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Development and Instruction Relationship: Reconsidering the Issue

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Abstract

The main subject of this paper is the issue of child's development and its relation with instruction. Analyzing Vygotsky's views on the problems meant by the issue the author justifies the necessity of some reconsideration. It mostly concerns the positions of some Vygotsky's interpreters on the major factors determining development, instruction is among them. The terminological value of "instruction" is discussed in this connection as well as the forms of "pedagogically oriented" approach to development. Analyzing child's joint activity with others as a factor of development the author represents his view on psychological mechanisms of development based on a resolution of contradictions objectively rising in a child's joint activity. These are the contradictions between the modes of actions created by the child and his system of relations at the given period. Psychologically it is expressed in the changes of motivation directed to transforming either the child's relations system or his modes of action. Some conclusions are made concerning the practice of instruction. It is supposed that the "developing" effect of instruction is determined by not so much its "technology" but by its adequateness to the motivational priorities of a child at a certain stage of his development.

Keywords: Development; Instruction; Developmental instruction; Joint activity; System of relations; Mode of activity; Modes of action; Motive

Introduction

As it is well-known the fundamental issue [1,2] of child's development was put forward by Vygotsky [3-5] at the beginning of the 20th century and has been one of the subjects of his legacy studies in Russian and Western psychology ever since. However, as time passes it becomes clear that not all the answers to the questions implied by the issue look appropriate, to say nothing of the biased and fragmented interpretations of Vygotsky [3-5]. Concerning the category of development as the leading "for all fields of reality and for all spheres of scientific knowledge" Vygotsky draws attention to some barriers that block the way to its adequate comprehension. By these barriers he meant "not only certain metaphysical theories rejecting the idea of development itself", but also the theories pursuing some "erroneous ideas of development" [3].

Today the task to reconsider certain aspects of development defined and elaborated by Vygotsky and his followers seems no less relevant than before. For that end, one should come back to the original ideas of Vygotsky on child's development [4].

However, it is necessary to start with some points of terminological character. They concern mostly the English translations of Vygotsky's works, namely, the wording of some concepts considered as factors of development. The first one is "learning". In fact, many interpreters of Vygotsky's theory emphasize the leading role of learning as a factor of development. Unfortunately, learning is mostly treated as a result of social incentives' assimilation by a child. Consciously or not, this usage includes Vygotsky's theory into the behavioristic paradigm under which child's learning is treated as a sequence of passive response to the social environment impacts. In this case, a learner's passive role seems to contradict the essence of Vygotsky's views [5].

The second comes "teaching". Taking into account some works by Vygotsky devoted to the problem of development at school age [4] many authors bring to the fore the term "teaching" to outline the leading role of adults (or more knowledgeable others) in child's development. This is what follows directly from the fundamental idea of child's joint activity with adults which are just a paraphrase of the interpsychological plane of higher mental functions development conception known also as "Vygotsky's law" [5]. Thus, teaching is considered the factor that conditions development. However, the use of "teaching" in this context seems to make an emphasis on the activity of those who teach.

In the author's opinion, the term nominating the process that "promotes child's development when preceding it" is "instruction". According to Vygotsky's conception mentioned above "instruction" may be defined as an instrumentally equipped process realizing educational goals and providing development or, in other words, it is a form of child's joint activity structured and organized by adults. Thus, "instruction" seems to be more appropriate terminologically since it represents the given context of Vygotsky's theory more adequately.

It should be noted, however, that the role of instruction for development seems to be overestimated by Vygotsky [5]. The problem of overestimation especially manifests itself at the above-mentioned conception of ZPD describing development-instruction relationship. It appears that development as the internally conditioned process of new psychological possibilities emergence in a child is considered as the immediate result of instruction. In the author's opinion, it is a pedagogically oriented view of development while the development of specific logic remains unidentified.

