Interview

An Interview with Annalisa Sannino and Yrjö Engeström on Fourth-Generation Activity Theory

KATSUHIRO YAMAZUMI
Kansai University
kyamazum@kansai-u.ac.jp

This interview with Annalisa Sannino and Yrjö Engeström was held on the subject of fourth-generation activity theory. The interview was conducted by Katsuhiro Yamazumi on August 30, 2018, at the Center for Research on Activity, Development and Learning (CRADLE), University of Helsinki, Finland.

In order to overcome the limits of the previous three generations of activity theory, an emergent *fourth generation* of activity theory has to capture new forms of activity, in which the fixed boundaries, constraints, and structures of activity systems are blurred and a significant number of activities are loosely synchronized, interconnected, and combined. The fourth generation of activity theory should expand the unit of analysis to overcome the inner contradictions of the previous three generations of activity theory. Additionally, this new generation of activity theory should attempt to develop collaborative efforts to tackle the ongoing global humanitarian and environmental crises and advance formative interventions during such crises.

Annalisa Sannino is a Professor at the Faculty of Education and Culture, Tampere University. She holds visiting professorships at Rhodes University, South Africa, and University West, Sweden. Her career in research includes appointments at American, French, and Italian universities. Her work develops and uses the Finnish tradition of cultural-historical activity theory to facilitate participatory analyses of major societal challenges in close collaboration with the stakeholders and practitioners. Her work focuses on the activi-

ties undergoing critical transformations and what these transformations entail in terms of collective agency and learning. Apart from authoring a number of journal articles, she has served as the leading editor of several special issues and edited various volumes in the fields of management, education, and psychology.

Yrjö Engeström is an emeritus professor of communication at the University of California, San Diego, and an emeritus professor of adult education at the University of Helsinki, Finland, where he is also director of the Center for Research on Activity, Development and Learning (CRADLE). He applies and develops cultural-historical activity theory as a framework in studies of transformations and learning processes in work activities and organizations. The theory of expansive learning and the interventionist methodology of developmental work research are among his notable contributions. His most recent books are *From Teams to Knots: Activity-Theoretical Studies of Collaboration and Learning at Work* (2008), *Learning by Expanding: An Activity-Theoretical Approach to Developmental Research* (2015), *Studies in Expansive Learning: Learning What Is Not Yet There* (2016), and *Expertise in Transition: Expansive Learning in Medical Work* (2018), all published by Cambridge University Press.

Interviewer

I would like to ask you four questions. Let me start with this: as you clarified, each of three generations or traditions of activity theories is described as a qualitative transformation of the previous generation. What societal and historical demands would you regard as driving the need to transform third-generation activity theory toward fourth-generation activity theory? Additionally, please provide a general picture of what fourth-generation activity theory looks like.

Annalisa Sannino

With regard to the demands, these are the ones that our time is imposing on us. They are actually—if one looks at the current priorities that the United Nations has classified as the major concerns of our time—about poverty (number one) and climate change (number two). These are the most pressing demands that challenge activity theory at the moment, and these should be the focal points of the theory. Taking these challenges very seriously is something very natural for activity theory, which since Vygotsky's years develops as a theory in dialogues aligned with the demands of its time. Thus, it is not just an initiative by researchers. It is a need of society that we want to respond to.

The second part of the question is much more difficult because you are asking for a general outline and overview of the fourth generation. I would say that we have some hints, perhaps, but at the moment is still premature because these objects—actually, objects of research like climate change or

poverty—are really, as Yrjö would say, runaway objects. We need to reconceptualize what they look like in order to have a picture of what our research can look like, so it is very difficult to provide an overview, but I suspect that we need to take at least two aspects into consideration. The first one is learning; particularly, how does expansive learning address acute societal problems of our time, including these runaway objects. Secondly, understanding the connection between expansive learning and collective transformative agency is necessary because these are problems that require more and more concerted commitment at the societal level. For example, it is not enough that only one municipality in a nation takes care of climate change or poverty. This issue has to reach broad, global communities working together. So, outlining the fourth generation of activity theory is a very demanding project. At the same time, it is also an exciting one for proponents of the activity theory.

