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## **Untangling a genetic root of *Thinking and Speech*: Towards a textology of *Tool and Sign in Child Development*<sup>1</sup>**

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*Данная работа представляет собой обсуждение, базирующееся на оригинальном сравнительном анализе русского и английского текста работы Выготского "Орудие и знак в развитии ребенка" (см. Kellogg, D. & Yasnitsky, A. The differences between the Russian and English texts of Tool and Symbol in Child Development. Supplementary and analytic materials, этот номер) и таких характеристик как (1) различия в разделении на абзацы и в выделении текста курсивом, (2) использование иноязычных фраз и прямых цитат из работ на немецком языке, (3) авторское "мы", (4) утрата графиков в русской версии, (5) расхождения в локализации сегментов текста, и (6) избыточные сегменты текста и почти дословные повторы. По контрасту с работами других исследователей (Р. ван дер Веер, Я. Валсинер, А. Ясницкий), автор приходит к выводу о том, что известный нам текст возник в результате перевода с русского языка, а не наоборот, и обсуждает его значение в творчестве Выготского.*

**Ключевые слова:** *Выготский, текстология, анализ текста, перевод, публикации, фальсификации.*

Anna Stetsenko, in her introduction to the English translation of the Russian version of *Tool and Sign in Child Development*, remarks that this text must above all be treated as if it were alive and still breathing (2004). She means that it is born, child-like, in striving to make sense of the world and the self, that interpreting the text is the continuing work of people who are still living (such as we translators of the work) and also that it is constantly renewed by the ever-expanding pool of our readers. But the text is alive in another sense that Vygotsky's contemporary Mikhail Bakhtin would have recognized immediately. It is a text unfinished and unfinalized, or as Bakhtin would say, unconsummated (1990: 91).

For example, parts of the text appear to be highly redundant, though what appear to be repetitions are usually not word for word. Other parts of the text are highly elliptical. Chapter Five, for example, begins with a reference to "two psychologies, which we have characterized above as the psychology of pure spiritualism on the one hand and the psychology of pure naturalism on the other." There is no obvious place in the preceding text which characterizes these schools, at least not in those terms. As a result, when the authors refer to "behaviorists" and "psychological objectivists" in the penultimate paragraph of Chapter Five, it is rather hard to say what they mean by the latter term. At least two translators, in the *Vygotsky Reader* and in the English version of the *Collected Works*, have simply changed it into "subjectivists" (we shall suggest, in Kellogg and Yasnitsky 2011, this issue that what is really meant is those who take as their objective psychology as opposed to behavior).

Although the text is alive and breathing in all the senses that Stetsenko intends (and then some!), it is equally true that the text is a little like a fossil record: we know remarkably little about its context other than what we may reconstruct from internal evidence. There are a few apparent references to at least the first chapter in Vygotsky's private letters (e.g. Vygotsky, 2007: 36), and there is a bibliographic note to the effect that a manuscript by this name was prepared with

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Alexander Luria in the first edition of *Thinking and Speech* (1934: 322). But until Luria handed an English version, annotated in his own handwriting, to Mike Cole in the early 1970s, that bibliographic note was really the only public evidence that the manuscript existed.

On the internal evidence, this version of the manuscript appears to date from 1930; there are numerous references to books published in 1930, and no clear references to any books published after 1930. Leontiev published his major work on memory in 1931, and the English manuscript refers instead to a lesser paper which was available in 1930). Note 43 in the *Vygotsky Reader*, (p. 172) says that the English manuscript makes reference to a book published by Luria in English, but the title used was the one Luria planned to use in 1930 (“Affection, conflict, and will”) rather than the one under which it was actually issued in 1932 (“The Nature of Human Conflicts”). This certainly suggests that the English manuscript dates from 1930.

Soviet publication of the manuscript in Russian did not take place until 1984, and van der Veer and Valsiner say that when it did happen, the Russian original had been lost and the “Russian version” discussed below is actually translated into Russian from the English (1991: 188). This hypothesis should be testable, by comparing the English and Russian versions, and part of the purpose of the present article is to test it. In testing this hypothesis, and in our forthcoming Korean translation, we base ourselves primarily on the Russian version contained in the 1984 edition of Vygotsky’s *Collected Works*. We do this for three reasons.

