

ORIGINAL ARTICLE

The final chapter of Vygotsky's *Thinking and Speech*: A reader's guide

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Abstract

The seventh and last chapter of Vygotsky's *Thinking and Speech* (1934) is generally considered as his final word in psychology. It is a long chapter with a complex argumentative structure in which Vygotsky gives his view on the relationship between thinking and speech. Vygotsky's biographers have stated that the chapter was dictated in the final months of Vygotsky's life when his health was rapidly deteriorating. Although the chapter is famous, its structure has never been analyzed in any detail. In the present article we reveal its rhetorical structure and show how Vygotsky drew on many hitherto unrevealed sources to convince the reader of his viewpoint.

KEYWORDS

authorship, egocentric speech, inner speech, linguistics, Vygotsky

1 | INTRODUCTION

Lev Vygotsky (1896–1934) was a Soviet psychologist who worked in the 1920s and early 1930s. He taught at various universities and higher institutes, worked with special-needs children, published monographs and textbooks, and became a prominent figure in the Russian variant of pedology, the discipline of child studies. His fundamental claim was that human beings differ from other animals in that they acquire cultural means that radically restructure their behavior and cerebral organization. The most fundamental cultural means is language (speech in Vygotsky's terminology), which makes it possible to transcend the here and now and to solve problems on a theoretical plane. Because language and cultural tools differ per culture Vygotsky believed it possible to find cross-cultural differences in intellectual development. More in general, he believed that instruction propels intellectual development into directions that would not be possible otherwise.

Vygotsky's ideas generated much research but shortly after his death this line of research came to a rather abrupt stop. The Soviet government issued a decree banning the discipline of pedology with which Vygotsky was intimately connected. Pedology fell into disrepute because it was associated with the massive use of intelligence tests as a means for selection for schools without taking the social background of the children into account. As a result, Vygotsky's writings were no longer available and it would last until the 1950s before his students managed to lift the ban. It would take

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until 1962 before Vygotsky was published in the West, where he remained totally unknown. In that year an abridged English version of his last book, *Thinking and Speech* (Vygotsky, 1934a), was published under the title of *Language and Thought*. Vygotsky's book struck a chord, perhaps because it seemed to provide an alternative to Piaget's more individualistic and maturational view of children's intellectual development, and further translations of his writings would follow. Today, Vygotsky's ideas are generally known, he counts as one of the better known psychologists of the twentieth century (Haggbloom et al., 2002), and a growing group of researchers is trying to test and extends his ideas.

Thinking and speech (Vygotsky, 1934a) remains arguably Vygotsky's most famous book. It was translated into many languages (e.g., Vygotsky, 1962, 1986, 1987, 1990, 2001, 2002, 2003), has been cited thousands of times, and is generally considered to be Vygotsky's major contribution to psychology, which represented the views he held in the very last part of his life. However, this view has not gone uncontested. Elsewhere we have argued that *Thinking and Speech*, although finalized shortly before or after Vygotsky's death, did not represent his latest views and that Vygotsky himself considered the book an intermediate result of a longer unfinished project (Yasnitsky & Van der Veer, 2016; Zavershneva & Van der Veer, 2017). Others (e.g., Lompscher & Rückriem, 2002) have discussed the authenticity of the book given the fact that it was published roughly half a year after Vygotsky's death and censorship was common practice in the Soviet Union at the time. Finally, it has been pointed out that *Thinking and Speech* was not a coherent whole or monograph. Rather, it was a collection of loosely connected articles and chapters published between 1929 and 1932 plus several parts written or dictated for the occasion, notably the first and the final chapter of the book (Van der Veer & Yasnitsky, 2011). In sum, the last word has not yet been said about both the value of *Thinking and Speech* and the history of its writing.

It is the final chapter that has drawn most attention from researchers. In that chapter Vygotsky sketched the nature of inner speech and its relation with overt speech, on the one hand, and thought, on the other hand. Because inner speech is not observable, Vygotsky tried to infer its properties by extrapolating from other, observable, speech forms. Thus, he argued that, developmentally speaking, egocentric speech is inner speech's precursor and that inner speech has certain properties in common with variants of dialogic speech. In his complex argumentation, Vygotsky relied partly on data obtained in his own empirical research and partly on phenomena described by other researchers, notably contemporary linguists. It is in the description of the linguistic phenomena that Vygotsky's text, on closer inspection, becomes very peculiar: substantial parts of his text appear not to have been written by himself. Rather than Vygotsky's text, they are verbatim quotes from the work of colleagues. In the continuation, we shall closely follow Vygotsky's argumentation, highlight the many hidden quotes, give their original sources, and, finally, speculate about the reasons for such a construction of the chapter's content and raise the question as to its authorship.

2 | VYGOTSKY'S ARGUMENTATION¹

Vygotsky began his argumentation by stating that previous researchers did not understand the true nature of verbal thought. They did not see that word meaning develops over time and that thus one and the same word may refer to different aspects of reality. The adult's concept of "father," for example, differs substantially from the child's concept of "father." Vygotsky added that the transition from thought to word and back again is actually a very complex process with various stages. It is not true, for example, that thought is simply expressed in words. Here Vygotsky (1987, pp. 250/251/28) several times used an expression borrowed from Potebnya "The thought is not expressed but completed in the word."² Actually, in speech we need to distinguish its inner, semantic side and its external, audible, or phasic side, which have their own dynamics. To illustrate that distinction, Vygotsky gave two examples from the development of children's speech: first, child speech goes from one-word sentences to more complex, differentiated sentences; second, these first one-word sentences mean many things and only gradually acquire a specific meaning. Thus, the semantic and phasic sides go in opposite directions and need to be distinguished even though they are intimately related. For those who did not find this convincing enough, Vygotsky adduced other evidence from the development of children's speech: the fact, demonstrated by Piaget, that children can use conjunctions like "because" and "although" before they actually understand them: in the development of speech grammar seems to precede logic and syntax seems to

precede semantics.³ In other words, the semantic and phasic developments of speech diverge. But this is not all, Vygotsky argued; in adult speech as well we can distinguish the semantic and the phasic plane. It was here that Vygotsky for the first time referred to linguistic sources and it is here that we can identify the first unidentified quotes. On the pages 251–252, Vygotsky wrote that we cannot rely on grammar to understand the meaning of utterances:

Fasler argues that it is wrong... and "severe spectacle" the predicate.⁴ (7 lines)

This passage was, in fact, quoted from Vossler's (1923) study of grammatical and psychological speech forms. Vygotsky then further explained the fact that the grammatical and the psychological subject do not always coincide with the example of "the clock fell." The interpretation (and intonation) of that sentence is dependent on the subject's situation. In arguing that grammatical and psychological categories are different, Vygotsky (p. 252) further referred to Paul's (1891) book on the history of language in which it was argued that grammatical categories have their psychological counterparts.

According to Paul, the grammatical category... its semantic structure.⁵ (3 lines)

In elaborating that theme he then extensively quoted Vossler (1923) again. In fact, the following passage on p. 252 was entirely based on Vossler.