Yrjö Engeström

What calls for the fourth generation, what makes it necessary, is that the transformations that even the third-generation activity theory was looking at were usually transformations in well-specified activity systems. You would have more than one, but you could pinpoint maybe two, three, four, or five activity systems, which are somehow interconnected. When we are dealing with this sort of wicked problem or really crucial problem for humankind, the challenges involve innumerable activities, so it is impossible to say that only these are involved. You have to consider that transformations can be very interconnected and heterogeneous. Very different kinds of organizations will become involved. They could be governmental or public sector organizations. They could also be local communities, non-governmental associations, and social movements. They could be schools or communities, and the heterogeneous combinations or coalitions will perhaps be the crucial new units that we need to look at. In heterogeneous coalitions, the heterogeneity is not only that there are different types of activities but they are also at different levels—national governmental organizations as well as local, regional, and even very specific families and villages. These multilevel and multiple types of organizations and activities need to find each other and create coalitions around shared challenges. This is the difficulty: How do you depict such a coalition?

I don't think that there is at the moment a very effective way to depict and model heterogeneous coalitions, but I think that the notion of heterogeneous coalitions is a useful one. There is also the issue of time because these transformations that are involved with—let's say, for instance, climate change and poverty, are really big challenges. You cannot limit them in time. You cannot say when something is finished; you probably will have to think of all transformations as multiple cycles rather than as single cycles, and this means that there are some forms of continuity that we don't quite yet understand,

which must be built in, because the idea that this is done in a couple of years, for instance, is not valid as these transformations are continuously with us. To think about this, we need to consider multiple overlapping and intersecting cycles that involve heterogeneous activities and influence one another; identifying how they are interconnected and how expansive learning occurs is not easy.

I think that what we require at this moment are good pilot projects, whereby these ideas are tested and developed with empirical material. I am sure Annalisa will talk about her project with the homeless as an example, and I think it would be very valuable and important to find two, three, or four good pilot projects from different parts of the world that could be carefully studied and discussed to identify the conceptual, theoretical, and methodological steps that we need to take. This time, we cannot simply build a new unit of analysis by expanding or extending the previous one. All previous generations are still useful, but at the same time, how do you incorporate the connection to the issues of foundational contradictions in capitalism today? Maybe, what is needed now is experimenting with different models for the unit of analysis. I think that, at the moment, the most promising notion is a heterogeneous coalition, but obviously that is not enough. We need to try to model that and think about how, theoretically, to make it rigorous and clear.

Annalisa Sannino

I think that what Yrjö was saying is already quite advanced in clarifying that we cannot really be satisfied with the units of analysis that have been utilized so far and which have proven to be useful. At this point, we are dealing with different types of objects that are qualitatively different from what we have been dealing with so far; therefore, our unit of analysis must also be qualitatively different. One idea I have been playing with is—this is also in line with what Yrjö said—to look at coalitions playing out at different levels. Vertically and horizontally, in time and in space, I have been thinking about when these intersections could be considered as nodes of learning that are like clusters or germ cell formations, which condense the learning process during one phase and open new perspectives for the next phase.

This is probably one approach; otherwise, there is the risk that with these types of objects, we are going to face impossible types of analyses that are simply too complicated to conduct with resources usually available to activity theorists. Activity theory is not a mainstream theory, and it usually doesn't attract the big teams and big money that many other trends in research do, so we need to be very mindful about the feasibility of this project. This is part of the ambition of the fourth-generation activity theory and that is why your question of providing an overview is such a difficult one at the moment because we need to be able to identify manageable units to pursue for empirical and theoretical research.

