

## Interview

### **An interview with Yrjö Engeström and Annalisa Sannino on activity theory**

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More and more researchers in the teaching and learning of language and literature are turning to activity theory as a theoretical framework. The *Center for Activity, Development and Learning (CRADLE, see: <http://www.helsinki.fi/cradle/info.htm>)*, earlier called *Center for Research on Activity Theory and Developmental Work Research*, at the University of Helsinki, is a center of reference for theoretical and methodological development of activity theory, and has pursued ground-breaking research based on cultural-historical activity theory (CHAT) since 1994. This multi-disciplinary research unit, under the guidance of Yrjö Engeström, has significantly contributed to the development of CHAT-based research as a globally highly regarded paradigm. CRADLE is oriented toward the creation of a strong research community with high international impact, forming both a national and international hub of activity-theoretical and socio-cultural research. Research in CRADLE is focused on reciprocal interaction between theory and practice, and much of its investigation includes formative interventions that use, among others, the Change Laboratory method, also developed in CRADLE. CRADLE works in close collaboration with work organizations, educational institutions, and social movements pursuing investigative developmental efforts aimed at transforming dysfunctional activities.

Yrjö Engeström, Professor and founder of the CRADLE research center, has developed cultural-historical activity theory as a framework to study transformations and learning processes in work activities and organizations, and is known for his theory of expansive learning and for the interventionist method of the Change Laboratory.

Annalisa Sannino is Academy Research Fellow at CRADLE. Her research is focused on communication, cognition and learning in educational institutions and work organizations. Her previous work deals with the connection between discourse and activity, and with the interventionist nature of cultural-historical activity theory, exploring how specific emerging forms of agency can be discursively identified, supported and enhanced in transformation efforts within educational and work activities. Her current work focuses on developing building blocks of a theory of transformative agency based on Vygotsky's principle of double stimulation.

Joan Ploettner and Eva Tresserras, PhD candidates in the departments of Education at the Universitat Autònoma de Barcelona and the Universitat de

Barcelona, both participated in research stays at CRADLE as part of their doctoral training. They have collaborated in preparing this interview with Yrjö Engeström and Annalisa Sannino. The interview published in this issue was conducted in March, 2016.

In this interview, current applications of activity theory in education are discussed and future directions for activity theory based research are presented.

## Interview

**Interviewer:** Could you give our readers a brief explanation of activity theory (AT) and its theoretical roots?

**Engeström:** The basic idea is that human beings are not seen as separate from their everyday involvements in various kinds of activities. So, instead of the individual being the unit of analysis, it is the activity which people are involved in. And this means that it's a unit that includes society and the individual. Activity or activity system is a notion that refers to something that is collective. It brings in the collaborative relations between people and it is oriented at objects. Object understood here as something which drives the activity and which gives it meaning and significance. So, for instance in the activity of health care workers the object would be the health and illness of their patients, and in the activity of teachers the object would be the learning of their students. In that sense the object is something that is evolving, open-ended and historically rooted. Activities are also mediated by their instruments, which includes most signs, sign systems and material tools and also mediated by division of labour and rules. So it's a complex notion, a systemic notion, which is deeply historical and oriented at objects that human beings need to deal with in order to live their lives. In the current scene, there are related notions, for instance, sociocultural research. These are usually broader and they don't necessarily emphasize what is the actual unit of analysis. For activity theory the unit of analysis and the foundational unit of transformation is the activity system, the collective, object-oriented, artefact-and-culturally-mediated, activity system. And this makes it different from a sociocultural approach. It can be certainly seen as a member of the very broad family of sociocultural approaches, but it's quite clear of its own basic concepts. The theoretical roots can be traced back to the work of Karl Marx in the idea of practice or productive practice that both transforms human beings and through which human beings transform their world. Later it was turned into an approach to human sciences by Vygotsky and after Vygotsky, by Leont'ev, Luria, Davydov, and others. The point here is that the concept of activity as a theoretical

concept only appears in the work of Leont'ev, basically in the 1940's. Vygotsky, talked about activity every now and then, but it was not a theoretical concept. Vygotsky had the concept of mediation, of mediated action, but not collective activity as a theoretical concept. So this is a basic accomplishment of Leont'ev, to see how individual actions and collective activity are not the same thing and that the distinction between them is of fundamental importance. There have been multiple generations in the development of activity theory so today we deal with issues where activities are embedded in complex organizations and institutions and interrelated with other activity systems, so the world of activity theory has become more complex and much wider than it was initially. It is not just a psychological notion, not just a notion to explain, for instance the development of a child, but it's much more a notion to understand human beings in their societies.

