

“Schooling and the Dialectical Reproduction of Knowledge from the Perspective of Activity Theory”

by **Newton Duarte**¹

January 21, 2004



A slide presentation & guest lecture sponsored by the
Centre for the Study of Education and Work,
Ontario Institute of Studies in Education, University of Toronto (OISE/UT)

* * *

Within the context of schools, what would the approach of a Marxist pedagogy consist of? A Brazilian educator responded to this question by emphasizing that such an approach would:

“a) ... identify the most developed forms through which objective and historically produced knowledge is expressed, recognizing the conditions of its production, while understanding its principal manifestations as well as the present tendencies of its transformation;

b) ... convert objective knowledge into school knowledge in such a way as to make its appropriation by students possible within school space and time;

¹ UNESP (Universidade Estadual Paulista/University of São Paulo State) Department of Psychology of Education, Araraquara Campus, São Paulo, Brazil.

c) ... provide the means necessary for the student to, as a result, not only appropriate objective knowledge but to also appropriate the process of its production and the tendencies of its transformation.” (Saviani, 1997, p. 14, *my translation*).

I agree with this answer formulated by Dermeval Saviani, Emeritus Professor of UNICAMP (Universidade Estadual de Campinas), who, since the 1970s, has become an important reference in both Brazil and the rest of South America for educators who have been working for the construction of a Marxist pedagogy.

* * *

Saviani also formulated the following definition of the educational work of schools:

“Educational work is aimed to produce intentionally and directly in each individual the humanity that has been produced historically and collectively by humankind. In this sense, the objective of education is related, on one hand, to the identification of the cultural content that needs to be appropriated by the individual in the process of formation (humanization) and, on the other hand and at the same time, to the discovery of the most adequate forms to achieve that goal.” (*idem.*, *also translated by me*)

If school education is the production in individuals of human characteristics produced through the course of human social history, school education can be interpreted as a process of reproduction with positive implications and meaning.

* * *

The fundamental concepts within Activity Theory allow us to appreciate the dialectical function of schooling as it reproduces historical/accumulated human experience.

The three most important references for Activity Theory in Psychology are:

- **Vygotsky**, Lev Semenovich (1896-1934)
- **Luria**, Alexander Romanovich (1902-1977)
- **Leontyev**, Aleksei Nikolaevich (1903-1979)

* * *

1) Activity Theory stems from the premise that the human being is an essentially social and historical being; the difference between human activity and animal activity.

Karl Marx and Friederich Engels define labour as a vital activity specific to humans involving the metabolism between the human being and nature. The survival of humankind would be impossible without that active relationship between the human being and nature. The social process fundamentally consists of the production of the means for satisfying human necessities. Such production constitutes the transformation of nature. Other animal species survive through an active adaptation to their natural environments. Humans transform their environments to create the social, cultural, historical world, creating the human world. This process of production and reproduction of the material and the non-material cultural reality is historical. A cultural object is a product of human activity even when human beings make any,

even minor, change/adjustment to the form of a natural object in order to use it towards some practical propose. In its most simple manifestations, labour is merely the modification to the physical form of a natural object (a stone, a bone etc) to create a tool. A tool is a human creation; it is not just the result of a natural process. Even when a human being creates a new function (social function) for a natural object, this process transforms the object into something social, cultural, something “humanized”.

“Labour, by realizing the production process (in both its forms – material and spiritual) is imprinted in its product. (...) The conversion of labour from a form of activity into a form of being (or objectivity) can be regarded from different aspects and in different contexts. It can be considered from the angle of the amount of labour power expended and in relation to the quantity of output produced, abstracting it from the concrete content of the labour. The process can, however, be considered from the aspect of the content of the labour activity itself in its relation to the producing individuals, abstracting it from its other aspects and relations. The transformation then appears to us as a process of the embodiment, objectification of man’s spiritual forces in the products of their activity, while the history of mankind’s material and spiritual culture appears as a process that expresses, in its outward objective form, the advances in the development of the human species’ abilities.” (Leontyev, 1981, p. 292)

Through human social history, the totality of human activity has consisted of creating various kinds of material and non-material systems (structures) of cultural objects. These represent the “essential powers” of humankind (in Marx’s terms: “social organs”, “the inorganic body” of humankind).