First of all, regardless of when it was actually written, we know that it was published a decade earlier than the English version found in the *Vygotsky Reader*. Secondly, as we shall attempt to demonstrate, the manuscript seems in important ways rather less finished—it includes a great deal of intra-textual redundancy, as if the author were copying and pasting but had not yet gotten around to cutting and writing over the breaches created by editing. This seems to us significant; it may suggest that the Russian version was slightly less subject to editorial tampering and slightly closer to the original hand of the author. Finally, there is a clear reference to a “Russian original” in a handwritten note on the English manuscript, and we believe that there is significant internal evidence to suggest that, despite the retranslation from English hypothesis put forward by van der Veer and Valsiner (1991) and Yasnitsky (2011, see this issue of the journal), the Russian version published in 1984 may be identical to or closely based on that Russian original.

The counter-hypothesis we wish to propose here is that the Russian manuscript was completed on time and translated into English for submission to the Murchison *Handbook* in 1930. Once the manuscript was presumably rejected, one or both authors then kept fiddling with Russian manuscript, copying or rewording parts of it into different chapters, perhaps with the intention of publishing it in the USSR in Russian as a complete book. This publication did not take place (perhaps due to the criticisms of the Vygotsky-Luria school which were already surfacing in 1930) and the project was eventually abandoned, or rather subsumed by the book which, in Vygotsky’s hands alone, became *Thinking and Speech* (1934). The English manuscript was also tampered with, either by the authors themselves or (more likely) by editors. As a result of this divergent evolution, the textologist is today faced with two parallel manuscripts, manifestly of the same book but significantly different in a plethora of ways.

This hypothesis of parallel, and even divergent, descent (rather than re-translation) is, we admit, largely speculative. There is no evidence for it outside the manuscript itself. It has the advantage, however, of accounting for certain peculiarities of the two manuscripts which are otherwise hard to explain. Below, we would like to examine six of these: 1) the very different style of paragraphing and italicization in the English version, 2) the more liberal use of German in the English version of the manuscript, 3) the shifting authorial voice in the English version (which changes from the “we” that Vygotsky used when writing alone to the “I” that Luria often preferred in his English work), 4) the omission of figures from the Russian version and the mysterious reference in a handwritten note attached to the English manuscript to a “Russian original”, which

may or may not be the one published in the *Collected Works*, 5) clear discrepancies between the positioning of material in the Russian and English versions, and 6) the near-redundancies found in Chapters Two, Three, and Four.

We shall examine all these peculiarities in turn. Let us take the most frequent, and in our view the least significant, differences first.

### 1) DIFFERENCES IN PARAGRAPHING AND ITALICIZATION

As the chart shows (see this issue of the journal, Kellogg & Yasnitsky, 2011), the English version has a strong preference for shorter and even single-sentence paragraphs, while the Russian version takes much longer turns. We may add that the English version has a strong preference for italics and the Russian version appears to use italics only very rarely. The Russian version resembles, in its paragraphing and in the relative paucity of italics, other publications of the early 1930s, such as Luria's book in English *The Nature of Human Conflicts* (1932: Liveright). The English version, in contrast, reminds one of the very differently paragraphed and italicized versions of *Thinking and Speech* published in 1956 and 1982, and Luria's later publications (especially the book he co-wrote with F. Ia. Yudovich, *Speech and the development of mental processes in the child*.)

But perhaps we ought not to read much into this. First of all, the final, concluding chapter, in the Russian version, is also rather differently paragraphed, with many "stand alone" one paragraph sentences. Secondly, as Anton Yasnitsky remarks (private communication, 2011), Soviet editing was at its most creative in paragraphing and italicization, and we can certainly see this when we compare the 1934 edition of *Thinking and Speech*, with the very differently paragraphed and italicized versions published in 1956 and in 1982. On the face of it, this yardstick would merely suggest, and not very strongly at that, that the English manuscript was the one that was most heavily re-edited after Vygotsky's death. Even then, we cannot exclude the possibility that both manuscripts were heavily edited, albeit by persons of different editorial persuasions.

It is not clear to us why a Russian retranslation of the English text would want to eliminate italics and merge paragraphs. On the other hand, we know that the Russian editors of Vygotsky's work did precisely this with the 1934 edition of *Thinking and Speech* when it was finally republished in 1956. So on the balance it seems to us that the differences in italics and paragraphing are probably not authorial.

### 2) THE MORE LIBERAL USE OF GERMAN AND THE USE OF DIRECT QUOTATIONS FROM GERMAN AUTHORS

Russian, like all other modern languages (and even ancient languages), uses a large number of loan words in its scientific discourse. A very large number of these loan words, particularly in the domain of psychology, were borrowed from German. As our chart demonstrates, there are a large number of instances where the original German is used in the English manuscript, whereas there are essentially no German words, except for accepted Russian loan words, in the Russian version. If we compare, again, with *Thinking and Speech*, we notice that the chapters written before 1931 (that is, Chapters Two, Three, Four, and Five) all make use of German words written in German, while those written just before Vygotsky's death for the most part avoid them. Another difference between the two texts has to do with the use of direct quotations from German authors, e.g. Carl Stumpf, Karl and Charlotte Bühler, and Wolfgang Köhler. In the English version these are used with clear quotation marks that suggest familiarity with the original sources, while the Russian version has a strong preference for indirect speech in rendering these quotations.