Yrjö Engeström

Look at, let's say, organizations wherein something really crucial can happen. At the same time, you need to see how they are connected to broader social movements and dynamics of change. As an example, we had here at CRADLE just recently a professor of Public Health from Sao Paulo, Brazil, who is conducting Change Laboratory interventions in two clinics in which women deliver children[1]. The providers at the clinics are trained to conduct the typical, aggressive procedures, but the background there is 25 years of struggle for changing childbirth care and for addressing other forms of violence against women. That culture treats women abusively; therefore, childbirth tends to be associated with all kinds of mistreatment on women. For instance, totally unnecessary cesarean sections are conducted regularly, reaching 85% in private sector, as a form to escape from aggressive management of normal birth. In the Change Laboratories, they are transforming local practices related to childbirth and maternity. These changes are crystallization points of a broader social movement for women's rights in childbirth, in Brazil and internationally, especially important for women who are poor or who come from environments where they cannot defend themselves. They don't have the material and financial means to demand good care, so they tend to be more vulnerable to abuse. Change Laboratories have so much impact and potential because they are connected to this much broader movement for justice for women. Therefore, you cannot only study them as local organizations, but you have to see the interconnections to a much broader network of activities and coalitions.

I think that the same applies to the analysis regarding homelessness programs in Finland, and I think that it also applies to what we have seen in South Africa, where the struggle is to give justice to the original black population whose land was taken away from them during Apartheid. Now that they are getting some of their land back, how can they learn to manage this land in a productive and ecologically sustainable way and, at the same time, how can justice in terms of the collective ownership of land and livelihoods be built anew after being completely destroyed by Apartheid? Again, our South African colleagues have conducted several local Change Laboratories. Admittedly, there are limited problems with water and sustainable agriculture, but in the end they are all connected to this much broader societal transformation of justice in terms of land use and sustainability[2]. So, I think that when we are looking for pilot projects that can represent a fourth generation, they must have these qualities: they must be deeply interconnected with big societal change forces that are not just local, and the research must be both broad and local. We are quite good at performing local analyses and interventions, but connecting the work to the building of new kinds of coalitions at the same time is the challenge.

Annalisa Sannino

I think one important lesson from social movement studies is, usually, that big progressive movements aiming for social justice also tend to become worn out at some point. After 10 or 15 years of concentrated efforts, it is not impossible. It is actually quite frequent that a stopping point is recognized, and it is at these moments when other actors—universities, for example—could join in with tools such as the Change Laboratory to revitalize progressive efforts. To revitalize the motivation for learning, other forces, actors, and institutions should be asked simultaneously to join in. I consider this approach an example of one of these nodes that operates at different interconnecting points in this constellation of very complicated interactions to face the big problems of our time. It is an ambitious vision, but it is a necessary one because the tools that we have are becoming too old and too ineffective to face these types of challenges.

Interviewer

Question two concerns the expansion of the unit of analysis. Fourth-generation activity theory includes a key component that goes beyond the existing third-generation unit of analysis; that is, it includes a more culturally advanced central activity. It seems to expand mainly along the anticipatory-temporal dimension, in contrast to the third generation, which seemed to emerge primarily along the social-special dimension. How would you define the zone of proximal development for the fourth generation of activity theory?

Annalisa Sannino

I think that the dimensions that we need are still the valid ones: the socio-spatial dimension on one hand and the temporal-historical dimension on the other. We cannot do without both, especially now, with the types of problems we are talking about. I think that there is more and more a need to reconstruct already existing longitudinal learning processes spanning over space and time. Yrjö was saying that this should be a really consistent effort over a long period, and within this perspective, I think that we don't need an alternative notion of a zone of proximal development, something radically different from what we already have in learning by expanding, for instance. Perhaps, I have been thinking along the lines that the distance could be reformulated mildly as the distance between ongoing consolidated activities and new activities involving—broadly speaking—diverse actors and institutions that are needed at certain points in time and space. This flexibility and continuous movement of actors is probably one element of an addition to the zone of proximal development as it is being defined already in learning by expanding, but I don't see a major need for changing the definition.

Yrjö Engeström

Yes, and I think the concept of a zone of proximal development remains very useful, but the issue regarding dimensions that we see in this transformation is tricky. The anticipatory-temporal dimension is obviously much more in the long term because the changes are not going to happen quickly and also because we need to understand—for instance, in Annalisa's case—this 10 year-long program for the eradication of homelessness in Finland. You have to go back at least 30 to 40 years to see how it has been grounded in society. Of course, we have always done some historical analyses, but perhaps now, we need to be prepared that the process of change will not be very quick—that it might be 10 years or 15 to 20 years. We need to know how research can connect to that, how to fund a project that lasts 10 years. Researchers and other actors must build different kinds of partnerships that carry on for longer periods, and that is a difficult task. In a way, the current contradiction is very much that the logic of contemporary neoliberal capitalism has a very quick turnover. Because things happen very fast and outcomes are produced very quickly, it is more than ever in conflict and a contradiction with the true logic of genuine transformation.

