

***New people and a new type of communication***  
**Lyudmila A. Markova, Russian Academy of Sciences**

Steve Fuller considers the important topic of the origin of a new type of people. He calls them intellectuals, not wanting, apparently, to deviate too much from the terminology used to refer to people of intellectual labor. Fuller (2013, 12) gives the following definition:

An intellectual is someone who makes a living out of the production and distribution of ideas. The focus on ‘ideas’ is quite important because it means that the intellectual must be adept at communicating in a variety of media — e.g. not simply academic texts — through which ideas may be conveyed.

Intellectuals act as, what Fuller calls, ‘agents of distributive justice’. He means that if scientific knowledge is considered as free from any human characteristics, its distributive version “sets up the intellectual as an anti-academic figure who assumes that any complex conception worth conveying can be done effectively in the popular media” (12).

Therefore, an important feature of intellectuals is their ability to use media for the wide dissemination of ideas. For Fuller, the humanitarian component of intellectuals’ publications differed from the 20<sup>th</sup> to the 21<sup>st</sup> centuries. The answer to the question “what does it mean to be ‘human’” in the 20<sup>th</sup> century addressed threats to global civilization that included poverty, genocide and nuclear warfare. The aim of the intellectual was to make scientific texts humane and show the possibility of their application in practice.

However, a new century poses new challenges, and we need to move on. The ‘threats’ to humanity facing us today are of a more second-order, conceptual nature. They pertain to how to divide the ‘human’ and the ‘non-human’ — with the division itself increasingly called into question. Consider these three recent developments: the greater moral and legal status given to animals, the greater blame placed on specifically human behavioral patterns for various ecological crises, and the massive scientific and technological breakthroughs relating to the cracking of the genetic code and the proliferation of computer code (Fuller 2013, 13).

To my mind, the main point in this characterization of scientific knowledge is that Fuller admits the possibility of including in knowledge social features such as its usage in practice and certain ethical norms. Although he has in mind knowledge in the popular press, the move is towards social epistemology. The next step might be rethinking the fundamental knowledge in academic journals in terms of their integral social integral nature. Allow me to add the need to highlight the specific role of digital media, which not only facilitates communication, but also transforms it. But we shall speak about this below.

## **The creative class in Russia**

The same issue of this ‘new type’ of people is discussed now in Russia. We use the notion ‘creative class’. The mass meetings and demonstrations that took place recently in Moscow gave rise to this issue. The participants of these actions are not poor and do not protest against high prices or bad roads — their demands are of another kind (they are more of a ‘conceptual nature’ in Fuller’s terminology). Our intellectuals want fair elections and fair trials. They are against corruption. And they are for freedom. They have limited access to conventional means of mass communication such as television, newspapers and radio. The main means of communication are social networks. However, this does not mean that these people do not see such threats to civilization as “poverty, genocide and nuclear warfare” (Fuller 2013, 12). These threats remain, but in order to overcome them it is necessary to improve the political system.

## **The specificity of a network communication**

Industrial society helped create the artificial world and, so, our physical lives through the production of material things: vehicles, houses and bridges, clothing, food, machines for their production and many other objects, which are important. Today, the surrounding artificial world helps us, first of all, to think. Many mental operations are performed thousands of times faster by machines than people and, for scientific computing, such an ability is of paramount importance. Changes in communication among people also are no less significant.

## **Humanization of knowledge**

Now, I return to the understanding by Fuller of the communication between intellectuals and the other people that seems, to him, as humanizing existing scientific knowledge for human benefit. Such communication should not be just understood by the lay public; rather, it should help to resist threats to human existence. According to Fuller, this is the main feature of the information provided by new intellectuals. In this case, scientific knowledge loses its most important attribute — to be free of all the properties associated with a person. New intellectuals appeal to people not with the aim of making understandable the logical structure of a scientific theory by its popularization, but to show the possibilities of its use in society.

This characteristic of the new intellectuals’ publications significantly changes their nature. Scientific knowledge is oriented not to the object of study, and not to the outside world, but to the needs of people. Such an approach retains a strong connection with the classical way of reasoning. The results already received by scientists are taken into account. Ignored were both the process by which they are obtained and the author of this process.