* * *

How are these “essential powers” of humankind transmitted to each human individual? The answer: through the appropriation of the accumulated, embodied and objectified social experience through material and non-material cultural objects. The individual's formation process is a result of appropriation of the “inorganic body” of humankind.

2) Leontyev's conception of appropriation

The totality of social objectified (embodied, accumulated) human powers is a synthesis of the human social and historical experience. Each cultural object is in itself condensed human activity. The historical activity is embodied in the object. A human individual can insert that object in his/her own activity only if he/she appropriates the activity embodied in it, mainly the correct use of that cultural object but sometimes also its production activity. The process of appropriation is valid for all kind of cultural objects (material and non material).

* * *

Leontyev (1981, p. 295-6) explains the difference between the biological process of adaptation and the social process of appropriation:

“The fundamental difference between the process of adaptation in the proper sense of the term and the process of appropriation and mastering is that the process of biological adaptation is one of change of the organism's species characteristics and capabilities and its species behaviour, whereas the process of appropriation or mastering is one that results in the individual's reproduction of historically formed human capacities and functions. That, it can be said, is the process by which man achieves in ontogenetic development that which is achieved in animals through heredity, viz., embodiment of the advances of the species' evolution in the characteristics of the individual.”

* * *

Leontyev describes the three most important characteristics of the appropriation of culture by the individual:

a) ***It is an active process.***

The individual must perform a practical and/or cognitive activity that has to be suited to the social meaning of the cultural object. In other words, the individual has to reproduce the social activity objectified in the social function of that object. Of course the level of adequacy of the individual's activity to the social meaning of the cultural object can be lower or higher depending on the specific situation and the moment in which the appropriation occurs. The most common form of appropriation is the process that occurs as a spiral in which the individual passes through different levels of mastering of the cultural object. This is one of the reasons that time and repetition in educational process are of such high importance.

b) ***It is a process of reproduction.***

The process of appropriation must reproduce in the individual the human powers historically produced. Here it is necessary to point out the positive sense in which Leontyev uses the term *reproduction*. In current day educational theory, it is common to see reproduction considered as an essentially negative process. But when describing an educational process as being reproductive, and evaluating its process as something negative or positive, we should endeavour to understand what it is that is actually being reproduced. The reproduction of human culture is an essential process without which human life could not continue. The educative process has to be reproductive. The fact that we valorize an educative process by which autonomy and creativity are developed does not mean that we are against any kind of reproductive educational process. For example, we can consider that a specific language is being reproduced when a child is learning a language.

c) ***It is a mediated process.***

The process of appropriation of the meaning of the cultural object is not one of solitary discovery. The individual learns this meaning in interaction with people.

This means that appropriation is an educative process that can be direct or indirect, intentional or unintentional, practical or theoretical. Schooling is a specific form of appropriation of knowledge by the individual.

Since completing my doctoral dissertation in 1992, I have been developing a theory of schooling that combines Activity Theory and the Theory of Everyday Life (elaborated by Agnes Heller in the late 1960s). From this perspective, I have been defining schooling as the mediation between the production (reproduction) of culture in “everyday” activities and the production (reproduction) of culture in “non-everyday” activities, such as science, art and philosophy.

The concept of appropriation as a mediated process is compatible with the concept of the zone of proximal development discussed in Vygotsky’s book “Thinking and Speech”. In chapter 6 of this book, Vygotsky explains that every child experiences in each moment of his life, two levels of development.

The first one is the “actual level of development” and it is defined by tasks that the child can solve independently, without help or instruction of any kind.

