

Chapter X

Mediated getting-to-know-the-world- Approaching learning with S.L. Rubinstein

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SUMMARY

The goal of our paper is to approach the process and activity of “learning” relying on the work of S. L. Rubinstein who was one of the grand old figures of psychology in the Soviet Union. His approach was founded on the thesis that it is not consciousness, the psyche, activity, etc., which reflect the world, but it is concrete subjects. Learning, according to S. L. Rubinstein, cannot be conceived from the outside, just as a result of assimilation or internalisation of already given knowledge, psychological schemata, etc. From this perspective, learning is to be viewed conceptually as an autonomous movement, i.e. as a subjectively grounded activity of the subject in his/her attempt to get-to-know-the-world. And this getting-to-know-the-world is evidently not realized by the subject in or through an immediate correlation with his/her world, but necessarily through participation in social practices, where his/her learning is mediated by certain things and relations: external or psychological tools, i.e. objects, artefacts, technologies, concepts, etc.

INTRODUCTION

In the past few years we have been fortunate to observe in the disciplines of psychology and education an increasing international interest for the cultural-historical or activity-theoretical approach, especially as it is applied in understanding and conducting research on “learning” (Hedegaard, 2001; Wertsch, 1996; Engeström, 1991; Kozulin, 1986). In these discussions the cultural-historical or activity-theoretical approach is seen less as a distinct and single theory and more as a *framework* or an agenda.

In order to locate the origins of the cultural-historical or activity-theoretical approach the search usually points to the works of Alexei N. Leont’ev, it also includes the work of L. S. Vygotsky (Davydov & Radzikhovskii, 1985). Going through the relevant bibliography it becomes easily apparent that despite the increasing interest for this approach, in the English-speaking part of our “guild” the contribution of Sergei L. Rubinstein to the formulation of activity theory appears to be not more than a marginal note. Concerning the topos of “learning” one can find only a few, scattered, incidental and more cautious hints than explicit references to his work.

Even without wanting to construct a stage for conspiracy theories, this deafening *absent presence* of Rubinstein and his work easily provokes discontent to everyone who is at least glancing at the history of Soviet psychology. Simultaneously, we are

burdened with the debt of going beyond conspiracy theories in order to identify the reasons that Rubinstein's work was not referred to.

The need for explaining this *absent presence* beyond conspiracy theories appears more pressing if we consider the fact that Rubinstein was one of the first and one of the most notable persons, who was contributing, on the one hand, to the articulation, and, on the other hand, to the philosophical-political fortification in the academic establishment of the Soviet Union of that approach referred to as "activity theory".

It was the research and the additional scientific-organizational efforts of this grand old figure who aided Soviet psychology to retain its autonomy as an academic discipline, i.e. to survive the concerted efforts made (in the late 1940's) to reduce it as a discipline to a mere branch of physiology. It is not overstating things to refer to him as an "organizer of science" - as Payne (1968) does.

Thus, it may be promising to look at different directions for the reasons as to why Rubinstein's work was minimized or blockaded. Especially after the "discovery" of Vygotsky in the English-speaking regions of the Western world and transformation of him into a "chewing gum" for everybody, everyday, and every occasion. The historical initial position concerning Rubinstein is much more complex and contradictory. This is because Rubinstein – as opposed to Vygotsky – did not disappear "from the stage". For many years he was placed, despite of the repeated anti-Semitic and political banishments he suffered, on the academic and institutional forefront of Soviet psychology. Rubinstein is not a terra incognita - there is little in his work that waits to be discovered in some archives or some political "poison cabinet."

Rubinstein contributed greatly in shifting the paradigm in the human sciences from an impersonal and subjectless one to an anthropological subjective one. He worked since the 1920s on a philosophical-anthropological ontology staking claims for the category of the "subject" (Abul'khanova & Slavskaja, 1997). His approach was founded on the thesis that it is not consciousness, the psyche, activity, etc., which reflect the world, but it is concrete subjects in and of themselves.