Meanwhile, the development of philosophy in the 20<sup>th</sup> century shows that the focus of interest shifted to the personal pole of scientific investigations. In modern times, all creative activity remained outside the logic of scientific knowledge. Epistemology was not social. However, with the development of such areas as the logic of dialog, of culture,

and of communication, the vector of research changed to the opposite direction. We now define the content of knowledge not so much by the object being studied as by the person studying it. Perhaps we can already answer the question, which Collier likes to put: “How, and why, we know what we know?” We know what we know because we consider the knowledge (that we know) not as a result of study, but from the point of view of the process of how the author obtains it. We can repeat the course of one’s thoughts and draw our own conclusion as to whether or not they were correct. The result of the study is not outside of me as it was in classical epistemology. Knowledge depends on me and it cannot be “meta-knowledge”.

As a result, the main epistemological problem becomes not how knowledge obtained in science is distributed and used in society, outside the researcher’s mind, but how it is produced in his mind. To understand this process, you must be closer to the person engaged in scientific work. The context of his activity is more important than the connection of the result obtained by him with the previous knowledge and the place of it at the time arrow of science development. The main role belongs to the space, not time. For scientific research it is important what is located next to it, namely, the conditions of the emergence of the result, the need for people to obtain this very knowledge.

Motivation is shaped both by the state of affairs in science and by the needs of society.

### **SERRC as a response to the request of society and of science**

The foundation by James Collier of the *Social Epistemology Review and Reply Collective* (SERRC) is an important event from three points of view. First, the SERRC intensified the professional life in the area of social epistemology. Second, it showed the possibilities of a new type of communication among representatives inside other scientific and humanist communities. Third, the problem was posed of the expressing thoughts just born in the mind of the scientist. Very likely, the main feature of the debate on the SERRC is the ability to make almost immediately available to readers thoughts just born in the mind of author. From my point of view, it must be emphasized that a new idea arises in the mind of one man, regardless of how many people participated in the discussion.

I remember a presentation by Richard Rorty in Moscow many years ago. Rorty said that a scientific idea may arise out of a simple conversation not necessarily on scientific topic. At the time, I thought he was talking nonsense. I now see some sense in his claim. However, I still do not consider myself as a supporter of the philosophy of Rorty.

Today, you can often encounter the opinion that the author of new knowledge is a team, not an individual. I disagree. Indeed, the study of scientific activity usually suggests that it is carried out by means of direct communication between people within the scientific community (Kuhn), or a laboratory (Knorr-Cetina, Latour), or a case of scientific discovery (Bloor, Kasavin — “case studies”), or by means of electronic journals (Collier). Communication among scientists is a necessary condition for their work. In the above cases, it is assumed that as a result of this cooperative labor (Marx’s terminology) new knowledge is born. For Marx, only material things can be produced in the conditions

of direct communication in the frame of cooperative labor. Science has been of interest to Marx as a soul of material production. Marx clearly fixed the opposition of the universal labor as creative to the cooperative or combined labor in industrial society. The material production needed only the results of creative activity of scientists.

Today the situation is different. The technique that we need is not material in the full sense of the word. It reproduces, to a greater or lesser extent, the properties of our mind, not only the laws of inanimate nature. These are the different types of personal computers, electronics in planes, cars, appliances etc. To construct such a technique, it is necessary to know the laws of our thinking. For Marx, it was important that the communication among scientists gave results that could be used in material production. Today, we want to understand a way of obtaining new knowledge in order to reconstruct it (more or less fully) in the working of machines. It is becoming increasingly important to know the structure of our mind, not the laws of nature. The idea that the author of a new result is collective, rather than individual, appeared, apparently, because of the formation of communities of scientists working side-by-side in a particular location. The laboratory demonstrates most clearly this type of research.