Meanwhile, one should take into account Vygotsky's refinement of his statement. He outlined that not every type of instruction is capable to provide development. Only the one that is oriented to child's development perspective becomes the major factor of development.

The author makes another step. He believes that it is not the process of instruction though driven by the goals of development but child's joint activity with its system of internal contradictions is the basis of development. Besides, there are other kinds of joint activity, which unlike instruction do not require any external organizing while making serious contributions to child's development. It means that joint activity overcomes the limits of instruction.

Indeed, development neither begins, nor terminates at school age. Consequently, instruction is not the only form within which

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development takes place. For instance, baby care as a form of infant's joint activity with parents could hardly be considered a purposeful instruction. Neither it is child's playing activity at preschool age, which Vygotsky himself considered the major factor of development of a preschooler. An adolescents' joint activity as the major factor of their development is not instruction as well [3].

Taking into account the essential role of child's joint activity it is necessary to consider the instruction-development relations more thoroughly.

Development-Instruction Relationship

Maturing of the younger generation is of vital importance in the society and historical progress. The implementation of this fundamental mission usually is carried through education (or instruction as its socially organized form). As a result, instruction is traditionally viewed as the process of social experience delivery aimed at developing in a child the desirable properties and abilities associated with a human being's social existence or, in other words, instruction is considered a universal way to reach the results of development prescribed by society [6-8].

It should be noted that binding development to the educational system is not accidental; it demonstrates the society's commitment to the idea of "human capital" reproduction in the course of development [9]. However, from this point of view development is nothing but the product of society's purposeful educational activity associated with achievement of pre-claimed positive results of education [10]. In other words, child's development is too often identified with instruction. It was Elkonin, one of Vygotsky's circles, who concluded that psychology failed to specify the logic of development different from that of instruction [11].

The evidence for that "blending" is the interchangeable usage of both notions in various contexts in psychological theory [4,6,7] as well as pedagogical practice [8-10]. Yet another evidence are the practically used terms nominating the age-phase periods of a child development related to school as a social institution ("school age", a "preschooler", etc.), thus pointing to the pedagogical basis of this periodization. As Elkonin outlined "…the division of childhood into stages is made on pedagogical foundation and not connected with the issue of a child development driving forces [11].

This type of instruction-development relationship is but a "pedagogically oriented" approach to development unable to represent the development specific logic.

For ages, this approach has been associated with the educational practice of the so-called traditional instruction. Unfortunately, the latter is known as usually not taking into account the great ideas of classical pedagogy itself.

At the end of the 19th century Kapterev [12], a Russian pedagogue and psychologist, managed to find a vivid metaphor to represent the traditional view of the process of instruction as "a tube through which the culture is flowing from one generation to another", the position to which he actually opposed. Disterveg [13], another great educator of the 19th century told that development or education could never be delivered or communicated from one person to another.

Everybody wishing must reach this only by way of his own activity, his own force and strain [13]. Evidently, it means that there are some drivers of development that under certain conditions stimulate the creation in a child of some new mental patterns despite the direct influence of instruction or the educational system as a whole. In other words, educational impacts on development should not be considered as immediate agents that drive the development process.

However, a sort of "pedagogically oriented" view of development seems to be inherent even in the well-known systems of "developmental instruction". The latter are opposed to the "traditional instruction" and based on different representations of the idea of "instruction that is preceding development". However, the pedagogically oriented approach manifests itself in the tendency within these systems to treat development as predetermined, ever progressive and positively directed process with the trend only to perfection [10,14]. Although this view seems mostly to be based on the common sense it underlies all kinds of the "developmental instruction" systems despite the differences between them. It is the Elkonin-Davydov's system oriented to the development of theoretical thinking [8,11] or introduced by Zankov system of "Instruction on the increased difficulty level" [15], "Learning according to the third type of orientation" system by Galperin [6], "Humanistic pedagogy" system by Amonashvili [16] or "Dialogue of cultures" school by Bibler [9]. They all seem to proceed from the assumption that a child's development is associated with his successful solving of a pedagogical task the essence of which is to find out the conditions for a child's early introduction onto the level of theoretical knowledge higher than the average for the given age group. Reaching of such a level seems also to be the desired result for the process organizers. No wonder that from this viewpoint any system of developmental instruction is considered as "good". In this case, the question arises concerning other vectors of development defined as "regressive" and "non-developmental". Unfortunately, they are usually not taken into account within the "developmental instruction" systems.

