Activity Theory for the De-Structuralized Modernity

Irina A. Mironenko & Pavel S. Sorokin

Integrative Psychological and Behavioral Science

ISSN 1932-4502

Integr. psych. behav. DOI 10.1007/s12124-020-09587-4





Your article is protected by copyright and all rights are held exclusively by Springer Science+Business Media, LLC, part of Springer Nature. This e-offprint is for personal use only and shall not be self-archived in electronic repositories. If you wish to selfarchive your article, please use the accepted manuscript version for posting on your own website. You may further deposit the accepted manuscript version in any repository, provided it is only made publicly available 12 months after official publication or later and provided acknowledgement is given to the original source of publication and a link is inserted to the published article on Springer's website. The link must be accompanied by the following text: "The final publication is available at link.springer.com".



Integr Psych Behav https://doi.org/10.1007/s12124-020-09587-4

REGULAR ARTICLE



Activity Theory for the De-Structuralized Modernity

Irina A. Mironenko¹ · Pavel S. Sorokin²

Accepted: 12 November 2020/Published online: 17 November 2020 © Springer Science+Business Media, LLC, part of Springer Nature 2020

Abstract

The present paper discusses perspectives of Activity Theory (AT) in the context of contemporary globalizing world, describing which we refer to the notion "De-structuralized modernity" (Sorokin and Froumin 2020). Radical changes in everyday life challenge social sciences and humanities. Approaches are in demand, which have the potential to comprehend the changing human étant and éntre. We argue that Activity Theory has the potential to face these challenges. Leontiev's AT grounds on the idea of qualitatively new mental features arising to deal with novel environmental challenges, which is much in line with J.M. Baldwin reasoning on evolution. AT also offers a method to prognosis the upcoming neoplasms. In the same time, applying classics of AT to the current reality, "De-structuralized modernity", entails the need for new theoretical elaborations of the latter, stemming from the radical transformation of the relations between individual and socio-cultural environments. A unique societal context emerges on the global level, which, on the one hand, requires individual to adapt constantly to changing socio-cultural reality, and, on the other hand, dramatically expands his/her potential for proactive actorhood transforming surrounding structures. We argue that the major and novel challenge for the individual is that maintaining the integrity and coherence of the a) Self-identity and b) system of links with the sociocultural environment - in their dynamics and unity, has become a qualitatively different issue, much more complicated and problematic than ever before. The notion of "culture" has particular relevance and importance in this context because it allows grasping simultaneously two dimensions in their dynamic dialectical interrelations. First, the "internal" ("subjective", "in the minds") and "external" ("objective", material and institutional environment) realities. Second, individual ("micro") and societal ("macro") scales of human activities. Discussing the ways to understand these

Irina A. Mironenko mironenko.irina1@gmail.com

Pavel S. Sorokin psorokin@hse.ru

¹ Department of Psychology, St. Petersburg State University, St. Petersburg, Russian Federation

² Institute of Education, National Research University Higher School of Economics, Moscow, Russian Federation

dynamics, we dispute the popular "constitutive view" on personality and refer to the concept of the "ontological shift" (Mironenko and Sorokin 2018). We also highlight how technological advancements change and "expand" human nature making it capable to deal with the outlined new tasks.

Keywords Activity theory \cdot Evolution of mind \cdot "Ontological shift" \cdot "De-structuralized modernity" \cdot Culture \cdot Technological advancements \cdot Gadgets \cdot Socio-cultural identity \cdot Self-identity

"The time is out of joint.." Shakespeare

Introduction

The twenty-first century's world is rapidly changing. This already sounds as an obvious banality. Global pandemic of 2020 and the massive imposition of the self-isolation regime (wresting a person out of the usual context of life), leave no doubt that the human ways of life and the human itself are not the same, what they were a couple of decades ago. This situation challenges social sciences and humanities with tasks, which are hardly possible to solve within the framework of mainstream approaches, based on reflections of the reality of the past time. These challenges stem from the radical transformation of the relations between individual and socio-cultural environments.

We refer to sociological vocabulary to introduce the notion of "De-structuration" (Sorokin and Froumin 2020) in the broader cross-disciplinary discourse. In the socalled "realist" approaches in sociology and several other disciplines (including institutional economics and political science), the term "social structure" applies to all the variety of social phenomena external to individual (see Meyer 2010). Usually these are major legitimate societal institutions including corporations, families or the state. However, "realist" approach to social structures draws them as not only "external" but also "solid" and "stable" in time. In general, sociological mainstream sees structures as creating a context that forces individual to conformity and reproduction of certain modes of behavior, which supports existing hierarchies and social order (see Sorokin and Froumin 2020). This is the point of departure for the concept of "de-structuration". "De-structuration" implies radical change in the nature of the external "structures" and their relations with individual, which has not yet been captured by academic discourses. We argue and illustrate empirically (Sorokin and Froumin 2020) that "structures" do not disappear (as some post-modernist theories have claimed long ago (see Denzin 1986), however, they do not remain the same as conventional mainstream in social sciences usually portrays them. Now they are globalizing, flexible, malleable and fast changing entities much more dependent upon (and, in a sense, open for) the proactive transformative action of an individual. For instance, it is illustrated by rapid increase in free-lancing and distant work (instead of traditional corporate employment) or in widespread of civil activities in social-media, transcending conventional political mechanisms, dramatically enhanced in the recent period of global pandemic (see

more in Sorokin and Froumin 2020). Thus, by the twenty-first century a unique societal environment emerges on the global level, which, on the hand, requires individual to constantly adapt, and, on the other hand, dramatically expands the potential for proactive individual actorhood (Meyer 2010) to change structures align with one's will and purposes. New approaches are in demand in the broad spectrum of social and humanitarian disciplines, congruent to the spirit of the times, which have the potential to comprehend the changing human étant and éntre.

We argue that Activity Theory (AT) has the potential to help in dealing with these challenges. Leontiev's AT grounds on the idea of qualitatively new mental features arising to deal with new environmental challenges, and a method to prognosis of the upcoming neoplasms can be found there also – explicating mechanisms fit to face those challenges. Following this logic, we start with analysis of the latter. We argue that the major and novel challenge for the Subjekt,¹ that de-structuration brings about, is the dramatic complication of the task to maintain the integrity and coherence of the a) Self-identity and b) system of links in and with the socio-cultural environment - in their dynamics and unity. The notion of "culture", central for AT, has particular relevance and importance in this context (see more (Mironenko and Sorokin 2018)), because it allows grasping simultaneously two dimensions in their dynamic dialectical interrelations. First, the "internal" ("subjective", "in the minds") and "external" ("objective", scales of human activities.