“LEARNING” IS A PARTICULAR FORM OF ACTIVITY

“Learning” is a participatory exploratory activity

Rubinstein set his boundaries towards idealistic approaches which assume consciousness to be a secluded (sealed, locked up) and introverted entity. For him consciousness has to be seen in connection with the practical activity of the subject, hence highlighting the mediating interrelationship between consciousness and activity. Consciousness and - more generally - the psychic properties of the subject not only appear (show up) in the activity, they also get shaped during this activity. Just like in productive activity, the psychic properties gain their form and even develop during the educational process (Rubinstein 1935, p. 86).

Consciousness "... is being formed/shaped during specific forms of activity (play, learning activity and later productive labour), through which the child and later on the youngster actively arranges/integrates him/herself in the surrounding world." (Rubinstein 1935, p. 148)

Already in his first scientific publication in 1922 Rubinstein puts forth some of his important and fundamental positions about learning and proposes the concept of

“activity”. At the same time, he tries to grant space for the category of the subject, a category, which becomes a central tenant in his life’s work:

“The subject is not only revealed and expressed in his acts and actions of creative self-activity: it is also created and determined in that activity. Hence, what the subject is, is determined by what (s)he does; and the subject her-/himself may be determined and shaped by the direction of his/her activity” ([Rubinstein 1922, p. 106;]- in Brushlinski, 2002, p. 67).

In order to overcome an one-sided view on Being and Consciousness, and grounding on the principle of the *unity of consciousness and activity* Rubinstein coins the concept “creative self-activity” of the subject (Russian: printsip tvorcheskoi samodeiatel’nosti) as a new starting point for understanding and researching the processes of learning and education/transformation. Learning is conceived in this early paper as participation in exploratory activities:

“Learning appears as a mutual search; instead of the dogmatic transferring of knowledge and the mechanical acceptance of ‘pre-prepared’ results there is a mutual transcendence to the path of discovery and research, a path that leads to such results. The system that is based upon a passive processing of ‘pre-prepared’ results and the copying of dictated prototypes - an inactive and barren engagement - will have to be replaced with a system that has the basis and the goal of developing creative self-activity. The aim of contemporary pedagogy is to construct the process and all of the educational system on the basis of the creative self-action of the subject” (Rubinstein, 1997/1922, p. 433).

Rubinstein writes about “learning” explicitly and systematically in his textbook “Foundations of General Psychology”, published 1940. The revised 2nd edition published in 1946 was often reprinted and has been translated in several languages (e.g. 1958 in German). Rubinstein attempted in this textbook to review systematically Soviet research up to that point and to integrate it into the relevant international psychological discussion. He sees this work as a critical and qualitative updating of his book “Foundations of Psychology” published in 1935. We don’t believe it is an exaggeration to state that the 1946 textbook could be viewed as a first, innovative and integrative presentation of psychology from a cultural-historical or activity-theoretical perspective.

Rubinstein grounded his presentation in this textbook on the principle of the *unity* (however not *identity*!) of consciousness and activity and outlined this principle as one of the methodological approaches in Soviet psychology. The principle of the *unity of consciousness and activity* was to help Soviet psychologists to overcome the methodological crisis in psychology at that period. This crisis was articulated in a confrontation between, on the one hand, the subjective idealism in the field of psychology of consciousness, and, on the other hand, a positivistic objectivism in the field of behavioural psychology (as Behaviourism, Reflexology, Reactology, etc.).

Before referring to his presentation on “learning” it is useful to bring to mind the textual context of this presentation - which is contained in the fourth of the five sections of the textbook. This fourth section starts with a chapter about “action”, where different aspects and forms of action are covered. The next chapter of the fourth part has “activity” as title and as content. Its three subchapters examine respectively three different forms or types of activity: “play”, “learning” and “labour”. We can see even through the structuring of his presentation that:

- For Rubinstein “action” is the more general category, and “activity” seems implicitly to be reserved for something more specific: human action.

- Furthermore, he conceives “learning” as a form, as a type of activity. It seems that as type of activity “learning” has to have common characteristics with the other activity types (play, labour), but also specific ones.