No wonder that Tsukerman, one of the serious researchers in the field of developmental instruction anticipated negative consequences of this approach concerning either traditional or developmental instruction. As she held: "if within some educational environment a child is required to act according to the given patterns, rules and instructions his development would be curved one particular way. If in a setting of circles, studios and classes a child is induced to demonstrate his initiative the development would also be twisted but some other way" [17].

From the one side these words are the recognition of a fundamental fact that development has its own logic that should be recognized within any type of instruction but from the other they obviously imply the pressure of the norms meant by pedagogy. In this case, the situation when the prescribed positive results of instruction are not reached is often considered in the terms of a person's asymmetrical development, deviation or delay in development.

The author believes that the answer to the question whether in a particular case the development should be assessed as "asymmetrical", "deviant", etc. will be positive only if it is oriented exclusively to the existing norms. However, the answer is negative if one realizes that development, as the objective process can be variable. The fact that some time ago the professional community decided to get rid of defectological terminology in relation to children with special needs is but an illustration of this fundamental statement.

A dialectical view to development expressing its contradictory nature can be illustrated with these words: "Each progress in the organic development is at the same time a regress because it is a fixation of the development only in one direction thus blocking the possibilities of development in many other directions" [18]. Indeed, it is rather difficult to predict which trajectory of development would prove to be a successful. However, development is an objective process so acting purposefully the educators should realize that every "plus" achieved is fraught with certain "minus".

Another methodologically important basis of the author's reflection is the holistic view of child's development derived from Vygotsky-Elkonin's position. It is opposed to the so-called "partial approach" introduced into psychological studies of the 19th century by Wundt W. Even nowadays it is associated with a number of psychological studies, mostly the studies of mental processes. Under this paradigm each mental process is treated as something separate and self-sustained. It means that each cognitive function is studied without evident correlation to others. It looks as if the partial approach is widely practiced by those researchers who are inclined to analyze development at the level of separate components of the whole hoping to get the integral unity at the end of the study.

One of the first who opposed this approach to development was Elkonin. Here are some lines from his diary concerning mental development and dated as early as 1967: "What is mental development? …It is neither intellectual nor cognitive development nor is it reducible to them. It neither assumes only the development of the so-called mental processes. Nor it assumes perception plus memory plus imagination. Similarly, it does not assume affect plus intellect or needs and affects taken "pure", by themselves. There might be the only conclusion of what was enumerated: our principal task is to discover some further indivisible unit of mental development.

The conclusion made by Elkonin drives the reader back to Vygotsky's idea of analyzing psychological phenomena by units rather than by components. Elkonin himself gave an example of such analysis in relation to a child's role-playing as a form of activity [11]. He believed that Vygotsky's methodological approach is applicable to any psychological integrity. To apply this approach to child's development within the system of joint activity, it is a mode of activity that represents such a unit. In the author's opinion, a mode of activity is a controversial unity of a child's concrete modes of action and his current relations in which these modes of actions are created and mastered by him.

Child's Development: System Of Relations

The fact is that contemporary psychology still tends to focus on treating a human being in a "nativist" way, viewing him as an isolated individual. Vygotsky at his time opposed this idea thus sharing the position of Marks and Engels [18] who stated "An individual is a social being. Therefore, any manifestation of his life even if it does not appear in the immediate form of the collective, jointly performed manifestation of life, is still a manifestation and assertion of social life".