The principal focus on activity – as an active engagement of a person with his or her environment (including social contexts) – is an important advantage of AT in relation to many other approaches. In the same time, applying classics of AT to the new reality entails the need for new theoretical elaborations of the latter, probably, in the direction of closer attention to the individual, for the lack of which AT was criticized by Toomela (2000, 2008). Building on Leontiev's theory, we acknowledge that in a sense, Leontiev's theory can be called an overly straightforward and simplistic approach (Mironenko 2013, 2020). In many cases, general criticism of AT arising in the literature (Toomela 2000, 2008), should actually be attributed precisely to Leontiev theory. When foreign colleagues blame Russian Activity theory for it focuses "activities without taking into account the individual involved in the activity at the same time" (Toomela 2000, p.298), – it is all true as far as Leontiev's theory is concerned. Nevertheless, Leontiev's theoretical model attracts with its elegant simplicity and

¹ In the international discourse Russian word "cyδьext" (Subjekt) is often translated as subject, and "cyδъeκmusuocms" (Subjektivity) as subjectivity, which to our mind greatly distorts the meaning of the text. The concept of *Subjekt* (and "*Subjektivity*" as a qualification to be a *Subjekt*) refers to Rubinstein. *Subjekt* means a self-determined and self-actualizing agent. The proper language equivalent is the German word "*Subjekt*," which was actually used by Rubinstein, who had been educated in Marburg as a German philosopher. The active *Subjekt* in German contrasts to the passive Objekt. In English the meaning of the word "subject" lacks focus on the active role. On the contrary, a subject is something or somebody, which is exposed to somebody else's actions. For example, we can discuss a subject. In our opinion, the best solution is to preserve the German version of the spelling of this concept: the "*Subjekt*." This translation option is still not in use, although examples of preserving the name of a concept in a certain language in psychological discourse abound. The English international discourse contains the concepts *Id*, *Ego*, *'etant*, *'entre*, and others. The use of the German word "*Subjekt*" in the AT texts will preserve the meaning of the texts and convey it to the reader, which is worth ng, even if our computer insists on turning it into a "subject" and underlines it with a red line (see the issue explicated in detail in Mironenko 2019).

seems relevant in the context of the outlined societal changes, for its emphasis on the dialectic relations between a living being and environment in a macro-historical and evolutionary perspective.

Activity Theory on the Evolution of Mind

AT grounds on the idea that the mind arises and evolves through the interaction of the living creature with the environment (Mammen and Mironenko 2015). Thus, new types of psychic structures and processes develop to face tasks set by a new situation, the latter becoming more and more complicated. A good example of this approach is the theory of the development of the mind in phylogenesis, as described by A.N. Leontiev in "Problems of the Development of the Mind" (Leontiev 1973).

According to Leontiev, the mind first turns up in phylogenesis as an ability to react to environmental stimuli, which are not directly involved in metabolic processes, like absorption of water by plants or by gastric cells, but which serve as distal signals of biologically useful substances, thus, promoting ability to get to the these by moving.² "What then is the activity of animals with which the simplest form of their psyche is associated? Its main feature is that it is induced by some property or another affecting the animal to which it is at the same time directed, but which does not coincide with the properties that the animal's life *directly* depends on. It is governed, consequently, not by the affecting properties in themselves but rather by them in their relation with other properties."³

Subsequently, "forms of psychic reflection are developed along with complication of the organism's structure and depending on the development of the activity together with which they originate. Scientific analysis of them is therefore impossible other than on the basis of a survey of the activity of animals itself".⁴

Thus, Leontiev's logic for explicating the regularity of the evolution of mind is quite clear:

First he points out the type of activity, requested to maintain Subjekt's survival through interaction with the environment. This becomes the clue to explicating the qualities of the mind, necessary to maintain this sort of activity. Leontiev describes stages of evolutionary development of the psyche according to the complexity of the tasks solved at each stage. The analysis of the cycle of the transition of the mind to a new stage of development begins, following this logic, by pointing out a new class of tasks that life sets before the Subjekt, requesting new ways of interaction with the environment. These tasks determine the neoplasms that appear.

A revolutionary game-changing development occurs when human mind appears in phylogenesis, involving two entities inextricably linked: individual mind and culture – a new type of reality, shared by humans. The notion of "culture" has particular relevance and importance here, because it allows grasping simultaneously the "internal" and "external" realities. Grounding on the standpoint of the Marxist Activity Theory (Cole and Parker 2011), we see culture as a two-fold entity. On the one hand,

² http://www.igs.net/~pballan/Leontyev1981chapt2.htm

³ http://www.igs.net/~pballan/Leontyev1981chapt2.htm

⁴ http://www.igs.net/~pballan/Leontyev1981chapt2.htm

it is a characteristic of the "mind", an attribute of the subjective reality of humans, individuals and communities. In the same time, culture manifests itself as a part of the "external" objective reality also: as artefacts, technologies and cities, and as forms of social organization and institutions. This fact is well reflected in cultural psychology. Subtle links between the "culture in the mind" and cultural transformations of the external reality are disclosed, for example, in the works on art as a cultural phenomenon (Valsiner 2018; Glaveanu 2012).

Culture exists in the form of the interaction between human mind and reality, through the unity of the processes of transformation of the mind in interaction with the reality and subsequent transformation of the reality by the human being. Thus, the human living environment becomes sociocultural, and changes occur here at an incomparably higher speed, constantly growing with the course of history. Culture comes to life through processes of structuring the mind through the living conditions and then in the subsequent structuring of the environment in accordance with the mind's intentions. This circle or rather a spiral of mutual-generation is the essence of the phenomenon, a kind of Ouroboros. In a certain period, one or another part of this spiral (human activity or changes in environmental conditions) is more active, due to concrete circumstances. It is probably appropriate to speak here of a certain heterochrony in the development of the components of the holistic integrate cultural system, similar to how subsystems of the organism develop heterochronically. AT presupposes complex systemic regulation of the development of psychic mechanisms, which support Subjekt's activity. Those include, along with the "central unit" ("the mind"), the information acquisition (sensory-perceptive) and motor systems. Obviously, all parts reside in a dynamic state of constant heterochronous development and disequilibrium, so that a change in any part of the system inevitably entail changes in all of them, influencing the evolutionary development of the system as a whole. Moreover, the initial impulse can come from any part of the system. For example, the emergence of striated muscle was an important step in evolution of the mind. Because of that, a variety of movements appeared, and the structure of the nervous system became more complicated.