Fourth-generation activity theory also requires much more sensitivity to different rhythms of time because some things can happen very quickly. Some things take 30 years, so you have to find the diversity in time perspectives and keep your eyes open and anchored accordingly. Perhaps it is not so much only expanding the time dimension but more making it sensitive to different time rhythms. The same thing is also possible in the socio-spatial dimension. Yes, there is an expansion because new actors must be involved, but at the same time it is more about understanding the different relationships and different kinds of actors. We need to become more sensitive to what is, for instance, a non-governmental grassroots organization, which employs a very different logic than a state bureaucracy or private corporation. Again, it is more about the differentiation rather than just an expansion of the dimension. I think that these dimensions are useful—like Annalisa said—, but they need to be seen more in light of heterogeneity and sensitivity. You know, in the third generation, we could still say, "okay, instead of one activity system, we need minimally two." It looks like a quantitative expansion, but of course it is also qualitative, and it was easy for people to understand that they must look at more than one activity. It is not enough to look at only the teacher. We need to look at the teacher and the student and how they interact. Now, we need to say, "okay, very different kinds of activities must be involved, and each one of them has a very different kind of logic; the idea is heterogeneity." How to grasp the heterogeneity and how to build coalitions between very different actors, I think, is the big challenge, and perhaps we need to reconceptualize these dimensions because people tend to think of them too easily in terms of quantitative extension, but it is not just that. There is a qualitative shift that needs to be grasped in both time and

space.

Annalisa Sannino

About the pace of the transformation or the pace of change, this is a conflictual issue as well because there is really a contradiction here that plays out because at the same time, we are dealing with objects that tell us that humanity doesn't have that much time to wait for change. We don't have much time, especially with climate change. It is a crisis. So, we need to allow this maturation, but we also need to increase the pace of these coalitions getting together and work in a very object-oriented way because part of the difficulty—if you look at all the studies on advocacy and governance—is that there are numerous discussions about the agency that collectives can mobilize. But they hardly bring about new designs that really respond to acute crises. At the end, you say, "That is wonderful, so many people came together around this issue." There were hundreds of participants, but what did they do? What did they produce together that was consequential and made a difference? I think this is where activity theory can play a role because, after all, we are building new designs for the future and offering them to multiple parties, even to the political actors to convey to them that there are alternatives that have been envisioned from the bottom up. Here, you have an alternative, and even practitioners in different institutions and various administrators would agree with that. Why not try this out?

Yrjö Engeström

Indeed, I think a very important methodological implication of the fourth-generation activity theory is that, increasingly, it is important to actually generate materially existing working cases of alternatives that are convincing because they work. This means that, for instance, in our Change Laboratory interventions, we need to look at what actually works, not only as an idea but as a material practice; documenting these becomes very important. I think it is also quite sensible to think that there are a lot of important alternatives— new material practices that have been generated but are not known— that must be found and brought to the table. This homelessness program, for instance, has existed for a decade but only very recently have people started to pay attention. So, a lot of important alternative models for the future may actually develop without much publicity, and it may be that this is a strength. There is more material action and there are fewer big words, but somehow we need to build on these developments so that we don't start from point zero. I think this is where we can agree with people like Erik Olin Wright[3] who writes about utopias and Paul Adler[4] who talks about the alternatives that are popping up everywhere and not receiving attention; I think we can agree with them regarding what is important. At the same time, our interventions are needed more than ever because, oftentimes, like Annalisa said, these alternatives are struggling to sustain themselves.