In a number of his works including those on childhood social history Elkonin attempted to trace the historical transformation of "a child-society" relationship. He observed that eventually these relations became transformed from immediate to the one mediated by nurturing and teaching but afterwards this function passed to the family. So "children-in-society" system of relations appears to be veiled by "child-family" and within a family – "child-individual adult" system of relations" [11]. Since a family is an economic unit of society, a child from the very beginning of his life finds himself within the system of "social production" that exists beyond his will and determines his social existence. It means that any child grows up within a specific social context as a productive power thus "producing himself" in the process of his development. In such a case the objectively existing child-society relationship would appear in the form of the emerging system of a child's concrete relations to other people.

Vygotsky specified this kind of situation through the notion of social situation of development. According to the present-day studies by Karabanova, a social situation of development comprises two aspects. A child's objective social position as well as the system of socio-cultural expectations, norms and requirements compose the objective aspect of his social situation of development while the systems of images orienting the child in his relations to adults and cooperation with them represents its subjective aspect [19]. However, in the existing practice each aspect seems to be privatized respectively by a conventional teacher (educator) who dwells on the outer circumstances and factors significant for a child's education and by a conventional psychologist paying attention to interpersonal relations of the child, his feelings and emotions. Thus, the actual relations with society which according to Andreeva are "non-personal" but into which a child is de-facto involved are left beyond the research framework [20].

Thereby, a human being who comes to life as an organism with a number of specific organic needs [21] finds himself within the system of objectively determined historically concrete social relations. These relations do not arise out of nothing. From the very first moment of his life, the system of a child's relations with the world is caused by his activity. Being social in its character, this activity is structured and supported by the people engaged with the child [22]. So it becomes more and more individualized in accordance with the circumstances of the child's life. As a member of society any child is a concrete subject of the society overall productive powers and consequently, of its production relations, while he tries on certain social roles and acquires certain social statuses fixed by the law: the inheritor, the assignee, etc.

This point could be illustrated with a historical example. After the abolition of serfdom in Russia at the second half of the 19th century, certain laws were issued regulating the allocation of an additional land allotment to a family with a male child while a female child was looked upon as a burden for the family. Another example represents a similar tradition though different in its vector. It is still commonly practiced in some Asian countries, custom of paying a dowry to the family for a female bride.

Anyway, the status of a child as the subject of law is not fully recognized even nowadays: the parents too often look upon their child as something belonging to them. Meanwhile, the International Declaration of the Rights of the Child was adopted in the majority of countries more than half a century ago and there was not a single case against parents won by their children at the courts. On the next stage of development when a child comes to school a child-society relationship is "veiled" again, now by the "child-school" system of relations" [11]. As a result, the role of a source of development is incorrectly ascribed to school (the educational system). However, "child-society" relationship is mediated by not only nurturing and teaching that family, school and other social institutions perform.

We should also mention some culturally specific mediators. They appear in the course of a child's real life as contradictions inherent in the way of life inside a concrete community. This means that the whole system of child's relations of which he is the rightful subject is constantly changing. This transformation takes place within the process of a child's producing his new possibilities expected by society and corresponding to its way of life as the child grows up to become the one belonging to his community, his "clan", his "tribe" [23]. Thus, it is that vitally important system of impersonal social economic relations that constitutes the base of development. It actualizes and specifies a child's joint activity with other people being at the same time the core of his interpersonal relations with them.

Child's Development: Modes of Action

The transformation of a child's organic needs into the human

requirements process takes place within the mode of activity. The satisfaction or non-satisfaction of these requirements may happen in a number of ways thus leading to contradictions arising within the mode of activity. In order, the objective social relations become a child's own relations he has to create, some new concrete modes of actions corresponding to his current relations. As it is well known, a mode of action concept is associated at the domestic psychology with the name of Rubinstein [24]. He treated a mode of action as the initial "cell of all the elements of psychology that makes it possible to comprehend them in their unity" [24]. Evidently, Rubinstein's "cell" looks analogous to the above-mentioned "unit" of psychological analysis at Vygotsky-Elkonin's approach, namely a mode of activity described as a controversial unity of child's concrete modes of action and current relations [11].

