Tendencies in Modern Higher Education System through ANT

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Abstract

The article considers modern tendencies prevailing in the higher education system while training technical specialists nowadays. According to the author, excluding the humanitarian courses from curriculum results in the complete dissolution of subjectivity in the impersonal world, which is deprived of 'living' knowledge, i.e., definite knowledge of a definite person. The application of such an approach is illustrated by the actor-network theory (ANT). It supposes subject integration with his moral imperatives and categories into the actor-network system being the social and technological unity of material and non-material components. Such depersonalization can be reckoned as a feature of the modern technologically computerized education. While studying a number of works by ANT founders, it turned out to be clear that such an approach eliminates any differences between natural and humanitarian, engineering and philosophical knowledge. As a result, the net emerges consisting of numerous actants. It is characterized by a collective action resulting in subjectivity disappearance in the net interaction, which requires from every participant his 'building-in' a model with the functions being delegated him in advance. The report concludes that an 'alive' component is disappearing from the higher education nowadays when the main stress is being made on the knowledge acquired a priopi, not a posteriori. It is high time thinking about the quality of the educational system preparing 'narrow-profile' specialists. They may act as 'bolts' in actor-network models that have lost their individuality and ability to any reflection.

Keywords: Higher Education, Specialist, Positive Thinking, Mind Experiment, Actor-Network Theory, Actant, Subjectivity, 'Alive' Knowledge

1.   Introduction

Modern society offers unlimited opportunities to a person to get some information and gain some knowledge in various scientific spheres. At the same time the culture of thinking, reading, understanding the text that has been read or heard disappears. The higher school as a public institution doesn't develop any critical thinking elements or teach to gain knowledge. As a rule, it gives the foundation of some behavioral patterns in digging necessary one. A human being is unable to reflect and define a volume of knowledge, skills and experience being crucial for his professional and public life as he turns into a part of socio-technical nets. However, there appears a false feeling of competence in the subject he studies or the activity he practices. The reason is the algorithm of almost any action or reply to any answer can be found in the Internet. There is a feeling that everything is known and we should just use the information provided.

This is the way to the information consumerism. Technological development reduces the off-line social communication time, for we tend to spend a lot of it on surfing the Internet. Virtual reality invades human lives faster and rougher. Messaging in chats and social nets substitutes real communication. We prefer video lectures or their short clips to auditorium ones. We try to follow all the news without missing them. As a result, we get the views and ideas imposed on us. The target of human existence shifts to earning money and consuming everything we can including information.

Nowadays the human society has closely come to a gloomy future version that was described in the novel "Fahrenheit 451" by Ray Bradbury. He is extremely prophetical in its warnings. The writer demonstrates the consumption society in the raw. It has lost a possibility to think independently, to analyze the events, and to make own conclusions.

"Books cut shorter. Condensations, Digests. …Classics cut to fit fifteen-minute radio shows, then cut again to fill a two-minute book column, winding up at last as a ten- or twelve-line dictionary resume. …many were those whose sole knowledge of Hamlet was a one-page digest in a book that claimed…

We must all be alike. Not everyone born free and equal, as the Constitution says, but everyone made equal. …Breach man's mind. Who knows who might be the target of the well-read man?" [Bradbury 2008, pp. 52-55.]

The author pays a strict attention to such problems as mass media social manipulation, excessive involvement into the technical progress, and substituting ethical values with consuming ones. The main idea of the novel is the impossibility of human future without the previous generations' experience, which is stored in books as its main sources and carriers. It can have the most crucial consequences for the society as this behaviour is able to lead to its complete destruction.

2.   Body

Recently there has appeared a tendency in the higher school to exclude philosophy courses from the curriculum of technical students. The modern higher school administrations follow the example of P.A. Shirimsky-Shikhmatov, the Russian

Empire's Public Education Minister of the XIXth century, who believed that "philosophy usefulness is not evident, but its harmfulness is possible" [Nikitenko 2005]. They explain this fact by the statement that "positive thinking" formed by special disciplines does not require any critical thinking skills from students. The paradox is that today's and tomorrow's students have to create new technologies crucially influencing and transforming social life in general and individual life in particular without its due reflection. There is a contradiction to Auguste Comte's idea here: "Now, when human mind has created celestial, terrestrial, mechanical, chemical, organic, vegetal, and animal physics, it has to create social physics to complete the system of observation sciences" [Comte 1971, p. 562]. We can suppose following Comte's statement that natural sciences are unconceivable without a social component, i.e. the communicative action creating demand and calling them into being. It is clear that the main part of the surrounding world can't be measured or calculated exactly. That's why it will include philosophical metaphysical ideas, which don't exclude the social nature. The absence of any knowledge of philosophy leads to the complete dissolution of subjectivity in the featureless world that doesn't have any alive communication, but virtual "communicative actions".