Learning has a double existence/life

Already the first sentence of the relevant section in the textbook “Foundations of General Psychology” about the particular activity “learning” situates the appearance of this form, of this type of activity, in the context of the historical development of *labour*. The historical development of labour and the necessities for “preparing/disposing further productive labour activity” created the need for a new kind of activity, since the “appropriation of the knowledge and abilities necessary for the labour activity is less and less possible during this labour activity itself” (Rubinstein, 1977, p. 740). The creation of the particular activity-form “learning” is founded on this historical-societal situation. Rubinstein conceives the relation between the new activity form and labour as particularly close, thus he suggests the concept of “learning *labour*”. By participating in “learning labour” the individual is enabled to appropriate the “generalized results of preceding labour of other humans” (ibid.). “Learning is, in this specific meaning, a particular form of productive activity” (ibid, p. 741), which produces new subjects, new subjectivities, but also new relations:

“As in labour, so in learning one has to execute *tasks* ... and perform *discipline*.

Learning-labour is grounded on duties. The general attitude/set of the person/personality during learning is no more a playing attitude, but a working attitude” (ibid., p.740).

But it is self-evident that human beings by far do not appropriate everything they acquire by this specific form of learning. Thus, Rubinstein distinguishes two kinds of learning:

“Learning as a particular activity, which is addressing its direct goal, which is learning itself, is just one of these forms. Aside of this, learning exists also as a result - and thus not as goal - of an activity, which is addressing some other goal. In this case, learning is not a particular, previously intended activity, but a component of some other activity. This second, unintentional learning is historically the primary one” (ibid., p. 205).

Articulating this with an example:

“Humans are learning algebra in the process of a particular learning activity, but the language, their mother tongue, they are acquiring from the very beginning (and do not learn it formally) by using/applying it in intercourse and in activity, whose goal is the satisfaction of their needs for living” (ibid.).

This “historical primary” learning process, which is the “result of an activity, without being its goal”, can be very effective, but it is not sufficient to enable the subjects to participate in labour and share in its products:

“Thus there exist *two forms*, or to be more precise, *two methods of learning* and two forms of activity, which lead to the acquisition of new knowledge and abilities. The one of them is addressing specifically its goal, which is the appropriation of these knowledge and abilities. The other one has the mastery of

these knowledge and abilities as its result, by realising other/different goals” (ibid., p.741).

In the case of “learning labour” “the subject is focusing primarily on the procedures/operations concerning the performance, on the scheme”, in the second case of the “osmotic learning” (Bourdieu), or the “Mit-Lernen” (Holzkamp, 1993), the subject is concentrated “on the result” (Rubinstein, 1977, p. 742). “The difference between the two cases lies in the degree of responsibility and thus in the general attitude/orientation of the personality” (ibid.). The action which in the case of “osmotic learning” is solely the precondition, means or method for its realization, is in the case of “learning-labour” the literal and explicit goal of this action (ibid., p. 741).

Since the “osmotic learning” is - in the historical process of development - becoming more and more insufficient in enabling subjects to participate in labour and partake in its products, appropriate “learning necessities” and “learning possibilities” are societally separated. The individual subjects, in the case that they “want” or “have” to participate and to partake in the societal process, are confronted with, but also have to position and relate themselves to these antecedent societal “offers”, since these “offers” are - as conditions and meanings - the mediators of their own actions. Logically, after this “relating” myself to/with these societal “offers”, I can take over the task of specifying for me – subjectively/individually - particular “learning actions”. This new form of activity called “learning labour” does not emerge and start as an individual initiative and/or necessity for action, but initially arises *from* and *for* the participation of the subjects in multiple (preexistent and more or less societal organized) “communities of practice” (Lave & Wenger, 1991) or “action contexts”.

However, both “methods of learning” should not be seen as alternatives to one another or as competitors or as simple continuations of each other. For Rubinstein it is important to focus on the *relationship* between “osmotic learning” and “learning labour”, which directs us to the importance of practice *for* learning and *during* learning. The potential sequence of both learning methods can and has to be discussed and decided for every concrete case, taking into consideration that “learning, accession to the final results is usually realized on both ways” (Rubinstein, 1977, p. 741).