Thus, correspondence between the grammatical and psychological structure... pronouns, superlatives, and tenses.⁶ (10 lines)

Vygotsky continued with the remark that grammatical mistakes may have artistic value and quoted a poem by Pushkin. Remarkably, this literary quote was immediately followed on pp. 252–253 by another quote from Vossler (1923), which again so far went unnoticed. Vossler remarked that unambiguous expressions are only possible in mathematics.

Only in mathematics do we find... movement that we call evolution.⁷ (8 lines)

Vygotsky explained that he gave his examples to show that the external, phasic side of speech and the semantic side may diverge, but that they are nevertheless fundamentally connected. To show this connection, he then provided two examples where the formal, grammatical structure dictated meaning or the other way around. The first example was Krylov's fable "The dragonfly and the ant," based on a fable by La Fontaine. Krylov replaced La Fontaine's grasshopper by a dragonfly to retain the image of female frivolity, which led to a strangely hopping dragonfly. Vygotsky's second example was that of Heine's poem "Der Fichtenbaum" and the translations into Russian by Tyutchev and Lermontov. In German the two trees have a different gender, which confronts the Russian translator with a problem. A literal translation (Lermontov) loses the gender difference, which may be preserved by replacing one of Heine's trees by another one with the right gender (Tyutchev). This example, which Vygotsky discussed on p. 253, nicely demonstrated how grammatical properties of words, such as their gender, may suggest certain meanings. However, the example was not original with Vygotsky. In fact, the entire discussion was based on a famous talk given by the linguist Shcherba in 1926, who discussed the different Russian translations of Heine's poems in some detail.⁸ For Vygotsky, these examples demonstrated that one may distinguish a grammatical and a semantic plane of speech and that the relationship between these planes is flexible. Moreover, he claimed that children have to learn the distinction, that is, they have to learn that the relationship between words and the concepts or objects they designate is conventional. Young children tend to regard words as a property of things and find it very hard to refer to things with other, invented, words. In other words, for young children words are tied to the object and have a nominative and indicative function. Meaning, independent of object relatedness, and signification, independent of the pointing to and naming the object, develops later according to the lines sketched above. Vygotsky added that this development is accompanied by another development: The syntax of thought must be transformed into the syntax of words. Thought determines the logical emphasis, which creates the psychological subject. Speaking requires the transition from the internal to the external plane, understanding the opposite. This was a rather dense passage that seemed an insert and became clarified only much later in the chapter.

Vygotsky now first switched to the topic of inner speech or endophasia and its various interpretations by the experts. In this context he mentioned Schilling (1929) and on p. 256 he literally quoted his distinction between inner speech and inner speaking, a fact that again went unnoticed by the readers of Vygotsky's chapter:

Recently, Shilling has proposed... hinder the thinking function.⁹ (11 lines)

Vygotsky's (p. 256) reference to Goldstein's view of inner speech also seems to be based on Schilling (1929).¹⁰ The weak point of the existing views on inner speech was, according to Vygotsky, that they did not understand its specific function and gave no explanation of its origin. It is here that Vygotsky switched to a lengthy discussion of his experiments with the registration of egocentric speech, which at the same time was an elaborate critique of Piaget's view on egocentrism. This part, which runs from p. 257 to approximately p. 266, was the core of Vygotsky's argumentation and also the part that reads most fluently and, naturally, is the least reliant on other sources.

Vygotsky's fundamental idea was that egocentric speech was a precursor of inner speech and can be used to infer its properties. This was an idea that was foreign to Piaget and Vygotsky first explained what he saw as the core of Piaget's view. According to Piaget, Vygotsky argued, egocentric speech reflects the child's original autism, which only gradually gives way to social thought under the pressure of the environment. It is incomprehensible and abbreviated, because it has not yet been fully socialized and has no function whatsoever in children's behavior. Under the consistent pressure of social others egocentric speech will just fade away. Vygotsky's own view was that egocentric speech was yet another example demonstrating the sociogenetic law, which stated that individual functioning originates in social, collective functioning.¹¹ Egocentric speech is speech that splits off from speech for others and serves intellectual orientation. This is why egocentric speech increases when children meet with difficulties. Vygotsky also claimed that egocentric speech becomes more incomprehensible when children grow older, but here we have to believe him on his word, because he adduced no evidence. To decide who was right about the function and fate of egocentric speech, Vygotsky decided to carry out a number of experiments. His reasoning was that in Piaget's view weakening the child's social situation must lead to more egocentric speech, because there is less social pressure on the child to adapt his or her autistic thinking to social demands. In Vygotsky's own view, weakening the social situation would lead to *less* egocentric speech, because the child no longer has the illusion that he or she is being heard. Children believe they are understood; their egocentric speech is social. In this connection, Vygotsky said (pp. 263–264) that Grünbaum (1927) reached the same conclusion. Again, it was not noticed that a substantial part of p. 264 was a direct quotation from Grünbaum's article.

[Grünbaum argues that] superficial observation... are the common property of all.¹² (18 lines)

Vygotsky then discussed the experiments in which he and his associates placed a child (1) among deaf-mute or foreign children; (2) among children unknown to the child or at a separate table, etc.; and (3) far away from other children, in noisy conditions, or with the instruction not to speak aloud but to whisper. In all conditions egocentric speech diminished as compared to a baseline condition. Unfortunately, Vygotsky provided no absolute numbers, just proportions (e.g., egocentric speech dropped 6:1), and mentioned no other details (e.g., number of subjects, age of subjects; definition of egocentric speech), so that it is somewhat difficult to understand and replicate his research. Piaget (1959), in the third edition of his *The language and thought of the child*, would later dismiss such experiments as irrelevant, because what he had in mind was *intellectual* egocentrism, that is, the inability to take the viewpoint of others. In his view, Vygotsky was indeed right that children want to be heard and address others, but the whole point is that young children do not realize that the others do not understand them, because these others do not have the same information.

Be that as it may, Vygotsky believed he had refuted Piaget's claim that egocentric speech has nothing to do with social speech. Egocentrism does not fade away under social pressure, Vygotsky claimed; it just becomes transformed into inner speech and goes underground. And if that is true, then the properties of inner speech may be inferred from the properties of egocentric speech. Rather surprisingly, at this stage of his argument, Vygotsky did not discuss these properties. Later on in the chapter, he stated that egocentric speech becomes less comprehensible when children grow older, but this was again a claim for which he provided no evidence. So, rather than beginning with a discussion of the properties of egocentric speech and extrapolating these to inner speech, Vygotsky assumed certain properties of

inner speech on other grounds. Here (p. 267) he quoted Watson's statement that recorded inner speech would still be incomprehensible:

*Even if we could record these hidden... but individual adaptation.*¹³ (5 lines)

We now arrive at one of the most peculiar parts of Vygotsky's chapter. Vygotsky believed that inner speech is abbreviated and predicative and to argue that viewpoint he pointed out the same phenomena in normal, overt speech. The peculiar thing is, however, that all the examples he adduced and the reasoning behind it on pp. 267–274 were entirely based on Yakubinsky's (1923/1986) well-known essay on dialogic speech. For example, when Vygotsky on p. 267 explained that in a dialogue our reply can be very brief and gave examples:

*First, no one would answer... he read it.*¹⁴ (7 lines)

he was repeating Yakubinsky. And when on the next page (p. 268) Vygotsky provided examples of abbreviation from literary sources, he was again speaking through Yakubinsky. For instance, the introductory sentence

*We find many examples... psychology of understanding.*¹⁵ (3 lines)

and the example of the conversation between Kitty and Lewin plus the statement that it was inspired by an episode in Tolstoy's own life (41 lines in total) were all borrowed from Yakubinsky, who, however, did not present Tolstoy's text given that it was "widely known." On the next pages Vygotsky continued paraphrasing and citing Yakubinsky, which was sometimes immediately evident, because he used words like "verbal stimuli," "discursive speech," and "apperceptive mass" that did not fit the context. A short and a long quotation can be found on p. 269:

*When the thoughts... reduced to a minimum.*¹⁶ (3 lines)

*Levin had grown used... of more discursive speech.*¹⁷ (15 lines)

Vygotsky concluded that under certain circumstances even in overt speech such phenomena as abbreviation, simplified syntax, and a tendency toward predicativity can be found. He then continued on p. 269 with a comical example of complete nonunderstanding between deaf people—taken from a poem by Pushkin—that seemed the opposite of the easy comprehension in the conversation between Kitty and Levin. Again, this example was inspired by Yakubinsky.

*Before the deaf judge two deaf men bow... the girl's to blame.*¹⁸ (6 lines)

Vygotsky's next remark on p. 269 about Tolstoy was also borrowed from the same source.

*As Tolstoy says... the thought of others.*¹⁹ (2 lines)

Like Yakubinsky, Vygotsky now introduced the topic of written speech to clarify the extremes of, on the one hand, abbreviation in dialogic speech and elaboration in written speech, on the other. In written speech we need to be much more elaborate, because we cannot take joint knowledge for granted. In other words:

*[Polivanov has noted that] if we included all ... thoughts than we do.*²⁰ (3 lines)

But this is exactly the case of written speech, Vygotsky said. It is speech without an interlocutor, so it requires maximal explicitness. Here, on p. 270, Vygotsky quoted a certain Thompson, but again via Yakubinsky.

*As Thompson has pointed out... seem artificial in oral speech.*²¹ (2 lines)

Vygotsky continued his reasoning by stating that linguists had recently advanced the notion of the heterogeneity of speech forms. Like Yakubinsky, he noted that Von Humboldt and Potebnya had distinguished prose and poetry, which have their own lexicon, grammar, and syntax, but had not developed this idea any further.²² Vygotsky (p. 270) then quoted Yakubinsky as saying:

*The very statement of this problem... on general linguistics.*²³ (3 lines)

Vygotsky then returned to the topic of dialogic speech and stated that dialogue always presupposes visibility of the interlocutor and his gestures, the hearing of his intonation, etc.²⁴ He then (p. 271) seemed to quote Tarde on the properties of conversation, but again this was an indirect quotation via Yakubinsky.

*Only in oral speech do we find... between the interlocutors.*²⁵ (2 lines)

To illustrate the role of intonation in the comprehension of speech Vygotsky (p. 271) gave yet another literary example. Both the introductory sentence and the example from Dostoevsky's *Diary of a writer*, that is, almost the entire page 271, were borrowed from Yakubinsky:

*Dostoevskii's writings provide us... I was a witness.*²⁶ (32 lines)

On the basis of this somewhat far-fetched example, Vygotsky concluded that abbreviation can occur when there is mutual comprehension (e.g., the persons refer to the same topic or object) or when the meaning is communicated through intonation. In fact, this is what makes dialogue easier and more natural than monologue or written speech. Here Vygotsky (p. 272) referred to Shcherba's remark about the artificial nature of monologic speech, but was again citing Yakubinsky:

*He [Shcherba] argues that monologue is... in dialogue.*²⁷ (2 lines)

Vygotsky (p. 272) added that Yakubinsky had expressed the same idea.

*Yakubinskii expresses this idea... than monologue.*²⁸ (3 lines)

In his attempt to further differentiate monological from dialogical speech, Vygotsky again heavily relied on Yakubinsky and quoted him repeatedly. See, for example, on p. 272:

*The rapid tempo of oral speech is not conducive... immediate expression.*²⁹ (6 lines)

And on the same page:

*The potential for incomplete expression... that appear in consciousness.*³⁰ (8 lines)

And on p. 272 again:

*Understanding must be produced... rough draft in thought.*³¹ (6 lines)

Having established the phenomena of abbreviation and predicativity in certain forms of overt speech, Vygotsky now turned to inner speech again. It was his fundamental belief that, because in inner speech speaker and interlocutor coincide, abbreviation and predicativity should be even more outspoken. The subject of a phrase is always omitted, because it is known beforehand and needs not to be mentioned. To understand ourselves we need very little information; we can sometimes even guess a sentence spoken by others on the basis of the initial letters of the words. Here Vygotsky (p. 275) stated that he found a remarkable analogy in Lemaitre's (1904) article on the inner speech of children. Lemaitre had asked children how they experienced their inner speech, whether they believed they heard or saw it, and one boy told him that he visualized the phrase "Les montagnes de la Suisse sont belles" (The mountains of Switzerland are beautiful) as a series of letters "LmdlSsb" with a vague mountain landscape above it.³²

To Vygotsky, Lemaitre's example and the phenomena of abbreviation and predicativity he had discussed earlier proved that in inner speech meaning is more important than syntax. Or, put in the terms he used at the beginning of his chapter, in inner speech the phasic side is reduced and the semantic side takes precedence. But in Vygotsky's view there was more: he also claimed that in inner speech sense dominates over meaning. To clarify this distinction, he referred on p. 275 to Paulhan (1928) and, in fact, it is not exaggerated to say that the next three to four pages of his chapter were fully based on Paulhan.

*A word's sense is the aggregate... as a result of the word.*³³ (3 lines)

Paulhan described the signification of a word as a set of concentric circles of which the most inner zone corresponded with the most stable, dictionary meaning of the word and the outer zones represented the word's sense or connotation. Sense, in Paulhan's view, was determined by the context of the word. As Vygotsky (p. 276) explained:

*Paulhan states that the word's sense... in varied circumstances.*³⁴ (3 lines)

Paulhan went even further and claimed that the sense of a word can only be judged in the context of the book, which in its turn can only be judged against the background of the author's other books, etc. This argument Vygotsky quoted on p. 276 and he also used it in his discussion of the title of Gogol's *Dead souls*, which has acquired another meaning when the novel is finished.

*According to Paulhan... its sense is never complete.*³⁵ (5 lines)

In Vygotsky's opinion one of Paulhan's greatest merits was that he distinguished sense and meaning and showed that words may also lose their meaning in phrases such as "How do you do?," when no answer is expected. In a way, then, meaning and sense may be separated. Again Vygotsky (pp. 276–277) quoted Paulhan to illustrate this fact:

He argues that in the same way... phrase as a whole.³⁶ (3 lines)

However, the word cannot exist without sense nor can sense exist without the word.³⁷

Here Vygotsky ended his discussion of Paulhan (1928) with the claim that sense dominates over meaning in inner speech. In fact, in his view the prevalence of sense was characteristic of inner speech; it was its fundamental feature.