In the Russian AT tradition, there are direct statements that human biological evolution continues, and its most important factor is the emergence of new tools that mediate sensory-perceptual, motor and mental activity of a person (Mironenko 2013, 2020). For example, Ananiev wrote, that an important factor of progressive evolution of human sensory processes is the "progressive development of the instruments of labor, and technical means that broaden the field of sensory cognition" (Ananiev 1977, p. 88). It's worth to note that this is much in line with J.M. Baldwin reasoning, who proposed that individual abilities necessary to cope with current situation, promote survival, and, thus, are fixed in evolutionary development. The prospects of Baldwin's approach for contemporary psychology are noted by Jaan Valsiner (Valsiner 2020). The works of Ananiev and his colleagues present vivid facts testifying to the influence of specific activities, mediated by instruments and devices on the functional mechanisms of perception. The effects on the general functional state of the body as a result of their use are also shown (Mironenko 2020).

However, much more than it has ever been, contemporary technological gadgets are not only used for the information reception, but also to a significant extent, they mediate the activities of the "central unit" – the mind. For example, a massive change in the structure and functions of memory are observed in smartphone users (Aharony and Zion 2019). A computer/laptop/smartphone for a contemporary human who regularly uses it becomes literally a part of the brain, carried outside the body (supported by the so-called "cloud technologies"). The immediate future may be the mass introduction of such gadgets inside, in fact, into the space of the human body, like the so-called augmented technologies and biotechnologies (for instance, in the education system (Meletiou-Mavrotheris et al. 2020).

Claiming prospects of the AT for comprehension of this new world of human existence, we would like to note, that we do not claim AT to be the one and only approach which is of interest today in light of the outlined challenges. We consider Psychology (and, broader, socio-humanitarian disciplines) as an inherently interconnected but poly paradigmatic endeavor. Psychology originally developed as that, because its subject, that part of the reality that this science is seeking to assess, has the most complex nature, comprising many aspects that have different ontological grounds and, thus, require different versions of methodology and conceptual systems for their reflection. The entire psychological knowledge was obtained by particular schools, through the development of differentiated theoretical and methodological approaches. These developments relate to different aspects of the reality of the psychic: each school captures a certain foreshortening of that inexhaustible multidimensional reality as its basic theoretical model (see argumentation in more detail in Mironenko and Sorokin 2020). Therefore, seeking to reveal the prospects for the development of AT in the context of modernity, we in no way deny perspectives of other approaches or their relevance for contemporary psychology, neither neuropsychology, nor semiotics, nor any other. Neither had we set ourselves the task of reviewing, analyzing and criticizing other approaches, this lies well beyond the scope of the paper.

AT itself is also a complex formation comprising theories and approaches that differ from each other and partly contradict each other, even if we limit our analysis to Russian AT (Mironenko 2013, 2020). In the context of the AT there are also promising developments carried out on the basis of international schools, first of all we would like to mention Scandinavian AT (Engelsted 2017; Engelsted and Engelsted 2018; Mammen 2017, 2019). However, here we, again, do not set ourselves the task of reviewing various developments of AT, analyzing existing discrepancies, evaluating and comparing those. We focus here on a certain aspect of AT, which, in our opinion, first, is underestimated in the international discourse, and second, seems promising in the context of the ongoing transformations of human existence, outlined above.

Contemporary developments in psychology, including those in AT, are often done at the interface with other sciences, are interdisciplinary in nature, use the methodology and conceptual apparatus of other disciplines. Important AT developments refer to semiotics, linguistics, logic, mathematics. Here, we turn to the theoretical and methodological apparatus of sociological science (primarily, the concept of "de-structuraction" (Sorokin and Froumin 2020)), grounding on the Alexey N. Leontiev's assumption concerning the decisive role of the environmental changes in the evolution of the psyche (Leontiev 1973).

The Brand New World?

Artefacts have radically advanced in the twenty-first century (for instance, rapid development of Artificial Intelligence and Digital Platforms (Brynjolfsson et al.

Author's personal copy

2018), allowing constant transformation of medium of human development. This results in completely new reality where almost every sphere of life becomes subjected to change of unpredictable and undetermined scale and consequences.

Karl Marx wrote: "Hunger is hunger; but the hunger that is satisfied by cooked meat eaten with a knife and fork differs from hunger that devours raw meat with the help of hands, nails and teeth".⁵

A human whose activities are mediated by modern gadgets, from this point of view should be considered as a creature, qualitatively different from what it was before they appeared. The tools serving human activity in recent decades have been changing with increasing speed, transforming both "internal" and "external" sides of human life in the de-structuralized modernity (see Sorokin and Froumin 2020).

"De-structuration" does not imply that the social structures disappear (as some postmodernist theories has claimed long ago (see Denzin 1986)): ontologically individual and structural environments remain different entities, not reducible to one another. This idea contrasts not only to several post-modernist schools, but also to influential approaches in mainstream social science of recent decades, which tend to unite structure and individual agency in ontologically single entities like "field" (Bourdieu) or "structuration" (Giddens) (see Sorokin and Froumin 2020). In contrast to these theories, the concept of "de-structuration" stresses not the "dissolving" of individual in his or her social environments (however "hard" or "fluid" they may be) – but rather the malleable and ductile nature of social world, which expands transformative capacities of a person.