The second level is the “zone of proximal development” and it is defined by the tasks that the child cannot solve on his own/independently, but can solve by imitating and learning from others.

To Vygotsky, that which is, in the present moment, at the level of *actual* development was once inside the zone of *proximal* development, which means that the psychological capacities of human individuals appears, at first, to be derived from an external source, such as a human relationship. It is only in a later moment that those capacities become internal to the individual mind. To

Vygotsky, the only good education is the kind that works within the zone of proximal development of the child: He states:

“When we observe the child’s development and instruction in school, it becomes apparent that each subject demands more than the child is capable of, leading the child to carry out activities that force him to rise above himself. This is always the case with healthy school instruction. The child begins to learn to write when he does not yet have the mental functions that are required for written speech. It is for precisely this reason that instruction in written speech calls these functions to life and leads their development. This is true of all productive instruction. The incompetent child in a group of competent children will be delayed in his development and in the relative success of his mental activity. So will the competent child in a group of incompetent children. For one of these children the problem lies in the fact that instruction is too difficult – for the other in the fact that is too easy. These opposing conditions lead to the same result. In both cases, instruction occurs outside the zone of proximal development, below in one case and above it in the other. It is as fruitless to teach the child what he is not able to learn as it is to teach him what he can already do independently.” (Collected Works, vol. I, p. 213)

Vygotskian psychology is surely compatible with Saviani’s formulation of the task of historical-critical pedagogy in what refers to school education. Marx and Vygotsky not only defended the idea that knowledge is objective, that it reflects the objectively existing reality, but also defended that the existence of a process of development of knowledge that results in the existence of some highly developed forms of knowledge. For both Marx and Vygotsky, the most developed forms of knowledge represent the path into understanding the less developed ones. Dermeval Saviani’s pedagogical conception and Vygotsky’s psychology are founded on Marx’s dialectical method, within whose limits there is no margin for naïve evolutionism when referring to either social history or to the development of knowledge, or for the relativism that denies the existence of the

most developed forms of societies and knowledge, or even for subjectivism that denies knowledge as the appropriation of objective reality by thought.

In the post-modern atmosphere that prevails in the universities, it is a very polemic idea that some kinds of knowledge are more developed than others. If we regard such an idea as already polemic when we refer to scientific knowledge, then it will seem even more so when referring to art. It is a great heresy to post-modern ears, to say that an artistic work is more developed than another. However, in his book *The Psychology of Art*, Vygotsky adopted

...the idea that the well-developed forms of art provide the key to the underdeveloped ones, just as the anatomy of man provides the key to the anatomy of the ape. I assumed that Shakespeare's tragedy explains the enigmas of primitive art and not the other way around. (Vygotsky, 1997, p. 319)

Vygotsky chose to analyze Shakespeare's *Hamlet* not as a personal preference, but in order to consider tragedy as one of the most developed forms of art. Vygotsky understood that psychology could describe the laws governing an individual's reactions to art in general by studying these exact *most developed* forms of art. That is the key to a pedagogic approach inspired by Activity Theory. The mission of school education should be to lead new generations towards the appropriation of the most developed forms of human knowledge in the fields of the science, philosophy and art.

References

- Leontyev, Aleksei Nikolaevich (1981) Problems of the Development of the Mind. Moscow, Progress Publishers.
- Saviani, Dermeval (1997). Pedagogia Histórico-Crítica. Campinas, Autores Associados [Historical Critical Pedagogy. Campinas (city, Brazil). Autores Associados (Publishers)]

Vygotsky, Lev Semonovich (1987). The collected works of L. S. Vygotsky: Problems of general psychology. (Including the Volume *Thinking and Speech*). New York: Plenum Press

Vygotsky, Lev Semonovich (1997). The collected works of L. S. Vygotsky: The history of the development of higher mental functions. (Vol. 4). New York: Plenum Press.