If we want to understand the process of the birth of a new idea in the mind of scientist, on what can we rely? Thomas Kuhn, more than anyone else, influenced the contemporary nature of the study of social moments in the development of science. For him, the main act was the victory in the competition among paradigms — each of them being individual and different from others. But this event was not the birth of a new knowledge. All participants of the discussion, including the new paradigm, already existed at the time of the beginning of the competition. For Kuhn, the emergence of a new idea in human mind, as well as the transition from the old to the new theory, cannot be understood logically. Still, he was sure that a new idea emerges in the head of a concrete person. The first thesis (the emergence of the new theory) went unrecognized by critics. But for the second thesis (the transition from the old to the new theory), Kuhn was criticized severely. The likely reason for this criticism was that no one knew what to do with creative thinking from the logical point of view, but it was quite possible to infer deductively the new theory of the old one in the frame of classical logic, and it seemed natural to preserve this procedure.

I believe that Kuhn's idea about the incommensurability of paradigms — perceived by his colleagues as a weak point of his theory — was, in fact, an important step in the creation of a new logic. Kuhn showed the inability of classical logic to solve the problems faced by contemporary epistemology. In Kuhn's system, there was no direct evidence of the signs of any new type of rationality. Rather, his closest followers inclined toward empirical research. However, over time, it became apparent that if classical logic could not cope with the difficulties encountered, the creation of a new logic is inevitable.

Merab Mamardashvilli believed that the number of scientists who agree with the Pythagorean theorem, for instance, does not make it more or less true. The knowledge is considered as existing from the moment of its appearance in the mind of scientist. But to make knowledge accessible to the other people, you need to put it in the language, oral or

written. Only a materialization of thought allows one to make it understandable by others. Only then does it become possible to criticize, or agree with, new knowledge.

Vygotsky writes of an inner speech in the human mind in which wandering thoughts are put into proposals having their own laws and their own grammar. This speech is a basis for external language that is oriented for others and makes thoughts understandable to them and communication possible.

Ideally, the electronic journal dialogue between the reader and the author is on the verge of internal and external speech. What will be the next step in the development of communication? Maybe we will communicate without making the transition from internal to external speech? What kind of technology will Collier offer us then instead of the SERRC? Or, perhaps, technology will not be needed? The relation of thinking and language becomes especially problematic.

### **Some presuppositions for the new type of communication**

We can say that the main feature of the philosophical background of the new type of communication is placing time in the background and bringing forward space. In dialogue, we communicate with participants as if out of time. If we deal with scientists, Newton and Bohr for instance, we consider each of them as having the right to self-determination and individuality, regardless of their place in the arrow of time. And quantum mechanics does not destroy the mechanics of Newton, they coexist and their dialogue (through the correspondence principle and the principle of complementarity) helps to refine and to understand better each of them.

French mathematician René Thom, who was interested in the problems of biology and their philosophical interpretation, saw the object of biology (and not only of biology) as a structure in multidimensional space that should be examined geometrically in the frame of topology. He believes it is possible to consider all biological phenomena as an expression of some geometrical entity that could be called vital field.

Deleuze pays great attention to the notion of surface, on the study of which he focuses his analysis. Surface — that is, to Deleuze, the true depth that is released and comes to the surface. Only here it is discovered and can be the subject of the reflection. Geography (the space) is more important for philosophy than history (time).

It would be not difficult to continue this list of ways to address problems in space rather than time. But maybe it is enough to say that this change of the role of space is connected with the appearance of many subjects, instead of one, in non-classical logic. And if we have many subjects, they have to be different and each have their own context as the basis of their existence and their activity. Context is formed by the state of affairs in science at the moment and the immediate environment that is next to the scientist engaged in research. This situation can be seen in case studies or in the laboratory and, to a certain extent, in electronic journals.

## **Fundamental science in the context of relationships of a new type**

As I understand Fuller, he suggests spreading scientific knowledge to society in a form accessible to the lay public. An important condition is that the information include possibilities regarding both its use in practice and moral concerns. I would like to clarify this thesis. Fuller says that regarding a change in knowledge that one should add what was absent in the academic variant of the author's presentation. In this he sees the main difference between scientists and new intellectuals distributing scientific knowledge in the media. I have a different opinion. The social significance of the fundamental science of the day lies at the very beginning of its production. Social orientation, along with the decision of purely scientific problems, is a motivational stimulus for the development of science. In biomedicine, for example, the set up of the experiment depends on what kind of socially significant outcome scientist wants to get.