Thus, two radical innovations in the dynamics of socio-cultural processes appear:

- The "external", "objective", "material", part of culture is changing unprecedentedly quickly, rapidly leaving behind the "integral" experience accumulated by the society or community. People's daily lives evolve in constant interaction with civilization environment, continuously updated. It is a reality, where one often finds himself, as Ortega y Gasset described, "a *Naturmensch*" in the midst of a civilized world (Ortega y Gasset 1964).
- The relationship between social ("macro") and individual ("micro") within the "subjective", "internal", part of the culture is also radically changing. Not the integrated, aggregate, social representations and collective experiences manifested in mass culture, but ideas of concrete individuals (like, for instance, bloggers) become the core element and driver of daily changes of the contemporary societal "self-consciousness".

Traditionally, academic literature considers culture in its "subjective", non-material aspect, primarily as a "public consciousness", a set of ideas shared and preserved in society:

"A unique meaning and information system shared by a group and transmitted across generations, that allows the group to meet basic needs of survival, by coordinating social behavior to achieve a viable existence, to transmit successful social behaviors, to pursue happiness and well-being, and to derive meaning from life". (Matsumoto (2009, p. 3);

"...a pattern of shared attitudes, beliefs, categorizations, self-definitions, norms, role definitions, and values that is organized around a theme that can be identified among those who speak a particular language, during a specific historical period, and in a definable geographic region". (Triandis 1996, p. 408).

⁵ Karl Marx, Grundrisse (London: Penguin, 1973), p. 92.

Largely in line with this, the classics of the cultural-historical approach states that culture "lives" in society, and is assimilated by individual through the process of socialization. Thus, a higher mental function arises as an inter-psychic one, and then internalizes, becomes intrapsychic. According to Vygotsky, a higher mental function develops through joint activity with someone who has already mastered that: thus, external becomes internal, and inter-psychic becomes intrapsychic. However, Vygotsky did not focus on changes in culture, how they occur. The importance of the latter issue has been realized only recently due to the fact that the world has become too fast to change, so that to learn already socially known things is not enough to be efficient and successful in increasingly competitive environments. Although Vygotsky emphasizes that baby is the active subject of development, who takes from the culture what he\she needs, this relates just to the selectivity of his/ her assimilation of cultural tools, and not to the production of new ones. Thus, the classics of the cultural-historical theory is not enough for the twenty-first century, and has to be supplemented with other elaborations to respond to the new realities of accelerated social change.

As we have argued above, currently, the culture as a "public consciousness" does not keep pace with the change of the civilization environment, as each individual masters the latter, – for instance, by using gadgets, which directly connect him/her with global society, bypassing the traditional institutions and structures that in before limited and mediated the individual agency. Illustrative is recent discourse on the "Internet Access as a Human Right" (Kirchner 2019).

Basing on micro-social links and communities, proactively created with the help of social networks and technological platforms, the individual becomes the true creator and (co)creator of not only his/her own world, but of the shared social world, including rapidly changing institutions, simultaneously affected by different people, often, with different interests, goals and identities. Thanks to modern gadgets and platforms that permeate our lives, the individual's ability to influence social reality has reached unprecedented scale, including both the sphere of professional activity and the sphere of leisure as well as relating values, opinions, tastes, etc., that dominate in the society. A clear manifestation of this is the phenomenon of bloggers, whose audience grows in no time, and the influence extends to all areas of society (Archer 2019). Thus, de-structuration leads to the "ontological shift" (Mironenko and Sorokin 2018), which reverses the "poles" of socio-humanitarian reality; traditional relationships between, on the one hand, the individual and his\her "internal world" and, on the other hand, the "external" entities like social structures and institutions, radically change. It is not any longer a malleable and compliant individual, who tries to cope with the reality of crisp and tough "external" structures, like, for instance, corporate or political institutes. These and other social structures appear to be more subversive to change than any time before. The social reality becomes "liquid" (Bauman 2013), more and more lending itself to the transformative action of the individual.

AT for the de-Structuralized Modernity: New Tasks for the Next Stage of Evolution

Following the logic of AT, to comprehend the contemporary changes in human étant and éntre we stress the qualitative novelty of the tasks that life puts before humans in the twenty-first century. Integr Psych Behav

Let us recall the evolution of the concepts of a major universal ability to comprehend tasks, traditionally labeled "intelligence" in the academic psychology. At the turn of the 19th and 20th centuries, when the development of psychological theories of intelligence and tests began, properties such as the ability to quickly and accurately process big data were in demand - the corresponding theoretical models and tests appeared;

In the 1960s, with the computer revolution, a relative depreciation of these abilities came, because computers took that burden, and a wave of research arose in the sphere of abilities to make things, which were in demand but which the computer cannot do, labelled creativity.

In the last decades of the twentieth century, when the main type of professional activity became communication with people (sales, consultancy, various other practices associated with "service economy") the concepts of social-emotional intelligence arise.

The history of the evolution of psychological tests shows that, firstly, at a new stage of the development of human civilization, there comes a massive demand for certain general abilities that were not previously used in widespread practice, but which correspond to the tasks of the time. This sets up a request for the development of appropriate tools for the psychological science. From the standpoint of the AT, the emergence of qualitatively new concepts of intelligence and corresponding tests can be considered an indicator of the direction of development of human abilities, much in line with the logic of the "Baldwin effect" (Valsiner 2020). An indicator of the corresponding factual development of neoplasms depending on the social environment can be considered a well-known phenomenon of the constant growth of the IQ norms (Flynn 1987), as well as the unevenness of this growth, including even the possibility of certain decrease, which is typical in evolution of functions that lose their adaptive value (Flynn 2012).

Is the type of activity, which is becoming necessary in contemporary social life really a one fundamentally new? It is universally noted that contemporary world challenges a person to unprecedented levels of uncertainty, diversity, complexity and rapid changes. The main stressor in the new reality is the continuous volatility and polysemy of the socio-cultural environment. Thus, we argue that the main new challenge for the Subjekt, vitally important for survival in the new conditions, is the task of *maintaining of integrity and coherence of the a*) *Self-identity and b*) *system of links tying the socio-cultural environment* - in their dynamic unity.

Hence, the focus is on culture - personality relations and the socio-cultural identity of the personality.

Disputing the Constitutive View on Personality

As the socio-cultural identity of the personality was gaining more and more importance in academic discourse, a so-called "constitutive view on personality" emerged in the 1980s and has gained influence, which shows through high citation⁶ (Sandel 1982; Sampson 1985, 1988, 1989).

