The work of Lev Semnovich Vigotsky can be divided into four periods. In the first period, which starts in about 1915 and ends in 1924, he wrote the book 'The Psychology of Art' (Vygotsky, 1971). The second phase in his work was initiated in 1924 and ended in 1927. In this period, Vygotsky tried to develop an objective psychology. He also analysed thoroughly several psychological currents and schools, which culminated in his famous study 'The Meaning of (the significance of) the Crisis in Psychology' (Vygotsky, 1927. In: Vygotsky, 1982a). In the third period, which can be placed in the period from about 1927 until 1930-31, Vygotsky developed his famous cultural-historical theory of the development of the higher psychological functions. In 1930-31, he switched the focus of his research to the problems of speech and thought, and the development of these processes in child-development. This research resulted in his 'unfinished', well-known book 'Thought and language'. It is only this last book that has been studied by researchers in the Anglo-Saxon countries (using Kaufmanns rather mutilating translation, 1962). It is not surprising, then, that this last, fourth, period in the work of Vygotsky has been considered by Western researchers (and by Soviet researchers) as the most important, also because in
this book one can detect some interesting changes in Vygotsky's line of thought. Vygotsky switched his attention, for instance, from the cognitive factors in children's speech and thought to the emotional, motivational factors and began concentrating his research on the 'meaning' (Znacenie) of words rather than on signs as such.

The third period of his work is also considered as being of the utmost importance, because at that time Vygotsky created his cultural-historical approach, which has had such an enormous influence on psychological research in the Soviet-Union and in the Western world until today. Although much can be said in favour of such an evaluation of Vygotsky's work, it is now becoming more clear that to get a complete picture of the originality of Vygotsky's ideas and of his intellectual 'debts', we should not underestimate the importance of these first two periods of his research. In particular his philosophical and methodological ideas developed and matured in this phase (see also Jarosevskij and Gurgenidze in Vygotsky, 1982a). We would also like to suggest that it is Vygotsky's philosophical and methodological approach, rather than his empirical investigations, that will continue to be of interest for psychological and educational researchers. These are some of the reasons why we will concentrate in this paper on the early periods in Vygotsky's work, and in particular on the way in which his philosophical and methodological ideas developed.

Several authors, e.g. Hydén, 1978, 1980; Mecacci, 1976; Jarosevskij and Gurgenidze, 1977, 1981 and 1982 (in: Vygotsky, 1982a), and Leontiev (in: Vygotsky, 1982a) place the first phase of Vygotsky's research in the period from 1915 until January 1924, this being the time at which Vygotsky started to work at the institute of Kornilov (see also Vos,
1976). This is considered as the start of his career as a psychologist in the narrow sense of the word. We do not know very much about this period but we do know (see Leontiev, in Vygotsky, 1982a; Vos, 1976) that he studied law and philosophy. Meanwhile, he occupied himself with the study of theatrical art and wrote numerous reviews of theatrical performances. At the same time, he taught history to a group of high school pupils and held seminars on political economy. It is rather surprising that he still found the time to study some of the works of world literature. The works of, among others, Tolstoj, Dostoevskij and Shakespeare were thoroughly analysed. He was mainly interested in trying to detect the underlying psychological laws, which would explain the aesthetical experience a reader has, when enjoying a work of art. This research resulted, as is well-known, in his 'The Psychology of Art' (1925). In the period up to 1924, Vygotsky also acquainted himself with the German classical philosophy and marxist authors. We are told (Leontiev in: Vygotsky, 1982) that he read, for instance, Marx, Engels, and Schopenhauer. It is also possible that Vygotsky knew Politzer, the French precursor of the marxist philosopher Sève (see Hydén, 1978). Finally, Vygotsky got to know in this period the work of B. de Spinoza and A.A. Potebnja. In this paper we would like to say a few words about the influence of Spinoza. But first of all we would like to state that it is not our intention to detract from Vygotsky's reputation by pointing out some similarities with other researchers. For Vygotsky, if we may permit ourselves a slight exaggeration, took the idea of internalization from Hegel and Janet the principle of genetic analysis from Marx and Blonskij, he found the idea of a unitary approach in the works of the Gestalt psychologists, the conception of the sign as a means or tool can be traced to Po-
tebnja, the category of 'communication' (obscenie) was already stated by Hegel, and the idea of the intellectualization of psychological functions can be found in the works of Spinoza. This is not a complete list of Vygotsky's 'intellectual debts' but, of course, the force of Vygotsky's work lies exactly in the way he connected all these separate notions into an integrative system, his cultural-historical approach to the development of the higher psychological processes.