**Sannino:** Activity theory is a living theory, an activist and interventionist theory. This is related to the work of the three generations of activity theory because all the way from Vygotsky it was grounded in the effort to change the circumstances of the time, for instance in the work that Vygotsky did with the children who were left without parents or with children who had multiple impairments and so on. The work of Leont'ev was also very much connected with interventionist efforts. And then the work of the third generation of activity theory as it has been implemented in this research centre is very much focused on interventions. So by intervening in the world human beings also understand it. And this is done by researchers but it's also done by very common people in their own lives all the time. I think this theory has the potential to understand these efforts.

**Interviewer:** Two of the important developments derived from AT are the concept of expansive learning and the method of the Change Laboratory Could you give a brief explanation of them?

**Engeström:** At the root of the theory of expansive learning was the realization that most theories of learning are very conservative. They assume that what needs to be learned is already fully known ahead of time by those who either manage or teach. In other words those processes of learning in which learning is inseparably intertwined with the generation of new realities new activities new forms of human life seem to be completely absent in the repertoire of standard theories of learning. The theory of expansive learning grew out of this

dissatisfaction with the available theories of learning. This idea of expansion is strongly connected to some key concepts in the first generation, specifically the zone of proximal development, when the zone of proximal development is understood as an open ended space of possibilities. Of course it needs to be transposed to collective level, not only as a zone for an individual child, for instance. This theory owes mostly to the work of Vasily Davydov. Davydov developed the first truly dialectical theory of learning, and learning and instruction. It's a theory based on the method of ascending from the abstract to the concrete. The theory of expansive learning literally expands on that, pulls it out of the confines of school classrooms and into other kinds of activities and other kinds of age groups so that learning is seen as a phenomenon that needs to be understood in all domains of life. Change Laboratory then is a way to trigger and support and accomplish processes of expansive learning in which activity systems are qualitatively transformed and new potentials are discovered for activity. The change laboratory itself is a specific method which we could call a method of formative intervention. By formative we mean here interventions which do not have predetermined end results, but which are formative in the sense that also what is generated actually takes shape in the intervention. So you could say that Change Laboratory interventions and other formative interventions are driven by the existing contradictions and historical possibilities, not driven by pre-set predefined goals or end results. That's a very crucial difference. On the other hand, it needs to be said that Change Laboratory type of interventions are not action research. There are variations of action research which have very weak theoretical foundations. For us, formative interventions are foundationally built on two crucial epistemological and methodological principles, the principle of double stimulation and the principle of ascending from the abstract to the concrete. These are both quite demanding principles and when they are connected to the theory of expansive learning you can see that these interventions are based on a rather complex and coherent conceptual toolkit. So they are not just going to a community and starting an action research by listening to what people want to change. Above all these Change Laboratory interventions mean you bring in tools which have powerful potential and these tools are then turned into instruments for those that actually do the learning. Obviously it's never something that the interventionist or researcher can fully determine or predict.

**Sannino:** One difficulty that many students of activity theory find is the relation between expansive learning and the dialectical method of ascending from the abstract to the concrete. And this is an important point because they actually overlap. There could be no cycle of

expansive learning without the Davydovian explanation of the method of ascending from the abstract to the concrete. I emphasize the Davydovian explanation because this is a philosophical principle that Davydov brought into use in empirical interventionist work in transforming entire schools. This is an important point because in change laboratory interventions aimed at promoting expansive learning what the interventionist does is actually invite the participants to think differently. To think differently about their activity means to think dialectically about their activity. So in this way formative interventions are formative because they bring participants to acquire a different type of thinking about their work. This is done by mobilizing different theoretical tools without which you could not possibly talk about the Change Laboratory. That is why one must be very careful when initiating a Change Laboratory intervention. A Change Laboratory is not just a method that could be applied by reading a couple of methodological chapters in a book. It has a theoretical background without which the entire intention of promoting expansive learning and dialectical thinking would collapse.