According to this view, in a situation of interaction with *a different* cultural environment, one's own culture appears as "not something that stands in the way of

⁶ Sampson (1988) got 419 citations in Scopus.

persons or something that persons must overcome in order to realize their real self, but rather it is the only vehicle available for persons to know and to understand who they are" (Sampson 1989, p. 918). As a reflection of the importance of socio-cultural identification for comprehending the essence of personality, persons have been increasingly often seen "as creatures whose very identities are constituted by their social locations...persons are constituted in and through their attachments, connections and relationships (Sandel 1982, p.179). Unlike the liberal individualist view, in which persons choose the lives they will lead and construct the kinds of community they will inhabit, in this alternative view, "persons do not choose the ends or purposes they will select to follow, but rather they engage in a shared, common process of discovery in which their goals and purposes are revealed in a never-ending process of living with others." (Sampson 1989, p. 918).

This viewpoint emphasizes the conditionality of a person by culture. Here a human appears a product and embodiment of the culture to which he/she belongs. With this interpretation, personality goals and values are generated in the space of social interactions and then they are internalized to form the subjective inner world of the personality, the "mind". In the light of "constitutive view" on personality (Sandel 1982; Sampson 1985, 1988, 1989), personality appears as a conditioned, programmed by culture entity, participating and relatively passively accepting the world of "his/her own" culture and entering into active interaction only with a "alien" culture, when contacting with the latter.

Pseudo-Individualism of the Neoliberal Ideology

Individualism of the traditional academic mainstream and broader public discourses of the second half of the twentieth century has long been a target for criticism. However, in the "liberal individualist view" on personality - there is a hidden paradox. On the one hand, it stresses the importance of an individual in comparison with structural and institutional environments, on the other hand, implicitly individual appears in this approach as a sponge, absorbing external structural forms, and not as an engine changing those (which would be more relevant to the empirically observed trends in the XXIst century, including de-structuration). In developed countries, over the last 50 years the ideas about a human being, as not only the main value, but also the "master of the world", remain paradoxically combined with a dependent, sometimes even parasitic understanding of what a person is. To some extent, it results from the negative influence of neoliberal ideology, which bases on the specific type of rationality (stressing mono-dimensional market success) and combines the cultural imperative of individual responsibility and justification of the existing inequality between various groups in terms of real chances for the success in life (Sorokin 2018a).

In this context, the persistent dominant approach in public debates implicitly bares a bizarre understanding of individualism. The emphasis is on the "rights" of INDIVID-UAL guaranteed by law, which implies huge requirements for the social environment. Institutions are supposed to create certain conditions empowering individual creative capacities.

From the ontological point of view, it means that an individual per se becomes a "secondary-order" entity. One can become a "Person" only in conditions of an

appropriate favorable environment. For example, the ideal in this quasi- (or pseudo) individualist model, emerged in the post-war western world - is the career of a person who has "made himself" - obtained an education, made a career in an organization, started a house and has a family that supports him/her. However, let us note that high quality (even though competitive) education, the labor market, the corporate environment, the political system (including the protection of gender, religious rights, etc.) - all of these institutions, as assumed in the "self-made man" model, are already built, well-established, well-balanced - to ensure the most comfortable, almost greenhouse conditions for the creative disclosure of personality.

Structural dynamics of societies in that time (middle and second half of the XXth century) fitted to the rational bureaucracy model, described by Max Weber, which implied specific skill requirements for different positions in organizational structure, as well as principles of accountability and measurement. Qualified labor was acknowledged as the major factor for increasing economic growth and societal development. The importance of this claim for academic and public debates is evident in the fact that three Nobel prizes in the late 60s-early 90s celebrated achievements of scholars, elaborating on human capital theory (Denison, Schultz and Becker) (see Kuzminov et al. 2019). However (as has been argued elsewhere (Kuzminov et al. 2019), the place of a human in this mode of growth is a respected one – but it is a role of the executor of pre-given regulations in a well-established mechanism. Other drawbacks of somewhat perverted understandings of "individualism", widespread in modernity, are analyzed in Charles Taylor's book "The ethics of authenticity" Taylor (1992), which emphasizes the dangers of subjectivism, the fading of moral horizonts and loss of freedom. According to Taylor, "Authenticity" - is a valid ideal, allowing overcoming the narrow selfishness of individualism ideologies and misleading attempts to substitute mutual respect and support with relativism. Perhaps, de-structuration provides a good opportunity for advancement of humanity, however, central for this advancement is recognition of the radical changes in societal environment and the subsequent treats and opportunities for the transformative individual actorhood. An important part of the current societal dynamics are populist movements (ethno-nationalism, right-leaning religious movements, and other such identity-oriented responses), which increasingly affect not only public sphere but social sciences on a global scale - to the extent that science becomes politicized and radicalized (see Sorokin 2016). However, these should not be seen as contradictious to the idea of expanding individual actorhood. On the contrary, perhaps, paradoxically, recent mobilization of radical movements manifest the "soften" nature of even the most "hard" and "solid" structures of twentieth century modernity (like political party or university), which are now open to interventions of a wide array of ideologies, both liberal progressive and antagonistic to liberalism, often driven by aggressive leadership.

Under de-structuration and "ontological shiff" (as its direct consequence) the transformations of human living are driven, primarily, not by pre-determined logics of the socio-cultural development – but rather by the individual actorhood. Thus, the core drama of global social world in the twenty-first century becomes not a struggle between macro-structures determining different sets of "rules of the game" for an "obedient" individual (a "cultural dope"), but rather an issue of complex interrelations and intersections between numerous dynamically changing ethically contextualized contexts (or "cultures"), of which individual is a co-creator. The actorhood irreducible to passively internalized "cultural effects" is the reason why the social world becomes so unpredictable, and, simultaneously, the tool for further social progress (Sorokin 2018b).

The traditional approach seeing interactions between cultures as interfaces between "fixed" entities becomes hardly relevant when the structure of culture itself is constantly transforming. The problem of intercultural communication is no longer the main one. Gradually the problem of the multiplicity and dynamics of cultural identities of a person becomes central (Kang and Bodenhausen 2015). In the global world, cultures are dynamically moving and mixing (Hermans and Kempen 1998) – internally, in the sphere of individual's mind and identity, and externally - in the sphere of social relations and roles. "Moving cultures" is just another manifestation of increasingly de-structuralized social world, along with manifestations in the fields of politics, economy, etc. (Mironenko and Sorokin 2018; Sorokin and Froumin 2020)). The *problem* of culture, initially manifested through the issue of cultural differences in the context of the global world, appears now largely as an internal problem of the individual, not only as something causing problems in the situation of interactions with others, but also as a factor causing internal discord and contradiction.