Two works of Spinoza had been translated into Russian at that time. They are his 'Ethics' (1911, Moscow) and the small work 'Treatise on the Purification of the Intellect' (1914, Moscow).

We have found three thoughts in the work of Spinoza which have inspired Vygotsky. The first idea is intellectualism, the second monism or determinism and the third is the use of intellectual tools. We would like to state that both authors show a certain degree of intellectualism (or cognitivism). That is, both authors share the ideal of a personality in which the intellectual functions (thinking) control to a large degree the whole personality. Spinoza in his 'Ethics' opposes especially the view of man as a slave to his affects, his passions. Spinoza sought a way for man to control his passions and found it in the capacity of the mind to understand. If the intellect has clear and distinct knowledge of the emotions, it will gradually learn to control them. The initially rather vague, primitive emotions will eventually (in the ideal case) be understood by the intellect and in that way they can be controlled. In the narrow sense of the word, says Spinoza, we only act, in so far as we understand what we are doing. It is this growing control of the emotions by the intellect and the resulting control of our behaviour
that can also be found in the work of Vygotsky. Of course, Vygotsky gave a more psychological elaboration of this notion and he did not limit the principle to the emotions, but extended it to all other, initially primitive psychological processes. The infant, for instance, has initially only a primitive, natural memory, more or less dependent on chance impressions, but in ontogenesis thought and, above all, speech develop and the memory gradually becomes better structured and controllable. This is the so-called development of natural memory into logical, instrumental memory as studied by Leontiev. We can see this principle very clear in Vygotsky's 'Lectures on Psychology' (1932, in : Vygotsky, 1982b). In these lectures, Vygotsky regularly underlines the overwhelming influence of speech and thought on the psychological processes and calls attention to a tendency in child development of 'intellectualization of all psychological functions' (Vygotsky, 1982b, p. 415). In another lecture, he states

"The course of the development of the imagination of the child, as well as the course of the development of other higher psychological functions is in an essential way connected to the speech of the child".

(1982b, p. 448)

We can also find this idea in his lecture on the origin of human voluntary behaviour (1982b, p. 464). Besides this, Vygotsky wrote (1982a, p. 125) in a paper in 1930 on psychological systems:

"We said that, as Spinoza correctly stated, the knowledge of an emotion changes this emotion and changes it from a passive into an active state. That I think about things outside of myself, does
not change anything in them, but that I think about emotions, that I place them in other relations to my intellect and other instances, will change much in my psychological life. To say it more simply, our emotions act in a complex system with our concepts ...

We can conclude that both Spinoza and Vygotsky have a view of man's development as a process of growing control of the psychological processes by the intellect. Of course, there are also differences between their views of the process of intellectualization. Spinoza considers, for example, the understanding of the emotions a sufficient condition for the (in any case partial) control of them. Vygotsky, however, underlines much more the role of speech in the development of the higher, "cultural", emotions. It is speech, which gives the developing child the opportunity to control the initially spontaneously evolving emotions and it is the use of the concepts of language that will enable the child eventually to develop his initially primitive emotions into refined aesthetic judgements.

With regard to Spinoza's so-called monism or determinism, we would like to point out the following. Spinoza writes in the preface of the third book of his 'Ethics':

"The majority of those, who have written about the emotions and behaviour of man, talk about these subjects, as if they were not natural things, subject to general natural laws, as if they were things, not belonging to nature. Sometimes it seems as though they imagine man i nature as an independent state within another state ... for they presume that he has complete power over his acts and that these are determined by nothing other than man himself".

(Spinoza, 1974, p. 135-136).
In the following, Spinoza makes it very clear that he thinks that all emotions have a natural cause and can be explained by natural laws. This is a clearly monistic point of view with regard to the psychophysical problem. This is also one of the main reasons why Spinoza has been a rather popular philosopher in marxist circles. Vygotsky too, who during his whole career as a psychologist manoeuvred between the Scylla of the denial of any differences between the lower and the higher psychological processes and the Charybdis of stating an irreducible, essential distinction between both types of psychological process, found a clear support in this book. On the one hand, he objected to the reduction of higher psychological processes to lower ones. For this would also be in clear contradiction with the tenets of dialectical materialism, which state that many small quantitative changes in a thing or process will eventually lead to a qualitative breakthrough, to a process or thing of a qualitatively different nature. On the other hand, the lower and higher psychological processes could not be considered as separate, irreducible domains, as this would be in contradiction to the principle of historism or genetical, developmental analysis. As we saw in this theory, the higher psychological processes develop out of the lower ones and to neglect this fact would be to make a 'naturalistic' error. 'Naturalism' considers phenomena that developed historically as if it were natural phenomena. It is thus quite understandable that Vygotsky in his instable balance between reductionism and naturalism found a source of inspiration in Spinoza's 'Ethics'. "For dialectical psychology", he wrote in 1930, "the mind (psichika) is not, to use an expression of Spinoza, something beyond nature or a state in the state, it is part of nature itself, directly connected to the functions or the higher organized matter of our brain."
Like all other nature it was not created, but evolved in a developmental process" (Vygotsky, 1930, in: Vygotsky, 1982a, p. 137).