We know that there was a strong reaction against German and even against German

psychology in the years following Hitler's rise to power. It seems to us that the use of German words and strict quotations from foreign authors in the English manuscript suggests the work of translators scrupulously preparing a manuscript for foreign publication in or around the year 1930, while the elimination of German words and the use of indirect quotations might tend to suggest a reworking of the manuscript somewhat later by the authors themselves, with a view to Soviet publication.

Of course, we cannot read too much into either the use of untranslated German words or the use of indirect speech. Like many educated Jews, Vygotsky and Luria knew German well and used the language extensively, often not bothering with the Russian loan word and directly inserting the untranslated German (e.g. "Fähigkeit" in Chapter Three of *Thinking and Speech*, "Namengebung" in Chapter Four, etc.). And the Russian text's preference for indirect speech extends to Russian authors such as Shapiro and Guerke; these are directly quoted in the English manuscript, while indirect speech is used in the Russian manuscript. In addition, the most notorious of the Nazi psychologists, Erich R. Jaensch, is still mentioned approvingly in the Russian manuscript. Other forms of evidence are necessary.

### 3) THE AUTHORIAL "WE"

We do not know for certain whether the book was written by Vygotsky alone or by Vygotsky and Luria together. Despite the clear reference in the 1934 bibliography of *Thinking and Speech* to a manuscript of this name by both authors, the published Russian version does not include Luria as an author at all. There are, however, certainly passages which reflect Luria's views rather than Vygotsky's (see, for example, 2-24, where the text reflects Luria's interest in lie detectors, and his interest in recovering "repressed" memories, two interests which as far as we know Vygotsky did not share). Van der Veer and Valsiner, who believe in dual authorship, stipulate that that they believe that Luria was very much a second author (1994, p. 173).

At the very beginning of Chapter Four, the author(s) write(s):

Серия работ, проведенных в течение последних лет нами и нашими сотрудниками, была посвящена указанной проблеме, и мы можем сейчас, опираясь на полученные данные, схематически описать основные закономерности, характеризующие структуру и развитие знаковых операций ребенка.

The English manuscript given to Mike Cole in Moscow by Luria apparently has the following:

"Several series of experiments, carried out during the last few years by my colleagues and myself, dealt with this problem, and now, basing ourselves on the acquired data, we are able to describe in a schematic form the basic laws that characterize the structure and development of the child's symbolic operations."

The editors of the *Vygotsky Reader* note that the Russian manuscript has something like "our colleagues and ourselves," which would be consistent with the authorial "we" used elsewhere in the manuscript. Later in the manuscript (4-14) there is a reference to "our laboratory" which uses the singular rather than the plural "our laboratories."

Проведенные в нашей лаборатории (А. Н. Леонтьев, 1930) опыты с использованием внешнего знака при запоминании показали, что эта форма психических операций не только существенно новая по сравнению с непосредственным запоминанием, но и помогает ребенку

преодолеть границы, поставленные для памяти естественными законами мнемны, больше того, она и является преимущественно тем механизмом в памяти, который подвержен развитию.

(English: “A. N. Leontiev [1930] carried out experiments in our laboratory on memorization with the use of external symbols which showed that this form of mental operation is not only substantially new in comparison with direct memorization, but also helps the child to overcome the boundaries set for the memory by the natural laws of mnemonics; moreover, it is this mechanism in the memory which is the predominantly subject to development.”)

The reference is apparently to the psychological laboratory in the Academy of Communist Education (Akademiia Kommunisticheskogo Vospitaniia, AKV), where Morozova and Leontiev worked.

The shift from plural to singular may not mean anything at all, or it might mean the very opposite of what we imagine. We who re-read these texts and re-edit them with Vygotsky’s modern reputation in mind may focus on Vygotsky as an individual author, but Vygotsky himself was well-accustomed to an inclusive authorial “we” which included himself, his co-thinkers, and sometimes even his reader (he tended to reserve “I” for hypothetical examples such as “I tie my shoe and I do it consciously”). So it is entirely possible that an English editor or translator, with Vygotsky’s fame in mind, inserted “me and my colleagues” and that the editors of the *Collected Works*, for rather similar reasons, eliminated the co-authorship of *Tool and Sign* which Vygotsky himself firmly established in the bibliography of the 1934 edition of *Thinking and Speech*.