Discussing these issues, one must keep in mind the origin of a new type of research centers such as technoparks and innovation centers. Innovation is not the same thing as new scientific knowledge. You have yet to convert fundamental scientific knowledge into applied knowledge, which you may use in production, and it may not be possible immediately. Innovation, as the product of a technopark or innovation center, possesses, from the beginning, both scientific and practical values.

My answer to Fuller is that we need not make practice (which is somewhere next to science, but not in science, understood as knowledge) one of the scientific knowledge components in mass media publications in order to understand New Intellectuals. Rather, we need to consider academic knowledge at its origin as containing the social aim of its production. The creation of the artificial world in which we live is possible only if its authors know the needs of society (including the market) and of the possibilities of science at this moment. Scientists themselves are new intellectuals and not the authors of the publications in mass media.

## **Creation of electronic journal by Collier**

I have read the interview with James Collier (*The Bubble Chamber*, 10 February 2013) and "About James H. Collier" (<http://www.collier.sts.vt.edu/>) which helped me to understand better the role of electronic journal. I was impressed how seriously the editor and his team think over the goals they want to achieve, relying both on their philosophical and sociological knowledge and on their practical experience.

I was interested primarily in the formulation of philosophical problems that are really important in finding out what makes this version of social epistemology different from the classical one. I completely agree that problems, selected by Collier, are really important and their discussion is useful to refine positions. However, I must apologize in advance for any possible inaccuracies, for what there are causes. I am not familiar with Collier's work and I can judge about his views only on these two small texts. On the other hand, it is difficult for me to express thoughts briefly on such complex issues. But I shall try.

1. I agree that social epistemology must be normative. However, it is important that the normativity of social epistemology differs from the normativity of classical epistemology. Each type of normativity has two poles. On the one hand, all members of the community (in our case, epistemologists) have to obey adopted rules. On the other hand, each individual makes it a little differently than his neighbor. Distinctions are inevitable. For classical epistemology, the first pole is crucial. Individual distinctions are more important for social epistemology. This is the reason not to speak about meta-science in social epistemology.

2. Collier refers often to dialogue and so, in connection with this, to a beginning. This seems to me very important for the understanding the logic of social epistemology. Every person (every author of the SERRC) is an individual and has their own position, their own “beginning”. This is necessary for a dialog and for any conversation. If we were all the same, we could not find anybody with whom to communicate.

3. It seems to me that interdisciplinarity is understood differently in social epistemology. We are not dealing with the fact that one object, knowledge (for instance), is studied by different disciplines. Classical epistemology as a philosophical discipline was never interested in the social environment of scientific knowledge. It was the matter of sociology of science, which, in turn, did not study the logical structure of knowledge. In the mid-20<sup>th</sup> century sociologists made scientific knowledge, its logical structure, their own object of study. Problems of philosophy and sociology became common, a new discipline emerged, social epistemology, instead of separate disciplines, philosophy and sociology of science.

Many interesting and important issues remain outside this comment. I hope I managed to convey my impression of the seriousness of Collier’s design, of the solidity of its intellectual basis. The journal provides wide opportunities for discussions, which, unfortunately, are little used by us, authors. But, as Collier likes to say, we learn as we go.

**Contact details: [Markova.lyudmila2013@yandex.ru](mailto:Markova.lyudmila2013@yandex.ru)**

## References

- Collier, James H. 2013. “Interview with James Collier of the Social Epistemology Review and Reply Collective by Mike Thicke.” *The Bubble Chamber*. 10 February. <http://bit.ly/1b8klXG>
- Fuller, Steve. 2013. “What Does It Mean to be an Intellectual Today? An Interview with Steve Fuller by Filip Šimetin Šegvić.” *Social Epistemology Review and Reply Collective* 2 (10): 12-17. 6 September. <http://wp.me/p1Bfg0-Zf>