Indeed, a person in his everyday life constantly makes use of various modes of actions that are at his disposal whether he is aware of this fact or not. Since at the given moment a child disposes a number of concrete modes of actions their adequateness to the system of his current relations might be only temporal. Therefore, they are subject to transformation. The relations system in its turn is also changing as soon as it is unable to correspond to the child's new possibilities coming with the new modes of action. Thereby, the mode of activity is always "twofold": the concrete mode of action created and practicing by a child is at the same time the realization of his concrete relations that take shape by that moment. The child inevitably comes to creation of new and more variable relations with the help of new modes of actions designed to uncover the essence of the developing relations. However, this need of a child occurs only if it is generated by his specific requirements turning into a new motive apt to emerge. Let us take for example, an infant's animation complex treated as the obvious expression of the infant requirement for communication with other people. Psychologically this means that an initial system of a child's "conscious" relations is in the making. As the circle of relations is widening a child's current modes of actions cease to correspond to them anymore and thus there emerges a new motive driving to transformation of the already existing modes of action. Other people appear in his life space as "partners" within the system of new relations induced by the joint activity in which he is involved and in the course of which the requirement for new relevant modes emerges.

Evidently, the differentiation of the requirements of a child involved into the activity process results in transformation of his motives that "push ahead" the development of the new modes of actions and consequently – the activity as a whole. Thus, a person's activity development is caused by contradictions of objective social economic character that are permanently ripening within any form of activity. First, it is the basic level of generalized contradiction between the modes of actions created and practiced by a person and the specific demands from the relations in which they are realized on any stage of his activity development. Second, it is the level of contradictions emerging in the course of implementation and testing of each concrete mode of action created by a person. This level of contradictions provided by the concrete modes of actions is to a certain extent tackled by Galperin [6], as it describes the interrelations between the orientative and performative "parts" of an action.

Duality of Child's Motivation and Psychological Mechanism of Development

The more generalized contradictions of a mode of activity affect transformation of the person's motivational base, which is but a psychological reflection of his position in the system of the changing relations. Therefore, the objective process takes place aimed at either actualizing the person's requirement to transform the current system of relations or creating the motives directed to transformation of the existing modes of activity. Usually, this differentiation of motives drives to the concrete psychological conflicts at the periods of developmental crises.

Finally, the contradictions find their resolution. Different vectors of activity development indicate the forms in which contradictions may be resolved. One could build the hierarchy of contradictions specific for any kind of activity. Indeed, their creation being objective is inherent in any development process thus expressing the need for rejection of older forms of activity while the new content is emerging.

The way in which the contradictions are resolved could help to explain the macro- and micro-phases (moments) of activity development, all of them representing certain motivational dispositions. Some of them are stable like a character [24], others – transitory as changes of mood [7]. Besides, there is always "splitting" of motives that constitute a child's system of motivation: some of them "look back" to the past, others – to the future sometimes making the child act inadequately. The character of a child's motivation can be traced through the psychological analysis of his activity. However, in real life this kind of analysis is often substituted by the pedagogical approach aimed at pulling the child's motivation up to the level of requirements and expectations of a definite social institution. As Elkonin [11] observed, motivational readiness for a new "serious, socially significant and socially evaluated activity" characteristic for senior preschooler should not be identified with motivation for educational activity.

In this connection Elkonin's conception of a child's development periodization is worth to be analyzed more attentively. It should be noted again that Elkonin as a true scholar never stopped reflecting over his conception. Here is a line from his diary dated from 1983 "My periodisation though precisely catching the dynamics of development does not reveal the internal mechanism of this dynamics". According to Elkonin the system of human activity includes two subsystems with different types of relationship which, in his opinion, determine one another: a "homo to homo" and the "homo to thing" types of relations providing the periodical interchange of a child's orientation to either motivational or to the operational-technical sphere. So indicating that the core of the proper mechanism of development must be some internal contradiction in the structure of activity, he assumed that it is the contradiction between motivational and operational-technical spheres [11].

