought but in the historical growth of consciousness as a whole. A word is a microcosm of human consciousness.

These notes are based on Lev Vygotsky's book *Speaking and Thinking* Retrieved on March 24, 2008 from <u>http://www.marxists.org/archive/vygotsky/works/words/vygotsky.htm</u>