Finally, we would like to make a few remarks about the notion of intellectual tools, which can be found in the work of both authors. As is well known, Vygotsky frequently compared the tool to the sign (language). Just as in manual labour where the bare hand is relatively powerless in comparison to the hand provided with a tool, the 'bare natural mind' cannot compete with the intellect which makes use of speech or language. Of course, this metaphor can be found in the works of such marxist authors as Engels (in his Dialectics of Nature) and Plechanov. The comparison can also be found in the work of A.A. Potebnja (1922).

Spinoza writes the following:

"Now that we know which sort of knowledge we need, we must indicate the way and the method by which we wish to find out the things we want to know, indeed learn to know. In the first place, it can be said that there is no investigation ad infinitum here. I mean: in order to find the best method for tracing the truth we do not need a second method, which would check that method for finding the truth, and for that second one not a third and so on ad infinitum. In this way, we would never attain the knowledge of truth, or any knowledge whatever. It is the same here as with material tools, about which one could reason in the same way. For to weld iron one needs a hammer and to have a hammer it has to be made first; for which we need another hammer and other tools, which have in their way to be produced by other tools, and so on ad infinitum. And with these arguments one could try - although in vain - to prove that man is quite unable ever to weld iron. But: at first people were able, using the native equipment, to make, though laboriously and imperfect, some very simple tools. With the help of these they could, more easily and with greater perfection, produce more complex tools and thus, grad-
ually ascending from the most simple trick to more complex apparatuses and workings, they succeeded finally in making with the least possible effort many and very complex tools. In a similar way, now, the intellect creates by its innate power its own tools, with which it creates new powers for new mental performances, which in their turn create again new tools and the capacity to extend the investigation even further. And so it progresses step by step, until the summit of wisdom has been reached."

(Spinoza, 1974, p. 11-12)

What is striking about this quotation is, first, Spinoza's emphasis on the use of intellectual tools and, second, his mention of the intellect as a developing intellect. With regard to the intellectual tool, we may notice a striking parallel with Vygotsky's emphasis on the sign as an intellectual means or tool. Using the tool (the sign), the intellect creates new possibilities (compare e.g. Bruner's conception of tools) and every phase in child development is, according to Vygotsky, almost completely determined by the level of the child's speech at that moment. "... everything depends on the degree of development of the meaning of the child's words" he wrote in 1932 (Vygotsky, 1982b, p. 415) and "all basic systems of psychological functions depend on the level the child reached in the development of word meaning". So we see a clear parallel here between Spinoza's emphasis on the use of intellectual tools for the controlling of one's own emotional behaviour and Vygotsky's emphasis on the use of signs as an intellectual tool for the control of one's behaviour. According to Vygotsky, the child at first literally steers itself by the use of signs. Also quite interesting is Spinoza's view on the development of intellectual tools. Man is continually reaching higher levels of thinking through his
creation of ever better intellectual tools "until the summit of wisdom has been reached". In Vygotsky's work, of course, we find that this view is very pronounced. In fact, the principle of genetic analysis can be considered as the underlying principle of all his work. In almost all of his works Vygotsky underlined that the child is continually developing and that he or she can only be understood with respect to this development. As Blonskij said, we have to analyse the history of behaviour to really understand it. Thus, it is not only in the work of marxist authors that Vygotsky found the principal of genetic analysis. His favourite philosopher expressed the same point of view.

In the above we have demonstrated some parallels between Vygotsky's cultural-historical theory of the higher psychological functions and Spinoza's theory. We do not wish to suggest that Vygotsky took these ideas from Spinoza, in fact all of them have been stated by several other authors. We do think that we have explained part of Vygotsky's fascination. Spinoza was a fascinating philosopher who wrote about subjects we would now consider as belonging to the domain of psychology and he stated some principles which were clearly shared by Vygotsky. It was Lev Semenovich Vygkosky who developed these and other principles into an integrated psychological theory.
REFERENCES


A.A. Potebnja, Mysl' i jazyk, Odessa, 1922.