Another feature of inner speech, Vygotsky continued, was the merging of words. Again, he turned (p. 277) to overt speech for examples of this phenomenon of agglutination and found one in Wundt.

In German, the single noun... and conjugated in the same way.³⁸ (20 lines)

Once again Vygotsky claimed that he had seen similar phenomena in egocentric speech and once again we have to trust him on his word. Supposedly, agglutination in egocentric speech increased as the child grew older. And again, Vygotsky posited that agglutination was even more prevalent in inner speech. In inner speech sense dominates over meaning; a single word can capture a whole gamma of meanings. It is these semantic properties of egocentric and inner speech that make it incomprehensible without additional information and Vygotsky felt that he was the first to provide a satisfactory explanation for this fact. To further clarify the incomprehensibility of egocentric and inner speech, he mentioned just two more aspects. First, functionally, inner speech is not meant for communication and thus does not need to be understandable. Second, when we share an environment we often develop a joint language, a jargon, or a dialect.³⁹ Once more, Vygotsky extrapolated this finding to inner speech. Experiments had shown, he said (p. 279), that word meanings in inner speech are always untranslatable idioms, full of idiomatic expressions, ellipsis, etc. In inner speech one word is enough, but it has another meaning than in overt speech.

Here Vygotsky stopped his overview of the properties of inner speech. He once again claimed he had first observed the phenomena in egocentric speech and subsequently compared them with similar phenomena in overt speech. His conclusion was that inner speech derives from overt speech through egocentric speech, which confirmed his original hypothesis. However, in itself inner speech is a transitional form between word and thought. To understand it, Vygotsky argued, we must probe still deeper and study thought itself. Each thought moves, unfolds, strives to establish something, but the units of thought do not coincide with the units of speech. We all know the phenomenon that we cannot find the words to convey an idea. Again, Vygotsky turned to a literary example, this time from a story by Gleb Uspensky about a petitioner who cannot find the words to express his ideas, and quoted it at some length.⁴⁰ The example showed that thoughts do not directly coincide with words and Vygotsky added that actors had known it all along. To further explain this issue, Vygotsky turned to yet another literary example, Griboedov's comedy *Woe from wit*, as analyzed by the stage director Stanislavsky. In Stanislavsky's work we find the attempt to uncover the subtext, the thoughts and feelings behind the spoken words and Vygotsky focused on Stanislavsky's analysis of the conversation between Chatskiy and Sof'ya.⁴¹ Stanislavsky clearly showed that one and the same idea may be expressed in various ways and that one and the same expression can mean various ideas. Thoughts do not coincide with words; a speaker can develop an idea during several minutes. Here Vygotsky introduced an image that has become well known: A thought can be compared to a cloud that gushes a shower of words. That it is difficult to convey ideas by words had been understood by many. The transition is complex and led to the well-known complaints by the poets Tyutchev (How can a heart expression find?) and Fet (If only the soul could say things without words) and the poet Khlebnikov's neologisms.⁴² But words cannot be avoided, one consciousness cannot communicate with another consciousness directly, mediation through meanings and words is always inevitable.

It was here that Vygotsky arrived at the final step in his argumentation; the step behind thought. Thoughts are caused by emotions, needs, and drives. Or in Vygotsky's image: we need the wind that causes the cloud of meaning to gush its shower of words. Ultimate understanding of utterances requires knowing their motivational undercurrent. Rather surprisingly, Vygotsky turned again to Stanislavsky's analysis of *Woe from wit* to show that every utterance hides

a motive and again (pp. 282–283) quoted his analysis extensively. His conclusion was that in order to understand an utterance we indeed need to understand the speaker's motive.

Here Vygotsky rounded up his argumentation. He concluded that he had shown that the relationship between word and thought is not stable but dynamic: it changes over time. The trajectories from word to thought and from thought to word go through many intermediate stages and involve complex transformations. To understand this complex phenomenon a historical approach was needed and then it could be seen that words without meaning are dead. Here (p. 284) Vygotsky quoted the poets Mandel'shtam and Gumilyev:

As the poet says: "Like bees in a deserted hive, dead words reek." But as another poet says, the thought that is not embodied in the word will remain a Stygian shadow, "mist, chimes, and void."⁴³

Hence, the connection between thought and word is not primordial and fixed, it is always developing. Vygotsky now quoted Goethe's attempt in *Faust* to dethrone the word (in the beginning was the deed) and replied with Gutzmann that we can choose a different intonation and say "in the *beginning* was the deed." The word is the end that crowns the deed.

we can agree with Goethe... in the beginning was the deed.⁴⁴ (5 lines)

This was the end of Vygotsky's study of word and thought, but on the final page of his chapter he hinted that it was only the beginning of the study of an even bigger problem: the problem of consciousness. Words reflect reality in another way than feelings. But if consciousness can reflect reality in various ways that means that there are various types of consciousness. Speech and thinking form the key to the comprehension of consciousness. And, of course, quite characteristically, Vygotsky ended his chapter on p. 285 with several quotes

If "language is as ancient as consciousness itself," if "language is practical consciousness that exists also for other men, and for that reason for me personally as well," if "from the start the pure spirit is afflicted by the curse of matter, the curse of moving layers of air."⁴⁵

[The word is] what—in Feuerbach's words—is absolutely impossible for one person but possible for two.⁴⁶

and the famous image "Consciousness is reflected in the word as the sun in a droplet of water... The meaningful word is a micro-cosmos of human consciousness."⁴⁷

3 | A POSSIBLE EXPLANATION

Above we have presented Vygotsky's arguments in the final chapter of *Thinking and speech* in some detail. Our goal was not so much to criticize his line of reasoning—although we made some critical remarks—but to lay bare several of the unidentified sources on which he drew. It turned out that Vygotsky's chapter was a veritable patchwork of unidentified quotations and that large parts of his text have to be attributed to other authors. Although Vygotsky often relied on other authors and tended to refer to them in a somewhat vague manner (e.g., "a well-known author once said"), we know of no other Vygotskian text where it was this extreme.⁴⁸ This brings us to the question: how on earth could this happen?