“Learning” is one moment of an integrative social process of education/transformation

We could see that the new activity-form “learning” does not rely primarily on accidental and/or individual initiatives and necessities for action (Rubinstein, 1977, p. 741). Learning-*labour* - being a moment of participation, of partaking and sharing in - is for Rubinstein always and in multiple ways interwoven and mediated, furthermore, it is supported by a “whole societal organization” (ibid., p. 740):

“The learning process does not run spontaneously. It is realized through an educational process. Learning is the one side of a substantially social process of transformation/education. A double sided process of transference and appropriation of knowledge” (ibid., p. 741).

This social process of transformation/education embraces different subjects and subjectivities. In school, as empirical background referred to by Rubinstein, this social process embraces, for instance (but not exclusively!), the subject positions “pupil” and “teacher”, which are “connected through certain reciprocal relations” (ibid.). For Rubinstein the transformative/educational process is “a unified/integrative process”,

thus he is not separating learning from transformation/education, nor is he merely contrasting learning and transformation/education. Transformation/education (as a social process) exists and is realized only as a combination of learning (activity of the learning subject) and teaching (activity of the teaching subject):

“But we differentiate in this process learning as a particular activity and distinguish herein the activity of the pupil. The formative/educational process embraces the co-acting of pupil and teacher. Learning is not a passive absorption, is not a mere reception of the knowledge transmitted through the teacher, but it is the active appropriation of these knowledge” (ibid., p. 741).

From his perspective on learning as part of an unified process of transformation/education Rubinstein concludes that learning has to be conceived as “mediated getting-to-know the world” (ibid., p. 745), which is being realized by the subjects through appropriation/assimilation and mastery of the generalized results of antecedent labour of other humans (Rubinstein, 2000, p. 499). The practical activity, e.g. of children appropriating such results, is for Rubinstein the decisive field in which the children’s thinking is getting its shape. In this process, the critical mediator in the transition from the practical (thinking) to the theoretical (thinking) is the development of that activity which is mediated by language, and thus this activity is itself mediated by the systematic instruction/education of the learning subjects in the foundations of science (Abul’khanova & Bruschlinskii, 1989).

Rubinstein insistence that learning-labour is necessarily *mediated* is just a logical consequence of his position that learning is a moment of the unified social process of transformation/education. This position obtained at the time of its formulation had a supplementary meaning because it was articulated in antithesis. It was meant to be an antithesis to the overemphasis on the self-activity of children, labelled “paidocentrism” which had as its consequence the abandoning of the supports that children need during the learning process. However, Rubinstein’s persistence maintains its validity even today. Although we are faced with a similar, though theoretically different danger, that is doing away with the necessary support for learner’s activities. The contemporary example has to do with the emphasis on self-activity, as part of the constructivist approaches, which are articulated during the neo-liberal transformation of our societies, where social supportive structures are generally de(con)structed.

The relationship between education/transformation and development

Rubinstein discusses the question concerning the historicity of “learning-labour” in multiple ways and directions. Here we can just name these. The first two directions are interconnected with the elementary character of learning activity as being a product of societal labour:

- On the one hand, this characteristic points to the history and logic of the developing labour. But it also refers to the particular qualities of the developing labour, namely changing nature and the labourers, and implied here, the creative relationship with the world.

- On the other hand, but related with the above, it is about the history and logic of the developing and differentiated *products* of labour, which can become relevant either as *objects of learning*, and/or as *tools for learning*.

The way we conceive and treat these two directions significantly determines our view on the relation between (individual) “learning” and (societal)

“knowing”/knowledge. The treatment of this relationship between (individual) “learning” and (societal) “knowing”/knowledge, according to Rubinstein, is in the context of the unified process of formation/education a fundamental issue of didactics, or an elementary task *to* didactics (Rubinstein, 1977, p. 742). For Rubinstein two general, though one-sided approaches, are dominating this (working) field of didactics. The central and disjunctive point is articulated in the different answer these two approaches provide to the question about how to organize the (individual) “learning” in relation with the (societal) “knowing”. The first approach is suggesting, the (individual) “learning” to be organized in a way where it can quasi recapitulate the (societal) “knowing”. For the second approach the (individual) “learning” is conceived, and thus organized, as an independent process in relation to the (societal) processes of acquiring “knowledge”. Here, the “learning tactics” have to be understood and determined by the psychic development of the children.