Sharing Elkonin's position about some inner contradictions providing the dynamics of development the author believes that it is a different type of contradiction that "works" here. As it was stated before, it is a contradiction between the child's motivation, which is losing its psychological significance for him, and the developing motivation conditioned by the child's entering into a new system of relations or by his wish to transform the modes of actions not responding to the requirements of the relations system [25]. Thereby, two basic types of motivation should be outlined respectively. These are not only the motives for a person entering a new system of relations but also the motives for his creating some new modes of actions adequate to these relations. The new modes of actions are apt to realize "the technology" of activity within the new system of relations thus providing activity further development.

Unfortunately, this significant moment was not enough reflected at Elkonin's conception. Discovering and fixing that at certain stages of development (infancy, preschooling age and early adolescence) there emerges a motivation for a child's mastering the human relations within the system of "child-social adult" he overlooked the motivation for

changing the modes of actions. This type of motivation also emerges at definite age stages (early childhood, elementary school age and late adolescence) and serves as the basis for creating the system of relations necessary for the child. Indeed, in the process of activity there is always a basis for creating both types of motivation. As an example of the first type, we could mention a role-playing activity that is a motivationally significant form of opening by a child the values and meanings of various modes of actions while he is joining some new community (group): a school class, a peer group etc. The second type of motivation associated with mastery of the activity modes is developed in the context of subject-manipulative game, learning activity in elementary or senior school, sporting activity and so on.

The basis of this duality of initially integral process of a child's life in society might be found within social historical processes: it is the contradictions of the labor division that "push ahead" the process of every person's activity development thus changing the vector of development. Thus, the duality of the social production process gives rise to the duality of individual development. It means that the modes of actions transformation results in such changes in a person's motivation that lead to transformation of his relations system. This kind of transformation is followed by changing of his social position that in its turn becomes a source of some new motives occurrence. The latter are the basis for the transformation of the current modes of actions. This is the specific logic of development due to which a person becomes ready to come onto some new level of his productive power. In other words, the development of a person's new psychological possibilities takes place.

Conclusion

Development occurs within the process of joint activity in which a person is involved thus reproducing human activity modes in the forms specific for his way of life. Psychologically it is the process driven by constantly ripening and constantly resolving objective contradictions between the modes of actions a person creates and the current system of his relations. As a result the corresponding transformations of the person's motivational base occur. It is these contradictions and their resolution that create the psychological mechanism of a person's development thus demonstrating its specific logic. Henceforth, the development process is always a process of activity development. Schematically it can be represented as a spiral dynamic structure of developing activity "plunged" into the system of objectively existing social economic relations specific for any society and realized in the course of a person's developing activity [25]. The model demonstrates the rising and descending trends of activity contradicting one another thus providing the mechanism for emergence of new mental structures at certain age periods.

Finally, there are some consequences for the educational practice. First, society should not treat social institutions such as family, school, system of education or a peer group as factors of direct influence on a person's development. Their role is in establishing such conditions for development that make various educational effects developmental.

We suppose that any instructional effect at any stage of education would be developmental in case it takes place as a moment of joint activity responding to the person/s topical needs. Hence, the importance for the educators to take into account the character and the objective content of the activity performed is obvious. Moreover, the developmental potential of any pedagogical effect could be realized only if it responds to the subject's requirements actual for the given stage or cycle of his development whether it concerns changing his current modes of actions or his relations in the context of the person's overall developmental perspective. In other words, the development–instruction relationship is determined by the level of motivational significance for a person of those new operational possibilities that he has mastered in the process of instruction performed as joint activity.

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