#### 4) THE OMISSION OF FIGURES AND THE “RUSSIAN ORIGINAL”

There are no figures or tables whatsoever in the Russian version published in the *Collected Works*. The English version of the text contains five charts and refers to two more which are not included in the text, according to notes 60 and 61 on p. 174 of van der Veer and Valsiner’s *Vygotsky Reader* (1994). This means that in two places there is about half a paragraph of material explaining the charts in the English version which has no equivalent in the Russian version, and so in one sense the English version is the more complete (although see the discussion below about the near-redundancies eliminated in it).

From the point of view of determining the origins of *Tool and Sign in Child Development* one of the most interesting notes in the *Vygotsky Reader* is the reference in endnote 60 to a handwritten message attached to the original English manuscript given to Mike Cole telling the reader to seek the illustrating diagram referred to in the text in “the original Russian manuscript.” Of course, the Russian version as printed in the *Collected Works* does not have this diagram. But an editorial note in the Russian *Collected Works* refers the reader to one of Leontiev’s papers for the famous “parallelogram of development” (which is also given in the *Vygotsky Reader* on p. 306).

Mike Cole (personal communication) adds that there is a note on the cover of the manuscript in the same hand as the reference to the “original Russian manuscript” which reads “Checked and OK’d by A.L.” and he suggests that the person who wrote both notes is the editor, and possibly even the translator, of the Russian manuscript. Assuming, as seems likely, that “A.L.” refers to Alexander Luria, this suggests, at the very least, that Luria was not the author of the English manuscript or the note referring to a Russian original.

This does not rule out the possibility of that the version printed in the *Collected Works* is not the “Russian original” referred to in the handwritten note, or that parts or even all of the Russian version in the *Collected Works* was translated from this or some other English manuscript. This would, indeed, explain why there is no diagram in the Russian version in the *Collected Works*.

But of course none of the diagrams appear in the *Collected Works* version at all. Before we

attempt to make our minds up on this question, let us consider some rather larger discrepancies between the two versions, all of which suggest—at least—that the Russian manuscript is a somewhat less complete manuscript, and has been rather less edited than the English one (although neither one can really be said to be print-ready).

#### 5) DISCREPANCIES IN THE POSITIONING OF MATERIAL

In order to locate the passages we are referring to in the table, and also in the argument that follows, we shall use a Korean translation we have prepared for publication in early 2012. In this Korean text, the paragraphs are numbered according to chapter and paragraph of the Russian edition of 1984, so for example 1-21 means the twenty-first paragraph of the first chapter. Page numbers for the Russian *Collected Works* and the *Vygotsky Reader* are also supplied in the chart (Kellogg and Yasnitsky, 2011, this issue).

In Chapter One of the English version, the entire discussion of how the symbolic activity of the child emerges (extending nineteen paragraphs, from 1-31 to 1-49) is omitted, only to reappear as paragraphs in other parts of the book. Russian paragraphs 1-31 to 1-35 appear in English as part of Chapter Four on pp. 151 and 152 of the *Vygotsky Reader*, Russian paragraphs 1-36 to 1-39 appear in the English version at the very end of Chapter Four (on p. 156 of the *Vygotsky Reader*), Russian paragraphs 1-40 to 1-43 appear as part of Chapter Four on p. 153 of the *Vygotsky Reader*, and Russian paragraphs 1-44 to 1-49 appear in English as part of Chapter Two on pp. 126-127 of the *Vygotsky Reader*.

Now it is true that these Russian paragraphs read pretty well in their English homes. For example, paragraph 1-40 is seamlessly integrated into the middle of an English paragraph on internalization. It is a complex argument on the “logical but not genetic contradiction” that happens when a new function such as self-directed (“egocentric”) speech becomes actually a step backwards in terms of its content as soon as the child begins to internalize it. Similarly, the child tends to read and write at a much lower level than he or she can speak for many years.

If anything, the transplantation is a little too easy. As an explanation of so-called U-Shaped Curves in development (e.g. the tendency of children to produce irregular verbs flawlessly, and then produce a litany of errors as soon as they learn the ostensibly more easy conjugation of regular verbs) this argument is so important that one may easily imagine the advantages of giving it a whole paragraph (as was done in the Russian manuscript) and perhaps even a whole chapter or a whole book. Why throw it away in the middle of a paragraph?