One can already assume that Rubinstein points to the interwoven and mediated relation between (individual) “learning” and (societal) “knowing”. In this context, the “logical”, which has emerged in the process of historical development of “knowing”, is “also the common, which connects/unites both, the historical development of (societal) “knowing” and the process of (individual) “learning”” (Rubinstein, 1977, p. 743). Learning means, in such a mediated developmental process, the individual discovery of new interconnections and relationships.

Two different directions in addressing the historicity of “learning-labour” do not have their starting points in the *objects/artefacts* to be learned and their history and logic as being products of human labour:

- These two directions are looking, either, to the history and logic of that “whole societal organization” - as Rubinstein is saying it (Rubinstein, 1977, p. 740) -, which support the social process of formation/education. Taking again “school” as our example, we could say that here it is about the history and logic of the “school-form” - as the historical-societal concretisation - in organizing the formative/educational process.

- The second direction has at its starting point the history and “logic” of the learning, and thus developing, individuals. It is so about the psychology of the learning subjects.

The way we conceive and treat these two directions determines significant our view on the relation between (social) “formation”/education and (psychic) development. This relation is grounded *on* but also offers the ground *for* the mediatedness of learning (as moment of the social process of education/formation), and it is from this point that we can put the question about the relation between the psychological development and the social process.

Rubinstein is demarcating his position from functionalistic perspective in psychology, which assumes, that primarily the particular psychic functions (like perception, memory, attention, thinking, etc.) have to develop, before the subject can realize “learning”. His explicit example here is Jean Piaget.

“The one or other developmental level of perception, of thinking in children constitute hereby less the pre-requisite and more the result of particular cognitive learning activities. In executing these learning activities the psychic functions themselves do not only articulate, but are also developed” (Rubinstein, 2000, p. 498).

As we can see, Rubinstein is stressing that formative/educational processes are also developmental processes. The child develops his or her psychic functions, develops

him/herself as a concrete person, *via* his or her formation/education. In this context the psychic processes constitute “the one side of a specific double-sided educational (instructional) process” (Rubinstein, 1977, p. 751).

“This is the way by which perception (but also thinking etc.) *during* learning activity is substantially different from the ‘function’ or the process of perception being displayed outside of the concrete activity. Perception, memorizing, thinking of the pupil etc. are themselves being formed/educated during instruction/learning” (ibid.).

Rubinstein is applying here the principle of the *unity of consciousness and activity* on the relation between (social) formation/education (as activity) and (individual) development (as consciousness). “According to this principle, psychological processes and characteristics (abilities in particular) not only manifest themselves but also *take shape in activity* - in work, study, communication, etc. Human abilities are not something like a finished product before their manifestation. At every stage of socially useful joint activity, as new socially significant results are obtained in the process of this activity, man rises to a qualitatively new stage of his psychological development, i.e., the development of his abilities, character, etc. The psychological development of man therefore constitutes a true organic, indissoluble unity of the biological and the social in the process of activity” (Fedoseev, 1976, p. 567).

This view on the relationship between (social) formation/education and (psychic) development is a common position both in Rubinstein’s activity theory and in Vygotsky’s cultural-historical psychology. Vygotsky was also very critical about naturalistic approaches that view (individual) development as fundamental and give learning the character of an external layer or cover upon this development:

“People’s abilities are formed not only in the process of assimilating the products that have been created during the process of historical development, but also during the process of developing. The process of creating the material world by human beings comprises, at the same time, the development of their own nature” (Rubinstein 1960/1973, p. 222).