Annalisa Sannino

It is interesting that this notion of disconnection with utopias came up in this discussion of the zone of proximal development, because I think that the development we are looking for is definitely utopian. It is for a better world. It is for humanity. These utopias, however, as Erik Olin Wright has pointed out, are real. I have recently reformulated this notion of real utopias in my concept of enacted utopias[5] because I think that utopias are not just there. They have to be built step by step, bit by bit, and this is where my interest in transformative agency comes in. How can we support the development of an utopia by moving step by step toward it and enacting it? We need to understand the process, which is ultimately a process of learning and agency formation.

Interviewer

Question three is concerned with another extremely productive thread of the future of the activity theory—that is, the current progress of formative interventions. How do you think the current progress of formative interventions could be integral to the formation of fourth-generation activity theory toward an enacted utopia?

Annalisa Sannino

So far in this interview, we have touched upon the challenge of looking at the longitudinal processes of learning and agency formation. Now, we need to take a step back and think about how researchers usually want to pursue formative interventions; sometimes they think of themselves as big heroes or champions of change, and this does not fit with the fourth-generation activity theory because they cannot play this role. It was a fallacy already with the third generation that they could be the champions of change, but now it is really impossible to even think in those terms. So, based on the insight of Michael Cole, in one of the recent publications, together with Monica Lemos, the two of us in the *Journal of the Learning Sciences*[6] talk about intervention and *intra*ventions as types of formative interventions because I think that it is necessary to start understanding that change happens everywhere. Administrators, civil servants, and many thousands of people are actually champions of change, they are involved in their own activities, pushing forward projects toward utopia. They are, however, usually doing that in a very fragmented way.

   At the moment, I think of myself as a hunter of utopias. I think one of the challenges that we have with activity theory is identifying utopias that can be studied historically so that we can trace the processes of learning over a long period; that is why I became so fascinated with the challenge of homelessness in Finland[7]. It definitely has a lot to do with poverty and, at the same time, it is a utopia that was realized: Finland is the only country in Europe that has had a consistent reduction in the numbers of homeless people since 2008. As

Yrjö already mentioned, a series of national programs—very targeted programs—on homelessness began in 2008, but before that, there was the groundwork of many generations of people working really hard toward programs that were implemented starting in 2008. So, what I decided to do was to trace the expansive learning and transformative agency formation over the 10-year period from 2008 to 2018; now, I am trying to understand the challenges of this process and where I fit in with the method and theory that we pursue. I think this is where we could answer your question because we cannot expect to initiate 10–15–20 years of change, but we can join ongoing major changes toward utopias and try to understand where we fit in.

For example, at the moment, the Finnish homelessness strategy is facing a big storm. They have been very successful so far, but at the moment, the previous expansive learning cycle of the strategy is coming to an end. The program is aimed at preventing homelessness and reaching the point where the number of people who are homeless is decreasing, but a big problem is preventing new cases of homelessness. A big effort was initiated for the period 2015 to 2019 to focus on preventing homelessness, but now there is no certainty in the country that there will be a new program. At the same time, we can see that after these 10 years of consolidated efforts, there are many practitioners on the ground who now think about homelessness in a real utopian way. They have learned to tackle the problem and enact this utopia, and that is where I think the Change Laboratory can come in by working with these practitioners in tackling the challenges that they are facing now—for instance, with youth homelessness, which is the only demographic that has not decreased in this country.

Yrjö Engeström
Exactly.

Annalisa Sannino
So, this is increasing. It is one other challenge that they are facing. Why not start a series of Change Laboratories with these practitioners to develop models and designs to tackle youth homelessness, for instance, and which we could present to the ministries as ways to go forward? We need to move at the level of major NGOs and cities, which have power to make changes, and we also need to go all the way up to the level of actual ministries.

Yrjö Engeström
Yes. I would like to add a very important aspect to this. What Annalisa has been pointing out is that formative interventions now need to be embedded in broader change processes, building on the energy that is already developing or is already there in the field. It is strategic that they focus on the right kinds of actors in this broad field so that they become critical stepping stones for the next zone of proximal development that leads to big change

processes. So, in a way, our formative interventions can act as spearheads for broader changes. That is important. At the same time, I would like to add—and this is vividly visible in the case of the program for the eradication of homelessness—that ascending from the abstract to the concrete can be a very crucial element of success in regard to change.