More, when we look back at where the various grafts were cut from, we see that there is a huge discontinuity created when we cut this huge section out of Chapter One and redistribute it as the English version has done. Paragraph 1-30 ends like this in Russian:

Нашей дальнейшей задачей и является рассмотрение этой проблемы в свете экспериментальных исследований, направленных на раскрытие специфически человеческих форм практического интеллекта у ребенка и основных линий их развития.

(English: 'The objective we pursue below is the examination of this problem in light of the experimental studies, directed toward the disclosure of the specifically human forms of practical intellect in child and the basic lines of their development.')

In the Russian version, the very next paragraph appears to provide precisely what was promised:

Изучение употребления знаков у ребенка и развития этой операции с необходимостью привело нас к исследованию того, как возникает, откуда берет начало символическая деятельность ребенка. Этому вопросу посвящены специальные исследования, разбитые на четыре серии: 1) изучение того, как возникает символическое значение в экспериментально организованной игре ребенка с предметами; 2) анализ связи между знаком и значением, между словом и обозначаемым им предметом у ребенка дошкольного возраста; 3) исследование мотивировки, даваемой ребенком при объяснении, почему данный предмет назван данным словом (по клиническому методу Ж. Пиаже); 4) то же исследование с помощью избирательного теста (Н. Г. Морозова).

(In English: “The study of the use of signs in childhood and the development of this operation necessarily led us to a study of how the symbolic activity of child appears and where its origins lie. The special studies that we devoted to this question may be broken into four series: 1) the study of how symbolic values appear in experimentally organized games of children with the objects; 2) the analysis of the connection between the sign and the value, between the word and the object designated by it in the child of pre-school age; 3) a study of the motivations given by the child in explanation of why an object is named by a given word in the data (according to the clinical method of J. Piaget); 4) the same study done with the aid of a selection test [N.G. Morozova].”)

The results of these studies are then given in brief, and even supplemented with the work of Samuel Kohs on tests of children involving the reproduction of patterns made with colored squares and triangles, replicated by Geshelina.

But if we cut out the next nineteen paragraphs, as the English version would have us do, we have a major gap. Here is what the next paragraph says according to the English version:

Два процесса исключительной важности, которым посвящена эта статья: применение орудий и использование символов. рассматривались до сих пор в психологии как изолированные и независимые друг от друга.

(In English: “The two exceptionally important processes to which this article is dedicated, the application of tools and the use of symbols, were until now considered in psychology as independent variables in isolation from each other.”)

Why do the authors use “article” (статья) to refer to what is actually the first chapter of a book? Why don’t the authors use “chapter” (глава) instead, since this is what is used as a heading in this very chapter? It is almost as if instead of giving the experimental studies promised the whole paper is starting over from the beginning.

## 6) REDUNDANCIES AND NEAR WORD-FOR-WORD REPETITIONS

The near word-for-word repetitions that litter the book are perhaps the biggest and most significant mystery of all. Chapter Three, for example, begins with a kind of summary of the last part of Chapter Two. This is not so strange; Vygotsky and Luria frequently step back a little in order to leap ahead, and Chapter Three represents a giant leap.

Chapter Two was largely a generalization of the observations made in the very first, and most complete, chapter concerning the role of speech in practical activity. We have now seen that what was said about practical activity may also be said about perception, memory, and attention; each, like a tool, has a “natural” side which differs, reflecting its interface with the environment, and a “cultural” side which is similar, reflecting its interface with human free will and volition. Just

as the handle of a tool is hand-shaped, the handle of the higher psychological function is word-meaning-shaped.

The task in Chapter Three is to abstract from this generalization; to reduce it to the famous “genetic law”, to wit, that every higher psychological function (from higher perception to voluntary attention to verbalized memory) appears upon the grand stage of development twice: once as an inter-mental category of behavior, as a sociological phenomenon, and then again as an intra-mental category, as part of a psychological system.

For the first six paragraphs or so, the redundancy is quite deliberate and conscious: it includes expressions like “рассмотреть в свете того” (“in the light of what we have learned”) and “этому пересмотру и обобщению” (“this review and general summing up”). But then, in the sixth paragraph we have an almost word for word repetition of 2-52. In the chart below, only the words which differ in the two texts are underlined.