**Interviewer:** Our readers are largely interested in research regarding the teaching and learning of language and literature. How has AT been applied in education research?

**Engeström:** One thing is that schools and perhaps even classrooms can be understood as activity systems. You could also think about the learning activity or the school-going activity of all the students and the teaching activity of the teacher as two activity systems which interact and try to find a common ground. I think the first step typically is that people start thinking of educational practices, educational phenomena in terms of activity systems and start to model and think about who are these people, what is their community, what is their object, what are their instruments, what might be their division of labour and rules and what might be the historically evolving contradictions and tensions in these activity systems. Typically I think you will end up having more than one activity system involved because it would not be wise to equate the teaching activity and the school going activity of the kids. So immediately you start to take on a different lens which perhaps sensitizes you to different issues and perhaps allows you to see beyond the given curriculum and the given constraints of the classroom. So that you could start seeing perhaps also... that the students are involved not only in the school going activity but they somehow have to bridge and coordinate with other activities like for instance the home or activities with peers outside the school. So that ...from the student's point of view

it's also a difficult challenge of coordinating between participation in different activity systems at the same time and then coordinating with one activity system which has great authority, namely that of the teachers. So all that perhaps gives us often times a way to look at education a bit more from the point of view of the lives of the participants rather than a sort of self-contained given frame. The other step when applying activity theory in educational research... has to do with identifying contradictions and zones of proximal development. In other words starting to look at education as a changing constellation of activities and that there are always possibilities and potentials for even radical transformation. Some decades ago, for instance here in Finland, education was often considered so conservative that it was practically impossible to change in any significant way. Today I think people generally speaking have a very different attitude. We are seeing increasingly education and schools as activities which are indeed changing and sometimes in ways which we feel we don't quite understand. The fact that all kinds of new digital technologies are entering the schools whether we want them or not, and sometimes when we want them, they are not accepted at all, is just an example, not to speak about all these issues of motivation. So activity theory, as a second step after starting to look at education as activity systems, should look at it as historically changing and contradictory formations. In other words, to start seeing where the troubles come from and what kind of possibilities they open up. And then the third way to use activity theory in education is to actually intervene and to implement the various types of formative interventions. This is done increasingly, ...there are actually quite a few Change Laboratory interventions now being implemented ...in school settings and educational settings and I think that is really the test bench for activity theory, in other words putting it into practice and seeing what happens.

**Sannino:** I think the main contribution that activity theory has had on studies in education has been the possibility of looking at instruction and learning activities as not only confined to the classroom, but as part of a broader transformation effort that is inevitable in today's society. So, when we talk about, for instance multilingualism, it is impossible to really understand it just by looking at how it is dealt with in a classroom, without exploring the roots and tensions from which multilingual struggles come. So, activity theory allows us to open these issues up outside the confines of a classroom and perhaps exploring this way the fact that these struggles are not simply the limitations of teachers and students, but much broader societal struggles.

**Interviewer:** What do you see as the future for AT and the future of the CRADLE research group?

**Engeström:** From the point of view of activity theory there are several threads which seem to be extremely productive at the moment. One is the development of the Change Laboratory and related methods of formative intervention, which are increasingly now applied around the world in various settings. And this requires and opens up the possibility of powerful comparisons and powerful hybridizations and exchange of experiences between very different settings. This is for the next ten years a very, very exciting thread of research of activity theory in CRADLE. The second one is the work on agency and generation of transformative agency, both in settings such as schools, but also in work settings, communities, social movements, etc. The whole notion of how people can become more let's say shapers of their own lives and their own societies is at the core of this. The third line that I see emerging in research in activity theory is how to make this theory responsive and relevant for the new emerging phenomena in this world. And this is indeed related to research on learning in social movements, but also more broadly the big challenge is what the fourth generation might look like in the coming years. And this obviously is a zone of proximal development for the theory itself. We're only sort of taking steps on that, for instance through social movements, but also I think by looking into various aspects of interventions which are not necessarily initially designed by researchers, but are taking place as if unnoticed. How people can intervene in each other's activities, perhaps facilitate important transformation. So there are various challenges and possibilities. The challenge of fourth generation of activity theory is alternatives to capitalism. How you build sustainable viable resilient alternatives to capitalism especially understood as the neoliberal global regime. So that would be the challenge of the fourth generation of activity theory. So all this I think give you some signposts of why this type of research wants to continue and why CRADLE as a community is needed. With regard to the actual material future of the CRADLE as such, we live in uncertain times and right now the Finnish Universities and especially the University of Helsinki are going through very difficult times facing cuts and so on. And we'll see. If conditions are not sufficiently positive here, then it has to be somewhere else. But these ideas are not tied up to a specific location or a specific institution they have a very strong life of their own. You can see it from the number of visitors coming through CRADLE all the time. I don't think they come here in order to admire