Thus, in the twenty-first century securing the coherence and integrity of both intrapersonal world and relations between individual and society become vital tasks. In line with AT we should ask, what are the neoplasms that appear in response?

Maintaining the Integrity of the Self-Identity and the Connectivity of the Socium in the de-Structuralized Modernity

Maintaining a holistic integrative coherence of the Self requires continuous managing and re-creating one's own self-identity. In the times of traditional society, a person's socio-cultural identity was determined by the clearly defined position in society, his/her social status, usually staying the same through the lifetime.

The industrial society encouraged mobility, the transition from one position in the social hierarchy to another entailing the change of social status and identity (for example, from a peasant to an urban professional) - but the social stratification was still pre-determined and rather rigid (which was a target for extensive criticism of capitalist societies from Marxist school). One could plan moving from one social status to another and to preserve certain status, once achieved. Some social niches (like those connected with professional occupations) grew up significantly (Meyer 2010). However, the possibilities for further "expansion" of social structure – were limited, implying that their always had to be large social groups, occupying underprivileged positions, usually connected with low level of formal education (like majority of industrial workers or people involved in agriculture).

Currently social status positions are eroding, professions are disappearing, and education received no longer determines occupational field. The socio-cultural identity bases not on the labels of social institutions, but on the individual experience reflected in social networks and deliberately managed by the author, the "Self" socially presented as well as the one "for personal use" – "Self-consciousness".

Integrity and coherence of socium also rests increasingly upon the active individual, who positions, allocates and re-allocates his/herself through myriads of communities, groups and identities. For the first time in history, the solid structures and social institutions: states, corporations, political parties etc., are no longer the pillars of society. Social interactions (in such fields as employment, politics and entertainment) increasingly drift onto platforms that are forming here and now and are subjected to constant change. The most important factor that actually ensures the connectivity and integrity of the commonality becomes the individual ability to interact voluntarily and, often, proactively with others in the constantly changing social environment, thereby maintaining the social whole.

Under this circumstances the "essence" of society changes; it becomes more about "communication" than about "structures". Structures are changing increasingly fast and sometimes die, but the flow of communication between individuals globally connected by technological advances – never stops, never dies; moreover, this communication constantly disintegrates structures and create new ones, manifesting the "ontological shift" (Mironenko and Sorokin 2018). The nature of a human being also transforms. Its psychic potential increases dramatically with technological advancements empowering not only general physical parameters, but also essential sensory and cognitive abilities. Smartphones, which we wear with us all the time, become not an "adjustment" to our body, improving our efficiency in a particular type of activity (like a hummer for a worker in the early industrial revolution). They become an integral part of ourselves, universally applicable and necessary for securing the integrity and coherence of both: individual and social whole (for instance, our social manifestations, personal profiles in social networks, are available mostly via smartphones).

Thus, technological advancement not only generates problems of maintaining the integrity of the Self-identity and the connectivity of the socium, but also gives clues for their solution. Personal pages in social networks, like Facebook, LinkedIn or other, always available through the smartphone, allow one to comprehend and integrate one's own experience, select the desired identities and create new ones. No wonder that social networks are so popular: when the wind blows, one should build mills, not walls.

Discussion and Conclusion

The de-structuralized modernity of the current times, rapidly increased with global pandemic, brought along two radical innovations in the socio-cultural context of human life:

- The "external", "objective", "material", part of culture, is changing unprecedentedly quickly, rapidly leaving behind the experience accumulated by the society or community. Rapid development of Artificial Intelligence and Digital Platforms results in completely new reality where almost every sphere of life becomes subjected to change of unpredictable and undetermined scale and consequences, making people's daily interaction with civilization environment, continuously updated and filled with new technologies, kaleidoscopic.
- The relationship between social (macro) and individual (micro) in the "subjective", "internal", part of the culture is also radically changing. Not the shared collective experience manifested in social institutes, mass culture and shared values, but bright ideas of concrete individuals (like, for instance, bloggers) become the core element and driver of contemporary societal "spirit of the time". Thus, the "ontological

shift" (Mironenko and Sorokin 2018), which has shaped in the twenty-first century, reverses the "poles" of socio-humanitarian reality.

In response to the new de-structuralized reality, approaches are in demand, which have the potential to comprehend the changing human étant and éntre. We argue that Activity Theory (AT) has the potential to face these challenges. AT grounds on the idea that the mind arises and evolves through the interaction of the Subjekt with the environment (Mammen and Mironenko 2015). Thus, new types of psychic structures and processes develop to face tasks set by a new situation, qualitatively new mental features arise in and for the new sociocultural reality. Analysis of the new types of interaction of the subject with the environment becomes a way to prognosis of the upcoming neoplasms. In the same time, applying classics of AT to the new reality entails the need for theoretical elaborations of the latter.

Following the logic of AT, to comprehend the contemporary changes in human étant and éntre we focus on the qualitative novelty of the tasks that life puts before humans of the twenty-first century. The main stressor in the new reality is the continuous volatility and polysemy of the socio-cultural environment of the Subjekt. Thus, we argue that the main new challenge for the Subjekt, vitally important for survival in the new conditions, is the task of *maintaining of integrity and coherence of the a*) *Self-identity and b*) *system of links in the socio-cultural environment* - in their unity.

Maintaining a holistic integrative coherence of the "Self" and socio-cultural selfidentity in the era of the ontological shift implies a qualitatively new ability - *managing* one's own self-identity. In de-structuralized modernity, socio-cultural identity of an individual cannot depend on the labels of social institutions (as they are themselves eroding). It has to be built on the individual experiences integrated in social networks and deliberately managed by the author: the "Self" socially presented as well as the one "for personal use" – "Self-consciousness".