To understand this somewhat better it is useful to have another look at the novelty of Vygotsky's reasoning in chapter 7. Was what Vygotsky supposedly dictated in the final month of his life representative of his newest ideas or was he rehearsing insights from previous years? To begin with, we can have a look at his argument that egocentric speech splits off from social speech, acquires an intellectual function, and gets transformed into inner speech. We then see that Vygotsky discussed this topic in various articles, presentations, and chapters in the period 1928–1931 (e.g., Vygotsky, 1928, 1928/1935, 1929, 1930b, 1931a, 1931b). Well known is, for example, that Vygotsky's closest collaborator, Aleksandr Luria, presented their ideas about egocentric and inner speech at the Ninth International Congress of Psychology in New Haven in 1929 (Vygotsky & Luria, 1930). Thus, we may conclude that this central part of Vygotsky's whole argumentation in the final chapter of *Thinking and speech* was not novel at all and had formed part of his thinking since at least 1929. Or, in other words, what was Vygotsky in chapter 7 was not new. Because Vygotsky in

chapter 7 for the first time presented a whole set of findings by linguists to convince the reader of his viewpoint that inner speech has specific properties, we might also conclude that what was new in chapter 7 was not Vygotsky. However, this would be only true to a degree. It was indeed true that the new ideas were borrowed from other thinkers and that Vygotsky presented these linguistic arguments for the first time to the general reader. However, these linguistic ideas had formed part of his thinking since at least 1932 and he had shared them at informal gatherings with his group of co-workers. That this is so becomes apparent from his notebooks (Zavershneva & Van der Veer, 2017) and from a published internal talk (Vygotsky, 1997). Thus, when we take a look at the notebooks written in the second half of 1932 (cf. chapters 15–18 in Zavershneva & Van der Veer, 2017), we see that all of the references to literary (e.g., Fet, Dostoevsky, Griboedov, Gumilyev, Mandel'shtam, Stanislavsky, Tolstoy, Tyutchev, Uspensky) and linguistic (e.g., Paulhan, Potebnya, Vossler, Yakubinsky) sources are already present. The same is true for the conceptual distinctions (e.g., sense vs. meaning, phasic vs. semic speech, written vs. oral and inner speech), the alleged properties of inner speech (agglutination, abbreviation, dominance of sense over meaning, idiomatic nature, predicativity), the examples ("the clock fell," the dialogues between Sof'ya and Chatskiy, and Kitty and Levin), and images (e.g., the cloud of thought that gushes a shower of words) that Vygotsky provided in chapter 7. Moreover, in Vygotsky (1987, pp. 132–135) we can find an account of an informal talk that Vygotsky gave on December 5, 1932, which presented all of these aspects in more or less the same way as they would be printed almost two years later in the final chapter of *Thinking and speech*. In other words, even the linguistic arguments presented in this chapter were already known to his group of associates since at least 1932. This means that *Thinking and speech* consisted of a collection of older papers and chapters plus several new chapters that were based on older material.

Now that we know that all the material published in the final chapter of *Thinking and speech* represented ideas from 1932 and earlier, we must still wonder why this material was prepared for publication in the spring of 1934. We know that Vygotsky had been planning to publish such a book for a number of years and that his book proposal was criticized on several occasions. Vygodskaya and Lifanova (1996, pp. 136–137) mention such a discussion at the Leningrad institute of Education on April 2, 1932, and Zavershneva and Van der Veer (2017, chapter 19) provide Vygotsky's account of a similar meeting that took place at the Psychological Institute in Moscow in the fall of 1932. Vygotsky had to present his proposal to the members of the Party Cell of the Institute and subsequently the members voiced their criticism. Basically, the members felt that this was "not Marxist psychology," that one "didn't feel dialectical materialism," and that the "social class aspect" was lacking. It is quite possible, then, that Vygotsky decided to delay the publication plans for *Thinking and speech* until better times. But why, then, did he decide to give it another try in the spring of 1934? To understand this we must take a broader look at the situation in the academic world in Russia at that time.

On January 13, 1934, the Council of the People's Commissars of the SSSR (i.e., the government of the Soviet Union) issued a decree about scientific degrees and titles. Essentially, the decree introduced the system of two dissertations: the candidate's and the doctoral dissertation. More importantly, the decree stipulated that in certain cases the obligation to defend the dissertation could be waived (Kozlova, 2001). What is even more, the decree added that in some cases a dissertation was not even necessary, but that one or more already published books (or discoveries or inventions) would suffice to get the necessary degree. Such exemptions were especially meant for persons who were already working as a university professor and had shown their merits in academia (Kozlova, 2001, p. 155). The universities were quick to realize the possibilities of this decree and in the period from 1933 to 1940 the possibility to confer degrees to persons who had not written a dissertation was widely used. In fact, when a certain position required a doctoral degree this was arranged quickly, also because it was not clear how long the possibility of exemptions would last. In psychology, people like B.G. Anan'ev (degree conferred in 1937), N.A. Bernshteyn (1935), P.P. Blonsky (1935), K.N. Kornilov (1935), and S.L. Rubinshteyn (1937) received their candidate or doctoral degree without having submitted or defended a dissertation. All of them submitted in 1934 or 1935 one or more books they had recently edited or written to get the required degree. It is quite conceivable that Vygotsky as well, who already was a professor and who had in January 1934 accepted the invitation to become head of the psychological section of the All-Union Institute of Experimental Medicine, decided to use this temporary relaxation of the rules to get the degree that corresponded with his functions and status. That hypothesis would explain why Vygotsky, who had not published books in 1932 and 1933, just like his colleagues urgently needed one or more new books to comply with the requirements. Hence, *Thinking and speech*

(Vygotsky, 1934a), and possibly one or more of the other posthumously published volumes may have been originally prepared for that occasion. These were *Foundations of pedology* (Vygotsky, 1934b) and *Children's cognitive development in the process of instruction* (Vygotsky, 1935), both collections of university lectures, and the edited volume *The mentally retarded child* (with Vygotsky & Danyushevskiy, 1935).

However, although the decree may explain why Vygotsky quickly needed one or more books and decided to publish a collection of older material, we still have no satisfactory explanation for the disturbing number of unidentified citations. Here, again, we can only offer a tentative explanation. The fact that there were many citations in Vygotsky's chapter is in line with Vygotsky's other writings: he often referred to the work of his colleagues. It is at least possible that he meant to refer to all of his sources and that the quotation marks were present in the typescript of the book, but that the references to page numbers of books and articles still had to be added when Vygotsky suddenly fell ill and died. The group of colleagues that subsequently prepared the typescript for the publisher then faced the considerable task of finding all the exact locations of the citations in publications in various languages. It is quite possible that confronted with this difficulty they decided to choose the easiest solution and to simply delete the quotation marks. In fact, this is what happened several times with Vygotsky's other publications (Van der Veer & Yasnitsky, 2011; Zavershneva & Osipov, 2012). Another possibility is that the editorial team wanted Vygotsky to seem more original than he actually was. In both interpretations, however, it was the sloppy work of the editorial team that made it hard to recognize the frequent direct quotations.⁴⁹

4 | CONCLUSION

We have reconstructed Vygotsky's argumentation in the famous final chapter of *Thinking and speech*. To our surprise we found that this chapter, which has been read and praised by many scholars, is replete with hidden quotations and relies to a great extent on the work of other thinkers. The most striking example is that of Yakubinsky's essay on dialogical speech that Vygotsky paraphrased for eight pages and which he literally cited between 15 and 25 times, depending on how one counts. To explain this, at least to modern standards, rather shocking finding, we turned to Russian psychology's history and advanced the three-tiered hypothesis that (1) *Thinking and speech* was quickly compiled to meet the new and relaxed requirements for a doctoral degree. Rather than his latest insights, it consisted of older articles and chapters and hurriedly composed new chapters based on older material; (2) when Vygotsky died the final chapter was not yet ready for print; and (3) the team of editors did a sloppy job and decided to remove most of the quotation marks. We realize that other interpretations are possible (e.g., Vygotsky was a fraud who intended to deceive his readers), but we believe the present explanation is the most plausible one given the previous cases of sloppy editing of Vygotsky's writings that have been established. That leaves a final question: how is it possible that such an astonishing amount of quotes and paraphrases went largely unnoticed for such a long time? But here we have no clear answer and the situation also requires a certain humility on our part.