Helsinki although some of them might like it but they come here for the ideas. And they go out back to their own locations with these ideas and I think it's becoming a global community.

**Interviewer:** What are your recommendations for “young” researchers interested in learning more about AT or using it as a research framework?

**Sannino:** What I would like to tell young researchers is that if activity theory really interests you for the purpose of contributing with your research to real issues in our societies, then don't go for the quick way. Go for the serious focused way of trying to really understand this complex network of ideas and discuss it with the people who have adopted this framework and are utilizing it in their work, because it is a long journey. Learning activity theory is a long journey. Without having a very strong basis on dialectics it becomes very difficult to truly appropriate this theory. So the reading of Ilyenkov, the reading of Davydov, and also the reading of the French philosopher Lucien Sève are among the most important tough readings, but necessary readings to start entering this way of thinking. Usually very quick applications of it based on the reading of one or two papers are very limited attempts, and sometimes also misguided attempts. It's extremely important that one takes this effort at the beginning to understand the theory and then the beauty of it is that, being such a complex and versatile theory, it also lends itself to so many different developments that you can really find your own way in it. And you can make your own contribution to it. Don't stop just at the triangle, it is my suggestion.

**Engeström:** You know, dialectics often times when it is strictly seen as a sort of philosophical set of ideas, has the big challenge to connect to practice, to become something that you practise and not only preach. And my recommendation for young researchers is if they want to get into Activity Theory, not only read some basic texts, but at the same time also look at some concrete studies. Empirical work in which more or less successful ideas are put into practise and tested. Because without putting this theory into practice, it can become some sort of a canon of dogmatized ideas and that would be the last thing we want. So, like Annalisa said, go beyond the triangles. But the triangles are not meant to be some form of forced idea framework. It's an instrument and beyond using creative ways and some complex instruments, such as the model of an activity system, you also should actually study how it was constructed,

where it comes from. Since it's not easy, you really need to connect, find other people who are doing this or who have been doing this, and find ways to interact.

**Interviewer:** AT is also an interesting methodological framework to discover tensions and contradictions. Could you explain, briefly, these two main concepts?

**Sannino:** Actually, in our work we differentiate tensions in different typologies, not only tensions and then contradictions. What is crucial in activity theory is the notion of contradiction. And this concept comes from dialectics. The main example of contradiction comes from Marx and it is the clash between use value and exchange value. So, for instance, if one looks at the model of the activity system, each component of it can be regarded as a site of clash between these two forces. But then, contradictions can also take place between elements of an activity system or between activity systems. So, this has been the way in which the philosophical notion of contradiction, stemming from dialectics, has been integrated in cultural-historical activity theory. The tricky part of it is that contradictions are not empirically graspable. They require historical analysis to be detected. So, if we look at a transcript we seldom can define what might be the contradictions at the core of the struggle that preoccupy people.

**Engeström:** You might make first hypotheses, but that's only guess.

**Sannino:** Yes, you can make a hypothesis, but this hypothesis requires some careful analysis and for that you need to have some intermediate methodological tools. And this is when tensions come into the picture, because they are more visible in our data; the data that we use in our research, which are primarily discursive data, stemming from interventions. What people actually say in Change Laboratory interventions is usually transcribed verbatim and then analysed. So, we came up with a methodological framework for formulating hypotheses of contradictions. By identifying four types of tensions that were becoming quite recurrent in our analysis of Change Laboratories. These tensions are dilemmas, conflicts, critical conflicts, and double binds. In this order. Why? Because we think dilemmatically. The psychologist Michael Billig has clearly stated that we think dilemmatically, "on one hand and on the other hand". But this dilemmatic way of thinking that we often express in our conversations does not necessarily lead us to actual material changes in our world, beside exchange of opinions. A bit