PERSPECTIVE: THE MEANING/SIGNIFICANCE OF THE SUBJECT

As shown in the case of the active, creative character of learning on the psychic development of the subjects, there is consensus between Rubinstein and other representatives of an activity-theoretical or cultural-historical approach (e.g. Vygotsky), in a series of important issues and positions. Of course, we can also assume differences between them, although it is often very difficult to identify in such differentiations solid and clear-cut articulated formulations. Often the differentiations are articulated in slight nuances or in hints to potential or existing dangers, in the case that the one or other position or issue is emphasized. Without attempts to take in some way into account the historical, political and societal context of the Soviet Union, *in which* and *for which* the texts are elaborated and published, without such attempts to read between or behind-the-lines it seems nearly impossible to identify at all nuances and hints of danger. Such a historical-political contextualization (also) of activity theory in the Soviet Union as a “normal” society, which had to encounter “normal” problems, is though still waiting to be written and thus the danger still exists to reduce/confine the textual labour products of Soviet colleagues to mere “texts” - and thus to be forced to misunderstand and misinterpret them.

For us, one of the most important differences *inside* the working contexts of activity theory (or cultural-historical school) is in the significance accounted by Rubinstein to the subject. As mentioned above, the significance of the subject is obvious since the very beginning of his scientific career. For our particular discussion this difference consists in the accounted role of the subjects during the learning processes.

According to Rubinstein, Vygotsky accounts the central and directing role in the pedagogical interaction to the educator, e.g. in creating the “zone of proximal development”. This approach is, according Rubinstein, generally correct, though *not sufficient* in order to capture the learning process. Learning, as an activity form of the learner, can for Rubinstein not be equated (and thus reduced) to teaching, being the activity of the educator. Whereas “teaching” contains the sum of the pedagogical influences directed from the pedagogue towards the receptive or even passive pupil. Such a one-sided reduction from our perspective on the activity of the teacher, which registers only the sum of his/her actions, has been sharply criticized by Rubinstein:

“One of the main reasons for the ‘shallow’ empiricism and for the interconnected formalistic recipe-methodology, is a consequence of the attempt to relate the effect of this or that pedagogical procedure only with the impact of the educator and to disregard the developmental process of the child ...” (Rubinstein, 1941, quoted in Bruschlinski, 1970, p. 979).

A prerequisite to learning is the *transformation* of the activities “offered” by the educator *by the pupils themselves*. If we do not want to ignore the characteristics and possibilities which are contained in learning as learning-*labour*, than we cannot pass over the creative moments of *labour*. The pupils do not simply repeat what they are offered by the pedagogues, they reconstruct it; they reflect on and transform it actively and independently on the basis of their antecedent experiences (Jakimanskaia, 1989, 133): “When we speak about education ..., than we have to liberate ourselves from the view that a human being is only an *object* of the pedagogical procedures, just because this view separates implicitly the humans in two categories: Educators and Educated. Every human is not only object, but also subject of education” (Rubinstein, 1963, p. 121).

It is worthwhile also to bring the historical-societal background in mind in which Rubinstein tries to account humans as subjects; subjects who perform and engage consciously in activities. With this view he positioned himself distinct to Reflexology and Reactology, at that time dominant approaches in the Soviet Union. Where Reflexology and Reactology, as quasi Soviet variations, take a mechanistic reductionist position to activity - that is activity as a bundle of reactions on external stimuli (Veer & Valsiner, 1993).

The acknowledgement of the significance of the subject, as an important moment in Rubinstein’s conception of learning, but also of his general approach, can be shown in several fields. Here, we want only to name three, thus enticing the appetite, with the promise to catch up later.

- The first field is the reception and critique by Rubinstein to the so-called “concept of interiorisation” as it was articulated and developed by Alexei N. Leont’ev and P’otr Galperin.
- A second field refers to the question of the motives for learning and the subjective meaning-making - being both pre-requisite *but also a* consequence of learning.

- A third issue should deploy Rubinstein's view on thinking as the "organ of learning".