Integrity and coherence of social also rests upon the active individual. For the first time in history, the solid structures of social institutions: states, corporations, etc., are no longer the pillars of society – as platform technologies substitute usual ways of social interactions across all the institutions (brightly demonstrated by the global pandemic for education, employment, entertainment, etc. (Williamson et al. 2020)). Now it is the individual ability to interact with others that ensures, on the aggregate level, the connectivity and integrity of the social whole.

Contemporary technologies not only generate problems of maintaining the integrity of the Self-identity and the connectivity of the socium, but give clues for their solution. They become part of human mind and body, and allow one to face new challenges, comprehend and integrate one's own experience, select the desired identities and create new ones while keeping interaction with others.

So, what are the abilities, crucial for the de-structuralized modernity, which are in demand in the new living conditions, which can maintain the survival and progress of human civilization that we may try to predict following the logic of the Activity Theory? These abilities, first, should be "social" in their essence (because the new qualities of society emerge with de-structuration bringing new challenges). Secondly, these abilities must be "creative" – as the task of constant creation and re-creation of the Self and the society is coming up. We can go further and hypothesize that these might be "hyper-rational" and "trans-logical" abilities to correlate and integrate various, often

contradicting layers and aspects of contemporary volatile and polysemic reality, built on different logical grounds and modes of ratio. For instance, languages and communities coexisting in the globalizing world, hypostases and temporal layers of the existence of one's own Self, – setting it right, when the "Time is out of joint".

Funding Russian Foundation for Basic Research (RFBR), project № 20–013-00260; Basic Research Program at the NRU HSE (Academic Excellence Project '5–100').

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval This article does not contain any studies with human participants or animals performed by any of the authors.

References

- Aharony, N., & Zion, A. (2019). Effects of WhatsApp's use on working memory performance among youth. *Journal of Educational Computing Research*, 57(1), 226–245.
- Ananiev, B. G. (1977). Current problems of human nature investigations (in Russian) (379 pp). Moscow: Science.
- Archer, C. (2019). Social media influencers, post-feminism and neoliberalism: How mum bloggers 'playbour' is reshaping public relations. *Public Relations Inquiry*, 8(2), 149–166.
- Bauman, Z. (2013). Liquid modernity. Cambridge: John Wiley & Sons.
- Brynjolfsson, E., Rock, D., & Syverson, C. (2018). Artificial intelligence and the modern productivity paradox: A clash of expectations and statistics. In A. Agrawal, J. Gans & A. Goldfarb (Eds.), *The economics of artificial intelligence: An agenda* (pp. 23–57). Cambridge: National Bureau of Economic Research, Inc.
- Cole, M., & Parker, M. (2011). Culture and cognition. In K. D. Keith (Ed.), Cross-cultural psychology: Contemporary themes and perspectives (pp. 133–159). Chichester: Wiley-Blackwell.
- Denzin, N. K. (1986). Postmodern social theory. Sociological Theory, 4(2), 194-204.
- Engelsted, N. (2017). Catching up with Aristotle: a Journey in quest of general psychology)" // SpringerBriefs. Theoretical Advances in Psychology (157). Cham: Springer.
- Engelsted, N., & Engelsted, N. (2018). General Psychology Walks Again. Journal für Psychologie, 26(1), 74– 96.
- Flynn, J. R. (1987). Massive IQ gains in 14 nations: What IQ tests really measure. Psychological Bulletin, 101, 171–191.
- Flynn, J. R. (2012). Are we getting smarter?: Rising IQ in the twenty-first century. Cambridge: Cambridge University Press.
- Glaveanu, V. P. (2012). What can be done with an egg? Creativity, material objects, and the theory of affordances. *The Journal of Creative Behavior*, 46(3), 192–208.
- Hermans, H. J. M., & Kempen, H. J. G. (1998). Moving cultures: The perilous problems of cultural dichotomies in a globalizing society. American Psychologist, Hermans, H. J. M., & Kempen, H. J. G. (1998). Moving cultures: The perilous problems of cultural dichotomies in a globalizing society. *American Psychologist*, 53(10), 1111–1120.
- Kang, S. K., & Bodenhausen, G. V. (2015). Multiple identities in social perception and interaction: Challenges and opportunities. *Annual Review of Psychology*, 66, 547–574.
- Kirchner, S. (2019). Mobile internet access as a human right: A view from the European high north. Hossain et al.(eds.), Enablement besides Constraints: Human Security and a Cyber Multi-disciplinary Framework in the European High North.
- Kuzminov, Y. A., Sorokin, P., & Froumin, I. (2019). Generic and Specific Skills as Components of Human Capital: New Challenges for Education Theory and Practice. *Foresight and STI Governance*, 13(2), 19– 41. https://doi.org/10.17323/2500-2597.2019.2.19.41.