ACKNOWLEDGMENTS

The authors would like to thank S.A. Bogdanchikov and L. Mecacci for their valuable comments on a previous version of this paper.

ENDNOTES

¹ We here use the latest English translation, i.e., Vygotsky (1987), despite its many translation errors and distorted names, for lack of a better alternative. The use of English translations, in fact, obscures the similarities between Vygotsky's original text and the sources he used, because translators tend to translate texts differently and because Vygotsky (1987) is the translation of a later and unreliable edition (Vygotsky, 1982).

² See p. 120 of Potebnya (1913/1993): "language is not a means to express a ready-made thought but to create it."

³ Here Vygotsky referred to Piaget (1928).

- ⁴ Actually, Vygotsky connected two parts. Cf. Vossler (1923, pp. 106–107): “Denn, um die seelische Meinung eines sprachlichen Gebildniss zu missdeuten, gibt er kaum einen sichereren Weg, als den der grammatischen Erklärung.” This was a verbatim quote. Followed by Vossler (1923, p. 107): “Wenn Uhland seinen Prolog zum ‘Herzog Ernst von Schwaben’ beginnt... das Psychologische Prädikat ist.” This was a nonverbatim quote, partly a paraphrase.
- ⁵ Paul (1890; cf. 1891, p. 288): “The grammatical category is to some extent a petrification of the psychological.” (Die grammatische Kategorie ist gewissermaßen eine Erstarrung der psychologischen.) This was a verbatim quote from Paul. However, the next part of the passage seems based on Vossler (1923, p. 111): “Er [Paul] lehrt, dass man sich in letzter Hinsicht an die Tonstärke halten müsse.”
- ⁶ In fact, Vygotsky connected three parts: Vossler (1923, p. 109): “Vielleicht kommt Übereinstimmung... oder nie verwirklicht... nicht nur hier, sondern überall: in der Lautlehre... gleich wieder auseinander.” This was a long verbatim quote, but with the omission of several sentences. It was followed immediately by the next two parts from other pages of Vossler. Vossler (1923, p. 115): “Wir dürfen nicht nur psychologische Form- und Bedeutungselemente, psychologische Subjekte und Prädikate ansetzen; wir können mit demselben Rechte von einem psychologischen Numerus, Geschlecht, Kasus, Fürwort, Artikel, Superlativ, Elativ, Futurum usw. reden.” This was an almost verbatim quote. Finally, in the last part Vygotsky connected two sentences from different pages. Vossler (1923, pp. 110/150): “Die psychologischen Subjekte, Prädikate, Geschlechter usw. sind abgeleitet von den grammatischen... / die grammatischen Formen immer nur die Festigung, Regelung und Erstarrung der seelischen sind.”
- ⁷ This quote consisted of two parts. Vossler (1923, p. 149): “Der volle Ausgleich zugunsten eines allgemeinen und unbedingt richtigen Ausdrucks wird erst jenseits der Sprache und ihrer Gebräuche in der Mathematik verwirklicht... Der erste, der in der Mathematik ein Denken gesehen hat, das aus der Sprache hervorgeht, aber sie zugleich überwindet, dürfte Descartes gewesen sein.” This was a verbatim quote, but leaving out several sentences. It was directly followed by the next part. Vossler (1923, p. 151): “Nur so viel können wir sagen... die man Entwicklung nennt.” Again, this was a verbatim quote.
- ⁸ See Shcherba (2007, pp. 98–99). Subsequently, Shcherba's text became well known (cf. Budagov, 1988, p. 124). So far, it remains unclear which exact source Vygotsky used.
- ⁹ Schilling (1929, p. 205): “Das innere Sprechen ist demnach eine Teilfunktion der inneren Sprache, ein die Denkfunktion begleitender und unterstützender oder auch hemmender sprechmotorischer Akt von initialem Charakter, dessen Impulse entweder äußerlich gar nicht oder in mehr oder weniger ausgeprägten stummen Artikulationsbewegungen zum Ausdruck kommen.” This was a verbatim quote.
- ¹⁰ Although this passage can be found in Goldstein (1933, p. 457) as well, we have every reason to assume that Vygotsky paraphrased Schilling (1929, p. 104), who cited Goldstein's view on inner speech.
- ¹¹ Here Vygotsky referred to chapter 16 of *Pedologiya Podrostka* (1931a), called “The dynamics and structure of the adolescent personality.” On pp. 483–485 he introduced his “second law” of development, the law of the sociogenesis of higher forms of behavior, which said that every relationship between higher psychological functions once was a relationship between persons; collective forms of behavior become individual.
- ¹² Grünbaum (1927, p. 458): “Es gibt Fälle, in denen man auf Grund einer oberflächlichen Wahrnehmung der Kinder annehmen möchte, daß das Kind wohl die Intimität des Ichs besitzt und in sich selbst völlig eingekehrt ist. In dem Stadium, in dem wir das Kind als verstehende Wesen gut kennenlernen, etwa im 3. Jahre, erwarten wir von ihm auch eine geistige, d.h. logische Korrespondenz mit dem Umwelt.” This was an accurate translation, but with too many changes to call it a verbatim translation. The part that immediately follows was quoted almost without changes. See Grünbaum (1927, p. 458): “Da diese Art der Korrespondenz dem Kinde nicht gegeben ist, nehmen wir leicht an, daß es nur in seinem eigenen Gedanken und Phantasien lebt d.h. egozentrisch eingestellt ist. Beobachte man etwa 3-5jährige Kinder, wenn sie in gleichaltriger Gesellschaft ein gemeinsames Spiel treiben: Jedes Kind ist dabei sichtlich nur mit sich selbst beschäftigt, spricht eigentlich nur zu sich selbst. Glaubt man von weitem eine Konversation zu konstatieren, so handelt es sich dabei bei näheren Zuhören eigentlich bloß um einen ‘kollektiven Monolog’ (Piaget), bei welchem die Teilnehmer einander nicht anhören und nicht antworten. Doch letzten Endes ist auch dieses scheinbar krasse Beispiel einer egocentrischen Einstellung des Kindes bloß ein Beweis mehr für die Gemeinschaftsbindung der kindlichen Psyche. Denn schließlich handelt es sich beim kollektiven Monolog weder um eine willentliche Isolation von der Gesellschaft oder einen Autismus im Sinne der modernen Psychiatrie (Bleuler), sondern um etwas in seiner psychischen Struktur gerade Entgegengesetztes. Piaget, der den Egozentrismus der Kinder sehr stark betont und zum Eckstein seiner Erklärungen für die Eigenartigkeiten der Kinderpsyche macht, muß zugeben, daß im kollektiven Monolog die Kinder glauben doch zueinander zu sprechen und das der ‘andere’ zuhört. Ja sie benehmen sich scheinbar ohne Rücksicht auf den anderen, nur weil sie in der Annahme verkehren, daß jeder ihrer Gedanken, der mangelhaft oder gar nicht ausgesprochen, doch ein gemeinsames Eigentum ist.” This was an almost verbatim translation. The names in brackets were left out plus one or two other words.
- ¹³ Watson (1919, pp. 344–345): “Even if we could roll out the implicit processes and record them on a sensitive plate or phonograph cylinder it is possible that they would be so abbreviated, short-circuited and economized that they would be

unrecognizable unless their formation had been watched from the transition point where they are complete and social in character, to their final stage where they will serve for individual but not for social adjustments." Vygotsky quoted Watson verbatim.