In this case, this process has been built on a germ cell idea, which is called the principle of Housing First, and this is a very particular concept initially developed in the United States, but the Finnish activists in this process needed to reformulate it to create their own version. It became a core idea for overall change, and it is basically a counterintuitive idea because, traditionally, the idea of how to tackle homelessness would begin with sobriety and elimination of all alcohol and drugs, and also making sure that these individuals are not sick or mentally ill.

Annalisa Sannino
Or don't have debts.

Yrjö Engeström
You don't have debt; then, we can give you a house. This principle of housing first turns that completely around. First, you get a decent apartment of your own, your own keys, and your own name on the door; then, you can start working on your other problems with the necessary support from specialized services. If you don't have a house, it is unlikely that your other problems will ever be fixed because if you live on the street or if you live in shelters, you cannot gain a new grip on life very easily. It is very, very unlikely. So, putting the housing first principle at the core—and Annalisa looks at practitioners in this broad effort, as they are all very conscious of this principle—has become a very crucial backbone for this development - this very large-scale learning process. I think that it is likely that many of these strategic efforts for change might benefit from this, from the idea that you have to develop a concept. There has to be a crucial germ cell idea that people can identify and work with. If it is just a general idea of sustainability or a general idea of eradicating poverty, that is not enough. The idea has to become a concrete abstraction; you have to generate a real germ cell abstraction that can then continuously generate new solutions. The crucial principles of ascension from the abstract to the concrete and double stimulation are more valid than ever before.

Annalisa Sannino
I am amused; while the fourth generation is heading to more complicated-than-ever studies, things at the theoretical level are becoming clearer and clearer to me. For instance, Yrjö was talking about the centrality of home first in the Finnish homelessness strategy. This concept became the germ cell of transformation for national programs in this country in the past 10 years, and

many times in my career, I have heard students and colleagues talking about the connection between ascending from the abstract to the concrete and the object of activity. It is there. It is the home. What does a homeless person need? A home. What do you need to actually make a difference in the homelessness field? You need a new concept of homelessness, which is a concept centered around the object of this activity.

Yrjö Engeström

It is a reconceptualization of the object.

Annalisa Sannino

So at the end, you see that you are talking about germ cell reconceptualization of the object — the object of activity —, and this plays out right here in front of you in this enacted utopia to eradicate homelessness in Finland. But you need to have these examples of utopia, which can be studied and which are difficult to find. But I think that they are very, very crucial for tackling fourth-generation challenges.

Interviewer

Yes. True. So, the last question is related to the criticism against activity-theoretical formative intervention. With regard to your current work, please respond to criticism against activity-theoretical formative intervention, such as critics arguing that the primary contradictions between this type of intervention, use value, and exchange value in capitalism are effectively bracketed and that attention is focused on secondary contradictions and disturbances as their manifestations. Critics are also arguing that such transformations are generated by formative interventions and tied to localized contexts that may bear only a slight relation to wider structural relations.

Yrjö Engeström

Yes, yes. These are two very central criticisms. I would add a third one, which is that we also have often been criticized for neglecting power. That we are not talking enough about power. About the primary contradictions, I think we now are looking at issues of poverty and climate change, and we are talking about alternatives to capitalism, so I think more than ever the primary contradictions have to do with the profit motive and how to overcome it or how to build something that goes beyond profit, for the common good. So, today, we could talk about the same primary contradiction in terms of the common good versus private profit. I think that it is more visible now in these fourth-generation studies than ever before because these are issues of life and death. And of course, it is a real contradiction; therefore, it doesn't go away. You can't just eliminate it. The profit motive is there all the time, but the issue is how to continuously go beyond it or continuously show that we can go beyond it and build forms of activity that

go beyond the profit motive.

Annalisa Sannino

Again, the utopian examples are very clear; consider—for instance—the homelessness utopia in Finland: how do you give houses to those who do not have houses? Well, you need to make these houses available. Eventually, you need to build these houses. So, the first thing this country did was to practically get rid of shelters for homeless people and turn them into supported housing units in which each person would have his or her own small apartment and the services to get rid of addictions and other problems often associated with homelessness. Now, all these costs and, of course, the big struggle before 2008 in this country was to reach a point in which political forces would become convinced that it would be the right thing to do.