2-52 (That is, the 52nd paragraph of Chapter Two)	3-5 (The fifth paragraph of Chapter Three)
<p>Как <u>логическое следствие</u> из признания <u>решающей</u> важности <u>использования</u> знаков <u>для</u> истории развития высших психических функций в систему психологических <u>категорий</u> <u>вовлекаются</u> и внешние символические формы деятельности, <u>такие</u>, как <u>речевое общение</u>, чтение, письмо, счет и рисование. Обычно <u>эти процессы</u> рассматривались как <u>инородные</u> и <u>вспомогательные</u> по отношению к внутренним психическим процессам, <u>но с той новой точки зрения</u>, из которой мы <u>исходим</u>, они <u>включаются</u> в систему высших психических функций <u>как равноценные</u> всем другим высшим психическим процессам. Мы склонны рассматривать их прежде всего как <u>особые формы</u> поведения, образующиеся в процессе социально-культурного развития ребенка и <u>формирующие</u> внешнюю линию развития символической деятельности, существующую наряду с внутренней линией, представленной культурным развитием таких <u>формаций</u>, как практический интеллект, восприятие, память.</p>	<p>Логическим следствием из признания <u>первостепенной</u> важности <u>употребления</u> знаков в истории развития <u>всех</u> высших психических функций является <u>вовлечение</u> в систему психологических <u>понятий</u> <u>тех</u> внешних символических форм деятельности (речь, чтение, письмо, счет, рисование), <u>которые</u> обычно рассматривались как <u>нечто</u> <u>постороннее</u> и <u>добавочное</u> по отношению к внутренним психическим процессам <u>и</u> <u>которые</u>, с <u>новой точки зрения</u>, <u>защищаемой</u> нами, <u>входят</u> в систему высших психических функций <u>наравне со</u> всеми другими высшими психическими процессами. Мы склонны рассматривать их прежде всего как <u>своеобразные</u> формы поведения, <u>слагающиеся</u> в <u>истории</u> социально-культурного развития ребенка и <u>образующие</u> внешнюю линию в развитии символической деятельности наряду с внутренней линией, представляемой культурным развитием таких <u>функций</u>, как практический интеллект, восприятие, память и т. п.</p>
<p>(In English: “As a logical consequence of the acknowledgement of the decisive importance of the use of symbols for the history of the development of the higher mental functions into a system of psychological categories, external symbolic forms of activity, such, as verbal contact, reading, writing, calculation and drawing are also implicated. Usually these processes have been considered as alien and auxiliary with respect to the internal mental</p>	<p>(English: “A logical consequence of the acknowledgement of the paramount importance of the use of signs in the history of the development of all the higher mental functions is their involvement in the system of psychological concepts of all those external symbolic forms of activity (speech, reading, writing, calculation, drawing) which were usually considered as something external and supplemental with respect to the internal</p>



<p>processes, but from the new point of view from which we proceed, they are included in the system of the higher mental functions as equivalent to all other higher mental processes. We are inclined to examine them primarily as the special forms of behavior that take shape in the process of the sociocultural development of the child and making up an external line of the development of symbolic activity which co-exists with the internal line, that is, the cultural development of such formations as practical intellect, perception, memory.”)</p>	<p>psychological processes and which, from the new point of view defended by us, enter into the system of the higher psychological functions on the same plane as all the other higher mental processes. We are inclined to consider them primarily as specific forms of behavior which are components of the history of the sociocultural development of child, forming an external line in the development symbolic activities together with the internal line, represented by the cultural development of such functions as practical intellect, perception, memory, and the like“)</p>
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This is only one of many such near word-to-word repetitions. The 53<sup>rd</sup> paragraph of Chapter Two appears at the end of the Introduction to Chapter Three (3-7). The 54<sup>th</sup> paragraph of Chapter Two appears as 3-4, the 55<sup>th</sup> as 3-5, the 56<sup>th</sup> and 57<sup>th</sup> as 3-3, followed by the 58<sup>th</sup> and final paragraph of Chapter Two, which appears just four paragraphs later, as the fourth paragraph of Chapter Three. In Chapter Four, 4-44 is an almost (but not quite) verbatim repetition of 1-32 in the First Chapter, 4-46 is a near repetition of 1-33, 4-47 is a near repetition of 1-64, and 4-63 is a near repetition of 1-36. (Precise details are given in Kellogg and Yasnitsky, 2011, see this issue.)

Of course, there are also paragraphs in *Tool and Sign* which appear almost but not quite verbatim in other works by Vygotsky. For example, 3-4 and 2-55 end with a sentence which is quite familiar to careful readers of *Thinking and Speech*:

С этой точки зрения мы с таким же основанием, с каким говорим о логической памяти или произвольном внимании, можем говорить о произвольной памяти, логическом внимании, о произвольных или логических формах восприятия, которые резко отличны от натуральных форм.

(English: "From this point of view we may, with the same foundation with which we spoke of logical memory or voluntary attention, speak of voluntary memory, logical attention, and voluntary or logical forms of the perception which are sharply different from their natural forms“).