- Leontiev, A. N. (1973). Probleme der entwicklung des psychischen. (Russian ed., 1959). Berlin (DDR): Volk und Wissen.
- Mammen, J. (2017) A new logical foundation for psychology. / Cham, Switzerland : Springer, 2017. 130 s. (SpringerBriefs in psychology).
- Mammen, J. (2019). A Grammar of Praxis: an Exposé of "A New Logical Foundation for Psychology", a Few Additions, and Replies to Alaric Kohler and Alexander Poddiakov. *Integrative Psychological & Behavioral Science*, Bind 53, Nr. 2, 09.06.2019, s. 223–237.
- Mammen, J., & Mironenko, I. A. (2015). Activity theories and the ontology of psychology: learning from danish and russian experiences. *Integrative Psychological and Behavioral Science*, 49(4), 681–713. https://doi.org/10.1007/s12124-015-9313-7.
- Matsumoto, D. (2009). Teaching about culture. In R. A. R. Gurung & L. R. Prieto (Eds.), Getting culture: Incorporating diversity across the curriculum. Stylus: New York.
- Meletiou-Mavrotheris, M., Charalambous, C., & Mavrou, K. (2020). Augmented Reading through emerging technologies: The living book approach to teachers' professional development. In S. Yu, M. Ally & A. Tsinakos (Eds.), *Emerging technologies and pedagogies in the curriculum* (pp. 297–313). Singapore: Springer.
- Meyer, J. W. (2010). World society, institutional theories, and the actor. Annual Review of Sociology, 36, 1– 20.
- Mironenko, I. A. (2013). Concerning interpretations of activity theory. *Integrative Psychological and Behavioral Science*, 47(3), 376–393. https://doi.org/10.1007/s12124-013-9231-5.
- Mironenko, I. (2019). Concerning the vocabulary on personality in Russian psychology: "Subjekt" vs "personality". *Psychology in Russia: State of the Art, 12*(2), 45–57. https://doi.org/10.11621/pir.2019. 0205.
- Mironenko I.A. (2020). Boris Ananiev's theory of self-determination of human development. Oxford Research Encyclopedia of Psychology, 2020. https://doi.org/10.1093/acrefore/9780190236557.013.664.
- Mironenko, I. A., & Sorokin, P. S. (2018). Seeking for the definition of "culture": Current concerns and their implications. A comment on Gustav Jahoda's article "Critical reflections on some recent definitions of "culture". *Integrative Psychological and Behavioral Science*, 52(2), 331–340. https://doi.org/10.1007/ s12124-018-9425-y.
- Mironenko, I. A., & Sorokin, P. S. (2020). Concerning paradigmatic status of psychological science: for a flexible and flowing psychology in the face of practical and theoretical challenges. *Integrative Psychological and Behavioral Science*, 54, 604–612. https://doi.org/10.1007/s12124-020-09530-7.
- Ortega y Gasset, J. O. (1964). The revolt of the masses (1930). New York: New American Library.
- Sampson, E. E. (1985). The decentralization of identity: Towards a revised concept of personal and social order. American Psychologist, 40, 1203–1211.
- Sampson, E. E. (1988). The debate on individualism: Indigenous psychologies of the individual and their role in personal and societal functioning. *American Psychologist*, 43, 15–22.
- Sampson, E. E. (1989). The challenge of social change for psychology. American Psychologist, 44, 914–921.
- Sandel, M. J. (1982). Liberalism and limits of justice. Cambridge: Cambridge University Press.
- Sorokin, P. (2016). 'Global sociology'in different disciplinary practices: Current conditions, problems and perspectives. *Current Sociology*, 64(1), 41–59.
- Sorokin, P. S. (2018a). Making global sociology in the context of neoliberal domination: Challenges, Ideology and Possible Strategies. *Sociological Research*, 23(1), 21–42.
- Sorokin, P. S. (2018b). The ethical challenge for sociology in the face of global modernity: toward solidarityoriented and ethically contextualized practice. *The American Sociologist*, 49(3), 414–433.
- Sorokin, P. S., Froumin, I. D. (2020). "Structure–agency" problem in 21st century: Social development and research implications. *Sotsiologicheskie Issledovaniya*, no. 7, pp.27–36.
- Taylor, C. (1992). The ethics of authenticity. Cambridge: Harvard University Press.
- Toomela, A. (2000). Activity theory is a dead end for cultural-historical psychology. *Culture & Psychology*, *6*, 353–364. https://doi.org/10.1177/1354067X006300.
- Toomela, A. (2008). Commentary: Activity theory is a dead end for methodological thinking in cultural psychology too. *Culture & Psychology*, 14, 289–303. https://doi.org/10.1177/1354067X08088558.
- Triandis, H. C. (1996). The psychological measurement of cultural syndromes. American Psychologist, 51, 407–415.

- Valsiner, J. (2018) Ornamented Lives. Advances in Cultural Psychology: Constructing Human Development. IAP, 2018.
- Valsiner, J. (2020). From clay feet to new psychology: Starting the move. *Integrative Psychological and Behavioral Science*, 54, 515–520. https://doi.org/10.1007/s12124-020-09564-x.
- Williamson, B., Eynon, R., & Potter, J. (2020). Pandemic politics, pedagogies and practices: Digital technologies and distance education during the coronavirus emergency. *Learning, Media and Technology*, 45(2), 107–114.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Irina A. Mironenko is a Professor of Psychology at the St. Petersburg St. University, St. Petersburg, Russia. She received her MD from the Leningrad St. University (now St. Petersburg St. University) in 1978. Then she worked for 14 years at the State Optical Institute named after S.I. Vavilov in St. Petersburg, ng experimental research on visual perception in complex systems of optical devices. Meanwhile in 1980-1984 she took a Ph.D. course in Leningrad St. University and received her Ph.D. degree (Candidat of Science) in 1984, defending a thesis on visual perception of three-dimensional shapes. When "Perestroika" began, psychological research at the State Optical Institute was cut off, and she began her carrier in education. Since 1992 and up to 2009 she worked at the St. Petersburg University of Humanities and Social Sciences, beginning as a Docent and gradually becoming a Professor and the Dean of the Faculty of Culture. Her professional interests in this period turned to theoretical psychology and in 2005 she defended her Doctoral thesis on cultural determinants of psychological theories and received her Doctoral degree (Doctor of Science, 'Habilitated Doctor') in theoretical psychology. In 2009-2017 she was a Professor of Psychology at Pushkin St. University, St. Petersburg, and since 2014 she is a Professor of Psychology at St. Petersburg St. University. Collaborating with the Niels Bohr Centre for Cultural Psychology at Aalborg University since 2014. Address: Irina Mironenko, Saint Petersburg State University, St. Petersburg State University, 7/9 Universitetskaya nab., St. Petersburg, 199,034 Russia, e-mail: mironenko.irina1@gmail.com.

Pavel S. Sorokin is an Associate Professor, Senior Research Fellow, Institute of Education, National Research University Higher School of Economics (HSE), Russian Federation. He received his Specialist (Master) degree in 2009 at the Faculty of Sociology, St. Petersburg St. University. In 2009 he moved to Moscow to Higher School of Economics (HSE) for Ph.D. program and defended his Ph.D. thesis in sociology in 2013. Since 2010, he has been working in Higher School of Economics (HSE). In 2016, he joined the Faculty of Sociology and the Institute of Education. His research encompasses renovating theoretical and methodological tools of the current international social science, making it more capable of dealing with the challenges of the global world in various fields: academic research, policy sociology and public endeavors. His recent published papers in English include articles in the following Scopus-indexed journals: Current Sociology, Sociological Research On-line, Comparative Sociology, Filosofija, Sociologija, The American Sociologist, Society and Economy, Psychology in Russia: State of the Art. Address: Institute of Education, National Research University Higher School of Economics, Myasnitskaya Ulitsa 20, Moscow 101,000, Russia