more transformative energy stems from conflicts, when people actually clash with one another's' views on what to do in the contexts. And then critical conflicts are even more potentially transformative because they actually lead you to understanding what can paralyse the action. What actually clashes in critical conflicts are motives which are opposite to one another. And this indicates that a person wants equally to do one thing and to do something else, and is blocked between these two motives. And this in our work has led to much development toward the theory of transformative agency, developed on the basis of what Vygotsky wrote about conflicting motives and how they can paralyse action. For instance, this is seen in the context of what he called the waiting experimental or the experiment of the meaningless situation. The fourth category is double binds, which are yet more intensified degree of transformative orientation because it is when the paralysis has been overcome, and someone says, for instance in a Change Laboratory meeting, "We must do something". The situation is so unbearable that we must join our forces and do something together about it. "We must do something, but we do not know how". So it is acknowledged that some collective intellectual and tangible efforts are needed to do something about the crisis.

**Engeström:** When looking at the relationship between these concepts of contradiction and tension, and the ideas of change and transformation. It seems to me that in a way these kind of escalated steps of experiencing contradictions are needed, and expressing and articulating them is often needed and necessary in order for people to get involved and actually invest in serious transformation efforts. But, I think all this is put together in your framework of Double Stimulation.

**Interviewer:** At the present time your studies are focused on Double Stimulation. Could you give a brief explanation regarding this concept and activity?

**Sannino:** Double stimulation is one of the foundational principles on which the Change Laboratory method is based and it is a foundational principle of formative interventions in Activity Theory. The idea of Double Stimulation stems from Vygotsky and a long tradition in Soviet psychology of what were called teaching or formative experiments, in which the participant would walk out of the experiment having learnt something. And this is pretty much the model of what we call formative intervention in Change Laboratory, because the idea is that you offer a stimulus, a second stimulus, which is an artefact or a model, a theoretically

inspired tool that would help the participants to redesign their activity. And this is a second stimulus following a first stimulus; the first stimulus being a key problem participants are confronted with. And this problem in formative intervention is not necessarily recognized at first by participants. Therefore, you need to open up the critical conflict with what we call mirror materials. So during ethnographic fieldwork preceding a Change Laboratory intervention, we collect materials that actually document troubles or incidents that can be informative of the most acute struggles that the organization or the movement or the group is facing. And then these are documented in what we call mirror materials, and if appropriate, these materials are presented as a tentative first stimulus, which we need to open up a perspective on the paralysis of the action. So that's when the second stimuli enter the picture. So, the double stimulation framework has a long history in our approach and has already very strong methodological roots in the way we conduct research through interventions. But in CRADLE we're trying to make the case that double stimulation is not only a method understood as a technique. It's a Method (with the capital letter) understood dialectically as a generative principle that will be instrumental to develop our theory further. For instance, in its connection with the existing theory of expansive learning, or for instance, in making a contribution to theoretical efforts at understanding agency, which actually resonate with crises in today's world. The problem with mainstream theories of agency is that they are primarily individually oriented. And they are seldom focused on object oriented activities and collective transformative efforts. So, this is still an open agenda and very much a work in progress, but in the past five, six years, this line of research on double stimulation has taken up momentum. And the more we learn about it, the more we establish connections with other aspects of activity theory.

**Engeström:** Yes, I think that's a very good summary. You ask why Double Stimulation is relevant in activity theory. I think that the answer is that activity theory should not be reduced only to technical mediation. For instance, using the example of pole vault. The pole, you know, is the mediating means for you to accomplish a jump over the bar. This is strictly an example of technical mediation which doesn't tell you why you want to jump to begin with. And this is the crucial issue that distinguishes activity theory from many theories of, let's say, situated action or sociocultural theories. Because we ask: what is it connected to in the historical transformation of people's lives and societies? So, my advice if you want to study pole vault is to ask *why and where does it come from and how is it connected to our society*. In other words, it is not enough that we see nice examples where people use devices to enhance some

performance. It is always a question of why do you do the performance to begin with, and what is the connection to human well-being on this planet and the survival of our planet? So, this might look like terribly big questions, but without those, our research in the end doesn't have very much meaning.

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