Yrjö Engeström

To put public money together.

Annalisa Sannino

A lot of courage was required by the nation to invest this amount of money into this type of rebuilding. Now, after 10 years, it turns out that this has become a source of significant savings because having these same people today in the streets without their own houses would cost much more to the state than what the state has invested in the past 10 years.

Yrjö Engeström

There is a study that shows that everyone who has their own home and is no longer homeless saves the state €15,000 per year. So, in a way, this situation is also saving the public money, though the initial investment, obviously, is not an investment for profit. It is something that must be done, and the gain will be seen only in the longer run; this is the difficult threshold, but you must think about the costs of poverty. They are much bigger than the investment to eradicate poverty. So, in that sense, we always return to the issue of how to calculate: is it from the point of the long-term common good or from the point of view of short-term profits? These two logics constantly collide, and they obviously must somehow coexist at the moment, but what we need to do is strengthen the logic regarding the common good. I think that if we look at these fourth-generation cases that are emerging, we can make this primary contradiction much more analyzable than it has been before because it is so clearly vivid and visible in these cases.

The second issue is that the very idea of the fourth generation is that through these expanding heterogeneous coalitions, the very dichotomy between local and global or small-scale and large-scale dissolves. It becomes an organic process of generative change that is both local and typically quite widespread. It spreads widely. For instance, this homeless strategy is vividly

local in the sense that you go to a housing unit where people work with the former homeless and their addictions and mental health problems. It is very local. At the same time, this has now spread to all cities in the country, so in these cases, I think it is a different logic of scaling up. This is not the logic of duplication or standardization. It is a logic of organic generation or variations that follow the same basic principle. In this case, the Housing First principle is applied in every place a little bit differently.

Annalisa Sannino
That is how a germ cell works. It is generativity. Yes.

Yrjö Engeström
It is not replicability or duplicability but it is generativity, so every flower of the same species is likely to be different.

Annalisa Sannino
I must say that when I think about this critique—of course, I am partial here and cannot be impartial because this is a theory I really want to pursue in my work—, I think that is not really fair. Think about the number of Change Labs since the early days being run at nearly zero cost, practically all of them. So, has this nothing to do with exchange value and use value? Does it really mean that we are bracketing the issue of use value and exchange value? I really doubt it. Consider the work that is now emerging around issues of poverty. I am thinking about one of the examples in the *Journal of the Learning Sciences* piece from Brazil, which also indicates that there are indeed examples that are lifting the issue up. If you look at a third-generation type of analysis, then secondary contradictions become very important. It was a necessity in that context and at that point in time and space. It was a choice and all of us need to make choices when we conduct research, but this does not mean that we neglect things or don't care about certain things.

   About the second criticism—the issue of structural relations—, perhaps we have not focused on that much. Again, hitting the germ cell in a Change Laboratory study doesn't happen all the time because you do not manipulate changes there. You need to nourish them. You need to nourish learning, and you need to collaborate with others. You cannot do it just because you are an expert in this type of domain. You need to give it time to change and develop, and these designs have hardly been given a chance to be followed up by the readers. What has happened to the early studies that started in 2006 on elderly care? What has happened? Can readers who are fair and patient look at what has happened since the very early steps of this Change Lab in 2006?[8] What has happened is that this model that was created - the mobility agreement - is now serving about 7,000 elderly people in the city of Helsinki. Is that not structural change? Is that not generativity? You need to give it time. These are not things that can happen overnight.

Yrjö Engeström

This also means that only now can we start to show that there was this escalation and that generativity has actually happened because it was not certain before. It takes time, like Annalisa said, and this is connected to the notion of power, which is another critique often presented - that is, that activity theory doesn't address power. I think that there is a fundamental difference between activity theory and most sociological approaches that treat power as something that is there. These approaches emphasize that power needs to be discovered and disclosed critically, how power works and how people are oppressed by power. This can be very valuable and necessary. On the other hand, for instance, Karl Marx did not stop there. He wanted to show how power can be generated and how new power can be created. That is exactly what I think activity theory aims at.