REFERENCES

- Abul'khanova, K. A. & Slavskaja, A. N. (1997). On the history of the alliance between psychology and philosophy. *Russian Social Science Review*, 38, 6, 40-52.
- Abul'khanova-Slavskaja, K. A. & Brushlinskii, A. V. (1989). *The Philosophical-Psychological Concept of S. L. Rubinstein*. Moscow: Nauka.
- Brushlinski, A. V. (1970). Probleme des Lernens und Denkens in den Arbeiten S. L. Rubinsteins (Problemy obučeniija i myšleniija v trudach S. L. Rubinštejn). *Sowjetwissenschaft, Gesellschaftswissenschaftliche Beiträge*, 9, 974-984.
- Brushlinski, A. V. (2002). Development of the Principle of the Unity of Consciousness and Activity in Experimental Psychology (The Prewar Period). *Journal of Russian and East European Psychology*, 40, 2, 66-80.
- Davydov, V. V. & Radzikhovskii, L. (1985). L. Vygotsky's theory and the activity oriented approach in psychology. In J. Wertsch (Ed.), *Culture, communication and cognition: Vygotskian perspectives* (pp.35-65). Cambridge: University Press.
- Engeström, Y. (1991). Activity theory and individual and social transformation. *Activity Theory*, 4, 7/8, 6-17.
- Fedoseev, P. N. (1976). On the problem of the social and the biological in sociology and psychology. *Social Science Information*, 15, 557-578.
- Hedegaard, M. (2001) (Ed.). *Learning in Classrooms: A Cultural-Historical Approach (papers from the 4th Congress of ISCRAT 1998)*. Aarhus: Aarhus University Press.
- Holzcamp, K. (1993). *Lernen: subjektwissenschaftliche Grundlegung*. Frankfurt/M.: Campus.
- Kozulin, A. (1986). The concept of activity in Soviet psychology: Vygotsky, his disciples and critics: *American Psychologist*, 41, 264-274.
- Lave, J. & Wenger, E. (1991). *Situated Learning. Legitimate Peripheral Participation*. Cambridge: CUP.
- Payne, T. R. (1968). *S. L. Rubinštejn and the Philosophical Foundations of Soviet Psychology*. Dordrecht: Reidel.
- Rubinstein, S. L. (1922/1989). The Principle of Creative Spontaneous Activity (Toward the Philosophical Foundations of Contemporary Pedagogics) [Printsip tvorcheskoi samodeiatel'nosti (k filosofskim osnovam sovremennoi pedagogiki)]. *Voprosi Psichologii*, 4, 101-107.
- Rubinstein, S. L. (1935). *Osnovi psichologii* (Foundations of general psychology). Moscow: Gosudarstvenoe utschebno-pedagogičeskoe izdatelstvo.
- Rubinstein, S. L. (1946/2000). *Osnovi obshei psichologii* (Foundations of general psychology). Moscow: Izd. AN SSSR & Cankt Peterburg: Piter.
- Rubinstein, S. L. (1977). *Grundlagen der Allgemeinen Psychologie* (Foundations of general psychology). Berlin: Volk und Wissen.
- Rubinstein, S. L. (1960/1973). Problema sposobnostei i voprossi psichologičeskoi teorii (The Problem of the Abilities and Questions of Psychological Theory). In S. L. Rubinstein, *Problems of General Psychology*, (pp. 219-239). Moscow: Pedagogika.
- Rubinstein, S. L. (1963). *Prinzipien und Wege der Entwicklung der Psychologie* (Principles and Ways of Development of Psychology). Berlin: Akademie Verlag.
- Rubinstein, S. L. (1997). *Izbranie Filosofičko-psichologičeskie trudi* (Selected Works. Philosophical & psychological Writings). Moscow: Nauka.
- Veer, R. van der & Valsiner, J. (1993). *Understanding Vygotsky: a quest for synthesis*. Oxford: Blackwell.
- Wertsch, J. V. (1996). Sociocultural Approach to Socially Shared Cognition. In L. B. Resnick & J. M. Lenine & S. Teasley (Eds.), *Socially shared cognition*, (pp. 85-100). Washington: American Psychological Association.