- ¹⁴ True, Yakubinsky gave another example ("Are you going to make a walk?," "Yes (I am going to make a walk)"), but it expressed the same idea. Cf. Yakubinsky (1923/1986, p. 36): "Obshcheizvestno, chto otvet na vopros trebuetsya znachitel'nogo men'shego kolichestvo slov...: 'Ty poydesh' gulyat'?'—Da (ya poidu gulyat')."
- ¹⁵ Yakubinsky (1923/1986, p. 42): "Yarkim primerom podobnogo roda yavlyayetsya ob'yasnenie Kiti i Levina posredstvom nachal'nykh bukv slov." This was a verbatim quote. Like Vygotsky, Yakubinsky added that the interchange between Kitty and Levin was based on an episode in Tolstoy's personal life.
- ¹⁶ Yakubinsky (1923/1986, p. 42): "pri odinakovoy napravlenosti ikh soznaniya, rol' rechevykh razdrasheni svoditsya do minimum." This was a verbatim quote.
- ¹⁷ Actually, this passage was composed of three parts from Yakubinsky's text. First, from p. 42: "Levin uzhe privyk... i ona ponimala ego." This was a verbatim quote. Second, from pp. 43–44: "Ponimanie dogadkoy i, sootvetstvenno etomu... my govorym tol'ko neobkhodimymi namekami." Again, this was a verbatim quote. Third, from p. 44: "rech' idet o svoeobrazii sintaksicheskogo stroya v zavisimosti ot opredelennykh usloviy recheogo obmena, v chastnosti ob ego ob'ektivnoy prostote po sravneniyu bolee diskursivnym govorenem." This was an almost verbatim quote, leaving out part of the sentence.
- ¹⁸ Vygotsky quoted a poem written in 1830 (Pushkin, 1959). But there is every reason to believe that this quote was inspired by Yakubinsky, who gave a similar example. Cf. Yakubinsky (1923/1986, p. 45): "Zdorovo, kuma / Na rynke byla / Al' ty glukha? / Kupila petukha / Proshchay, kuma / Poltinu dala."
- ¹⁹ Yakubinsky, ODR, 1923/1986, p. 43: "vse lyudi, samobytno... pristrastnym k svoey." This was a verbatim quote.
- ²⁰ Again, this was a verbatim quote from Yakubinsky. See pp. 43–44: "Esli by vse, chto my zhelaem vyskazat'... chem eto delaetsya v deystvitel'nosti."
- ²¹ Yakubinsky (1923/1986, p. 23): "v pis'mennom izlozhenii upotreblayayutsya obyknovennymi slova, vyrazheniya i konstruksii, kotorye kazalis' by neestvestvennymi... v ustnoy rechi." This was a verbatim quote, but Yakubinsky referred to p. 376 of the book by the professor in comparative linguistics Aleksandr Ivanovich Tomson (1910), not to some Thompson.
- ²² The role of both Humboldt and Potebnya was analyzed by Yakubinsky on pp. 19–24.
- ²³ Yakubinsky (1923/1986, pp. 23–24): "samaya postanovka... v takoy ploskosti yazykoznaniyu chuzhda, chto sochineniya po obshchemu yazykovedeniyu etogo voprosa ne kasayutsya." Almost verbatim quote with two slight changes.
- ²⁴ Here Vygotsky rephrased Yakubinsky (1923/1986, p. 27): "vospriyatie ego mimiki, zhestov, vsekh ego telodvizheniy." But Yakubinsky (p. 25) made clear that this is not true for any dialogue and gave a telephone conversation as an example.
- ²⁵ Yakubinsky (1923/1986, p. 27): "razgovor v takikh sluchayakh, po vyrazheniyu Tarda, yavlyayetsya lish' 'dopolnieniem k brosaemym drug na druga vzglyadam' i pr." This was a verbatim quote.
- ²⁶ Yakubinsky (1923/1986, p. 29): "Dostoevskiy rassuzhdaet o yazyke p'yanykh i govorit, chto yazyk etot 'prосто-zaprосто nazvanie iz odnogo neleksikonno sushchestvitel'nogo.'" This slightly rephrased quote was followed by the long verbatim quote from Dostoevsky's *Diary of a writer*. It is interesting that the very same passage from Dostoevsky was also given in Voloshinov (1930/1972, pp. 105–106), Yakubinsky's student, but Vygotsky was clearly using Yakubinsky, because he also copied his introductory sentence.
- ²⁷ Yakubinsky (1923/1986, p. 31): "chto monolog yavlyayetsya... v dialoge." This was a slightly rephrased quote.
- ²⁸ Yakubinsky (1923/1986, p. 34): "Dialog, yavlyayas' nesomennym yavleniem kul'tury v to zhe vremya v bol'shey mere yavlenie prirody, chem monolog." This was a verbatim quote.
- ²⁹ Yakubinsky (1923/1986, p. 35): "No bystrota tempa ustnoy rechi... vyskazanie 'srazu', i dazhe 'lish' by', 'kak popalo.'" This was a verbatim quote omitting one expression.
- ³⁰ Actually, Vygotsky connected four different parts from Yakubinsky's text. See Yakubinsky (1923/1986, p. 34): "pri vsyakom dialoge nalitso eta vozmozhnost' nedoskazyvaniya, nepolnogo... monologicheskoy rechi." Followed by p. 36: "V protivopolozhnost' kompozitsionnoy... kompozitsionnoy slozhnost." Followed by p. 37: "i vodit rechevye fakty... na nikh sosredotochiyaetsya." And finally, p. 37: "Zdes' rechevye otnosheniya stanoviyatsya opredelitel'yami, istochnikami poyavlyayushchikhya v soznanii po povodu nikh samykh perezhivaniy." These were all almost verbatim quotes with a few insignificant changes (e.g., in word order).
- ³¹ Again, Vygotsky connected four parts from Yakubinsky's text. See Yakubinsky (1923/1986, p. 37): "Ponimanie proizvoditsya za schet slov i ikh sochetaniy." This was a verbatim quote. Followed by p. 37: "Esli dialog, ... po samomu sushchestvu ne sposobstvuet protekaniyu recheogo protsessa v poryadke slozhnoy deyatel'nosti." This was a slightly rephrased quote. Followed by p. 37: "I rechevaya deyatel'nost' opredelyayetsya kak slozhnaya." This was a verbatim quote. In Yakubinsky's text this

sentence was preceded by a passage that Vygotsky skipped. This is why the sentence looked somewhat strange in Vygotsky's text. Finally, this was followed by an almost verbatim quote from pp. 37–38: "na etom zhe osnovano... myslennyy chernovik."