We are interested in generating new power. For instance, in the situation that Annalisa has been talking about with homelessness, right now, it is extremely important that the practitioners working with the homeless are starting to realize that they have power. They must start to use that power to continue this process. This power needs to be generated, so creating new power is our agenda, but we have not talked about it much. Maybe it is time that we also start writing about these issues a little more explicitly to show that it is a different notion than scaling up. It is a different notion of power and it is a different notion of primary contradictions. Just declaring them or making a big point of them is not what we have been trying to do. It is about how this approach is involved in practice to tackle these issues. Generate new power. Create something that can actually be generative and deal with the primary contradictions.

Maybe now, the fourth generation allows us to make these things more explicit so that we can write about them in a clearer way and show that we actually have something to say about power, scaling up, and primary contradictions. So, I think that from the point of view of what is happening with activity theory, this is a very exciting time because the fourth generation probably opens up topics that have been a little bit on the side.

Annalisa Sannino

At the same time, these topics convey acute needs in our societies. They also highlight aspects of use value, change value, and power that we had not been addressed explicitly because we[5] were focusing on something else. It is time to actually address them more explicitly than we have done before.

Yrjö Engeström

To put it very simply, you could say that in these crucial processes that have to do with poverty and climate change, the primary contradictions and secondary contradictions almost melt together. You see both at the same time much more than you did before. You cannot hide the primary contradictions

anymore. They come to the surface and they become more analyzable. It is interesting because this kind of change is also visible in many quite surprising fields. For instance, in the field of management and organization studies, they have now started to talk much more about capitalism and profit and issues like that, which 10 years ago were still taboo. Now, in major conferences — like the Academy of Management, the biggest American management research organization —, there is an ongoing discussion on alternatives to capitalism. These are the people who train future managers. So, it is almost paradoxical, but this means that when the issues are pressing, it is sad that the discipline of education often is a little bit slow, perhaps because we are so protected inside the classrooms. The idea that school could be a major change agent in society needs to be re-discovered. One hundred years ago, people talked about that, but now it is time to restart it.

Interviewer
Yes. True. Thank you very much for this valuable interview.

Notes

1   This refers to the work of Carmen Simone Grilo Diniz. See:
   - Grilo Diniz, C. S., Rattner, D., Lucas d'Oliveira, A. F. P., de Aguiar, J. M., & Niy, D. Y. (2018). Disrespect and abuse in childbirth in Brazil: Social activism, public policies and providers' training. *Reproductive Health Matters, 26*(53), 19–35.
2   This refers in particular to the work of the group led by Heila Lotz-Sisitka at Rhodes University. See:
   - Lotz-Sisitka, H., Mukute, M., Chikunda, C., Baloi, A., & Pesanayi, T. (2017). Transgressing the norm: Transformative agency in community-based learning for sustainability in southern African contexts. *International Review of Education, 63*(6), 897–914.
3   Wright, E. O. (2010). *Envisioning real utopias.* London: Verso.
4   Adler, P. S. (2015). Book review essay: The environmental crisis and its capitalist roots: Reading Naomi Klein with Karl Polanyi. *Administrative Science Quarterly, 60*(2), NP13–NP25.
5   Sannino, A. (2017). *Researching work and learning for enacted utopias: The struggle to overcome homelessness.* Keynote address at the Researching Work and Learning Conference, Grahamstown, South Africa, December 2017.
6   Sannino, A., Engeström, Y., & Lemos, M. (2016). Formative interventions for expansive learning and transformative agency. *Journal of the Learning Sciences, 25*(4), 599–633.
7   See Sannino, A. & Engeström, Y. (2018). Valuable innovations out of "nonsense"? Expansive organizational learning and transformative agency in the Mann Gulch Disaster and in the Finnish Homelessness Strategy. *Teoria e Prática em Administração, 8*(2), 60–79.
8   Nummijoki, J., Engeström, Y., & Sannino, A. (2018). Defensive and expansive cycles of learning: A study of home care encounters. *Journal of the Learning Sciences, 27*(2), 224–264.