Indeed, the very conclusion of *Tool and Sign*, with the discussion of Gutzmann and Goethe's comment from Faust ("In the beginning was the deed!") makes one think that the great conclusion of *Thinking and Speech*, which was probably written four years later, is little more than a loose paraphrase or even a self-plagiarism.

We know that there was a great deal of inter-textual borrowing and lending going on in Vygotsky's work (e.g. the borrowings between the chapter on Esthetic Education in *The Psychology of Education* and Vygotsky's dissertation *The Psychology of Art*). What we do not know is to what extent the repetitions we see here are not editorial manipulations, but rather the result of deliberate but incomplete intra-textual borrowing, that is, the mental transplantation of an argument from one part of the manuscript to the other, prior to cutting the argument from its original position.

It may well be that what we have here is really the kind of thing that happens with every busy teacher: a long, complex but very well-rehearsed argument is stored, almost but not quite verbatim, and can be released at will by a single student question, as if by a hair trigger. We hypothesize, then, that the repetitions are the author's repetitions, and so are the variations, and that the author meant to go back and expand them with variations and new evidence, but never found the

time to do so.

## BORROWINGS INTER-TEXTUAL AND INTRA-TEXTUAL

What are we to make of all this—the differences in paragraphing and italics, the differences in the use of German and direct quotations, the differences in figures, the authorial voices, the differently disposed material, and above all the very different treatment of the mysterious repetitions? In particular, which manuscript are we to take as authorial? Is the English text derivable from the Russian text or, as van der Veer and Valsiner (1991) and Yasnitsky (2011, this issue) suggested, is it the other way around? Or is it the case that the two versions are really parallel descendants from some ancestral original, e.g. the “Russian original” referred to in the handwritten note on the English manuscript given to Mike Cole in the seventies?

Perhaps it is useful to keep in mind that in both cases we are dealing with a heavily cut and pasted manuscript from the days when cutting and pasting a manuscript was slow work, whether it was done with actual scissors and real paste or with brute authorial memory. Cutting left real gaps that were not immediately filled (such as the huge gap in the English manuscript left by the cutting of paragraphs 1-31 to 1-49). Pasting, if done from the author’s working memory, left redundancies that were not immediately cut away (such as the repetitions of paragraphs 2-52 to 2-58 we find in the Russian manuscript at the beginning of Chapter Three).

It seems plausible, then, that at the very least the Russian “original” referred to in the handwritten note was not actually the original, but a working manuscript, still in the process of being cut and pasted by one or both of the authors, right up until the time when this book merged with the mighty torrent that became *Thinking and Speech*. Of course, this plausible explanation is merely hypothetical, and even largely speculation, but speculation on textual evidence is the very stuff of interpretation.

## DOES *TOOL AND SIGN* STILL MATTER?

We may be rather more certain, always on the basis of internal evidence, that *Tool and Sign* is a major work, even in its unfinished state. There are really three reasons why we can say this with some confidence. First of all, *Tool and Sign* has present relevance for theoretical issues that still keep psychologists and educators awake at night. It has important things to say about the qualitative difference between tool use and sign use, the narrowness of a definition of activity that sees semiotic activity as merely a continuation of the physical adaptation of the environment to man’s needs, and the nature of development itself, as an inherently unpredictable process in which there must always be important changes arising in the middle which were not there at the beginning, and important changes arising at the end whose existence cannot be suspected even in the middle. These are issues about which Vygotskyans still disagree, and as this book makes clear there are many places where Vygotsky disagreed with Luria, Luria disagreed with Vygotsky, and Vygotsky disagreed with Vygotsky himself.

Secondly, like even more unfinished works (e.g. “The Problem of Consciousness”, in Vygotsky 1997a) it provides considerable insight into Vygotsky’s compositional processes. Although as van der Veer complains (1997: v) that Vygotsky “never rewrote a text for the sake of improving its style and readability”, he was, nevertheless, constantly revising and rewriting in his head. In instances like this, where we have a manuscript that seems rather more than notes and rather less than a finished book, we may actually see this process as it unfolds.

But thirdly, and perhaps most biographically, the textology of this manuscript and its relationship to *Thinking and Speech* matters because it allows us to glimpse the growth of Vygotsky as a thinker over the course of his career. It has become customary to divide Vygotsky’s work into

three periods: an early “reactological” apprenticeship in Moscow lasting from 1924 until roughly 1927, a cultural-historical period lasting from 1928 until 1932, and finally the last two years of his life when he was writing about play, transforming the ideas on concept formation laid out here into a clear programme of research for schools, and formulating the “zone of proximal development” as a way of linking learning and development (e.g. Minick, 1987; Kellogg, 2009; Rey 2011).