- ³² Lemaître (1904, p. 5) omitted the fourth letter, the "l." Again, this example owed much to Yakubinsky. In his chapter 6, Yakubinsky discussed "apperceptive mass," that is, what we perceive or know while talking. He then mentioned the game "secretaire," when we have to guess a word on the basis of a few letters or just the first letter. Guessing right is only possible, when we share the "apperceptive mass." Yakubinsky then gave a number of examples, also from Kitty and Levin. This also explains why Vygotsky (1987) on p. 274 speaks of "shared apperception" and on p. 275 of "shared orientation." In fact, both terms were translations of the term "obshchnost' appertseptsii," which was taken from Yakubinsky and did not fit in Vygotsky's text. The same holds true for the term "verbal stimuli," used by Vygotsky on p. 275, which again looked strange, but was used by Yakubinsky.
- ³³ Paulhan (1928, p. 289): "Le sens d'un mot... c'est tout l'ensemble de faits psychologiques que ce mot éveille dans un esprit." Vygotsky changed "esprit" for "consciousness," but otherwise it was a verbatim quote.
- ³⁴ Paulhan (1928, p. 311): "Le sens d'un mot est donc chose compliqué, mouvante, toujours variable a quelque degré selon les esprits, et, pour un même esprit, selon les circonstances." This was a verbatim quote, but leaving out "thus" (donc) and again changing "esprit" for "consciousness."
- ³⁵ Paulhan (1928, p. 328): "Le sens de la terre, c'est le système solaire qui le complète, et le sens du système solaire, l'ensemble de la voie lactée... C'est à dire que nous connaissons jamais le sens complet de rien et, par conséquent, d'aucun mot. Un mot est une source inépuisable de problèmes nouveaux... Un sens n'est jamais complet." This was a verbatim quote leaving out several lines.
- ³⁶ Paulhan (1928, p. 320): "De même que le sens d'un mot s'attache à l'ensemble du mot et non à chacune de ses lettres, de même le sens d'une phrase s'attache à l'ensemble de la phrase sans se répartir entre tous les mots." This was an almost verbatim quote, just replacing "letters" by "sounds."
- ³⁷ Paulhan (1928, p. 322): "Si le mot peut exister sans le sens, le sens peut également exister sans le mot..." Vygotsky quoted Paulhan verbatim. However, the translator of the English edition committed an error. In reality, Paulhan wrote that word and sense *can* exist independently.
- ³⁸ Wundt (1904, p. 600) briefly discussed the Delaware language: "Bei den Sprachen, die dem sogenannten 'agglutinativen Typus' angehören... Oder wenn ein Delaware-Indianer den Satz 'er kommt mit dem Kahn und holt uns über den Fluss' in einer Wortverbindung ausdrückt..." but this is not the source we need, because Vygotsky is quoting or paraphrasing a much longer passage from Wundt. Thus, probably, a large part of p. 277 is based on another of Wundt's texts.
- ³⁹ Here Vygotsky referred to Tolstoy's *Childhood. Boyhood. Youth* and the language spoken by the brothers Nikolen'ka and Volodya Irten'ev. The development of social dialects on the basis of shared knowledge was also mentioned by Yakubinsky (1923/1986, p. 44).
- ⁴⁰ Vygotsky quoted 24 lines from chapter 2 of Uspensky's *Nablyudeniya odnogo lentyaya* and one line from Fet's (1888/1979) poem "Kak trudno povtoryat' zhivuyu krasotu." The translator of Vygotsky (1987) left a large part of this untranslated and reduced it to 4 lines.
- ⁴¹ Vygotsky quoted Stanislavsky's analysis of a part of Griboedov's classic comedy in verse *Woe from wit*. However, in this exact form it was never published and there is every reason to assume that Vygotsky got this analysis from Stanislavsky himself, since they knew each other personally and Vygotsky was very interested in theater and play.
- ⁴² Vygotsky quoted Tyutchev's (1836/1976, pp. 132–133) poem "Silentium" (Kak serdtsu vyskazat' sebya, drugomu, kak ponyat' tebya) and Fet's (1844/1979, pp. 64–65) poem "Kak moshki zareyu" (O esli b bez slova skazat'sya dyshoy bylo mozno!) He also paraphrased Khlebnikov (1920): "Who would travel from Moscow to Kiev via New York? And what line of modern bookish language is free of such excursions? This is because there is no science of word formation."
- ⁴³ Vygotsky quoted Gumilyov's poem "The word" (1921/1988, p. 312) and Mandel'shtam's (1975, p. 64) poem "The swallow."
- ⁴⁴ Cf. John 1:1 and Goethe's *Faust*, chapter 6: "Im Anfang war die Tat." Gutzmann's reply can be found in Gutzmann (1922, p. 72): "Wenn man auch mit Goethe das 'Wort' als solches, d.h. das 'Lautwort' nicht immer gerade besonders hoch einzuschätzen braucht und mit ihm aus der Bibel übersetzen kann: 'Im Anfang war die Tat,' so kann man das auch, entwicklungsgeschichtlich aufgefasst, mit anderer Betonung lesen: *Im Anfang war die Tat*." This was a verbatim quote. Vygotsky and Luria used the same quote in "Tool and symbol in child development" (cf. Van der Veer & Valsiner, 1994, p. 167).
- ⁴⁵ Marx, *The German Ideology* (1845): "From the start the 'spirit' is afflicted with the curse of being 'burdened' with matter, which here makes its appearance in the form of agitated layers of air, sounds, in short, of language. Language is as old as consciousness, language is practical consciousness that exists also for other men, and for that reason alone it really exists for me personally as well; language, like consciousness, only arises from the need, the necessity, of intercourse with other." See <https://www.marxists.org/archive/marx/works/1845/german-ideology/ch01a.htm>. This was a verbatim quote. The last part of the quote, about the layers of air, was left out by the translator of Vygotsky (1987).

- ⁴⁶ "Quoted from §12 of Feuerbach (1986) *Principles of the Philosophy of the Future*.
- ⁴⁷ Recently, Mecacci (2016) pointed out that these metaphors about the sun, a droplet of water, microcosmos and macrocosmos may have been borrowed from Vlacheslav Ivanov.
- ⁴⁸ One of his texts that has remotely similar problems was *Imagination and creativity in childhood* (1930a), but this was a booklet for the popular market written to earn some quick money and not Vygotsky's "final word" in psychology.
- ⁴⁹ Strictly speaking, it cannot be excluded that the final chapter of *Thinking and speech* was not ready when Vygotsky died and was compiled or completed by the editorial team on the basis of existing material (e.g., lecture notes). This would explain why nobody has ever seen a written or typed version of chapter 7, whereas such a manuscript exists for the first chapter of *Thinking and speech* (cf. Mecacci, 2015). Such cases have been documented before (cf. chapter 4 of Yasnitsky & Van der Veer, 2016), but in itself this possibility does not explain the absence of quotation marks.

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How to cite this article: van der Veer R, Zavershneva E. The final chapter of Vygotsky's *Thinking and Speech*: A reader's guide. *J Hist Behav Sci*. 2018;54:101–116. <https://doi.org/10.1002/jhbs.21893>