If *Tool and Sign* really was entirely or even mainly composed before 1930, this suggests that many of the ideas we associate only with the later Vygotsky were actually present much earlier, and Vygotsky’s development was more linear than we have supposed (and much less crisis-wracked than Vygotsky intimates in the close of the Foreword he wrote to *Thinking and Speech*.) If, on the other hand, this manuscript was added onto here and there well after 1932, then the periodization that has been generally proposed still stands.

Along with *The History of the Development of the Higher Psychological Functions*, *Tool and Sign in Child Development* is the clearest statement of the cultural-historical psychology that Vygotsky was developing, and in many ways the last chapter directly prefigures the most mature statements of Vygotsky’s semantic theory of consciousness laid out in *Thinking and Speech* (Zavershneva, 2010). *Tool and Sign in Child Development* may help us to understand exactly how the curious young Vygotsky who wondered why Hamlet did not simply kill the king and measured the breathing rates of subjects while they read Bunin’s short story “Gentle Breath” (Vygotsky 1925/1971) became the theoretical titan who spoke of transferring the whole of the general laws of historical materialism, from phylogenesis right down to microgenesis, into psychology (Chapter Four of *Thinking and Speech*).

On the one hand, when Vygotsky and Luria speak of the “primary unity of the sensory-motor function” or when they describe the sign as a kind of “functional dam” or “barrier”, which prevents the “draining” of psychic energy into an immediate response, they are using ideas that belong to the very earliest period of Vygotsky’s thinking, which can be found in *Educational Psychology* (1997b). It is easy to see in the way that Vygotsky and Luria speak of “functional unities” of speech and action the influence of Kurt Lewin and the Gestaltists, thinkers who Vygotsky would later sharply criticize for treating speech as any other form of action. Vygotsky and Luria even refer occasionally to the “socialization” of the child, in a way Vygotsky would later criticize Piaget for doing.

On the other hand, there are clear intimations of ideas we associate with the mature Vygotsky (e.g. the idea of analysis into units, which appears in the eighth paragraph of Chapter Five, and even the idea of a zone of proximal development, which appears in the fifteenth paragraph). The insistence on the unique role and function of speech, far above and beyond practical activity and indeed dominating practical activity itself places this book far ahead of Vygotsky’s early work and the Gestaltists. Indeed the last chapter, “Word and Action”, is virtually a rehearsal of the discussion with which Vygotsky concludes the last chapter of *Thinking and Speech*. In short, there are very good reasons why this book, in the heavily paraphrased and edited form that it appeared in *Mind in Society* (1978), has become the classic introduction to Vygotsky’s oeuvre for millions of people who found *Thinking and Speech* too opaque or too visionary.

However, in the form that it has appeared to most readers in Korean and English, the *Mind in Society* version of this book is really an introduction to Vygotsky that Vygotsky never wrote. First of all, the first four chapters printed in *Mind in Society* are heavily paraphrased and rewritten in many places, with material written by other members of Vygotsky’s group simply spliced in where the editors thought it would clarify the argument, just as a Soviet editor might do. But secondly, Chapter Five and the Conclusion were almost entirely omitted.

The reasons for these editorial changes are understandable in context, but the successful publication made possible by those editorial changes has now rendered them unnecessary. When this book was first presented to Western publishers by Mike Cole back in the 1970s, it was roundly rejected by publishers, and Cole himself was quite surprised by the Stephen Toulmin famous review

“The Mozart of psychology” (Toulmin, 1978) which claimed for the book major contemporary relevance and the subsequent runaway success and explosion in Vygotsky studies that the book created (Cole, 2004: xi). Although that explosion has far from subsided worldwide (indeed it has scarcely begun here in Korea), it is clear that the initial period of struggle for recognition is now over. So perhaps the time has come to restore *Tool and Sign* to a form closely approximating the intentions of authors.

As van der Veer and Yasnitsky (2011: 6) remark, Vygotsky is now a historic figure on a par with Freud and Piaget, and works like this one are historical as well as psychological texts. So what is required is a set of authoritative translations of Vygotsky’s major works, on a par with those of Freud or Piaget. This issue of the *PsyAnima, Dubna Psychological Journal* is one short step in that direction, and we hope that many more will follow. Of course, it is always a clear understanding of an author’s thinking and written speech as having once been these forms of action in the material and social world that makes any written text into a living, breathing discourse once again. *Tool and Sign* is an exceptionally acute and far-seeing text, but it is surely no exception.

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#### NOTE:

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