The brightest example of applying such an approach is Bruno Latour's popular concept of actor networks as a result of communication practice. Following Auguste Comte's ideas, he suggests a transition from natural sciences to social philosophy. According to Latour, philosophical concepts are ridiculous due to the fact that they create "constructs" that are necessary for understanding the surrounding world [Latour 2006]. He simplifies the construction process up to building and creating. As a result, subject of cognition with his moral values and imperatives dissolves in the heartless world of actors and networks. They represent a social and technological integrity of material and non-material components. The complete depersonalization and dehumanization are unfortunately becoming the features of modern computerized and informatized education, but it is not to its credit.

At the end of the XVIIIth century, Immanuel Kant suggested separating the spheres of theoretical and practical mind application, i.e., science and morality [Kant 2003]. As a result, the field of rationality moved to subject and his activity. However, Kant's theory introduced epistemological subject as an ultimate abstraction that could be only transcendental one overcoming the empirical borders. I think it is fruitful to mention Edmund Husserl's idea of intentionality in connection with the above. It takes forming the idea of interaction of subject's consciousness and the cognized object as its fundamental one. The objective interpretation of subject's feelings is revealed in the flow of phenomenological entity. This approach includes intersubjective connections relative to formal and transcendental logical explanation of cognition. It gives an opportunity to build and conduct mind experiment with any object.

The Russian writer Vladimir Odoevsky in his novel "Russian Nights" made one of the first mind experiment in Russian literature tradition in 1844 [Odoevsky 2014]. He introduced apocalyptic descriptions of future due to technical and medical achievements that had led to the earth overpopulation. He thought that the only outcome could be collective, i.e., last suicide for all humanity. The number of earth inhabitants had increased so great, that they slowly destroyed all constructions to use land in agricultural purposes. It is necessary to understand here that Russia was an

agricultural country at that time, and the main disasters were starvation and a lack of land for processing in agricultural purposes. Their lives were full of struggle for survival, and suicide, considered as a great sin by the Christian church, turned into an exploit to help others to survive. The people, who tried to save their lives, were treated as criminals. Odoevsky projected this scenario could result in the philosophy of hostility to life. He finished his novel with "Messiah of Despair" as Earth explosion destroyed the planet and humanity. Thus, he was against western way of scientific and cultural development for Russia, calling to keep its identity and spiritual uniqueness. Nevertheless, as we can see, these were only suppositions, that might turn into reality in future.

This example demonstrates that similar models become more actual in the modern world. The reason is subjectivity dissolves in the objectivity flow in the actor-network approach. It causes grading human cognitive abilities to a subject "allocated" in the social world. This subject is no more a researcher, a scientist or a scientific community separated from the social world. According to Michel Callon, "allocated" subject of cognition doesn't reflect the reality, but participates in its creation. Innovations are collective, not personal ones. "The cooperative does not propose the alternative solution to a general problem but a particular solution to a series of very specific problems" [Callon 2007, p. 334]. There is no sense to oppose those who make statements and those who realize them, i.e., the final knowledge turns out to be impersonal. It is spread further by social nets based on modern technologies.

The borders between subjectivity and objectivity disappear in the actor-network theory, i.e., cognition as a process stops its being because of blurring its epistemological foundations. After studying a number of works by the actor-network theory founders, it turned out to be clear for me that such an approach eliminates any differences between natural and humanitarian, engineering and philosophical knowledge. There is no necessity in them as any actant (i.e., "involved in the activity") of the network combines heterogeneous components and relations without any strict hierarchy, i.e., a hybrid reality appears. Its feature is an interaction of alive objects, social and theoretical constructions, etc. on equal rights. There appears a network that consists of a number of actants. Its main feature is a collective action. The coordination of functioning network elements is due to interelement connections that help to interact all its components.

3. Conclusion

Thus, an 'alive' component is disappearing from the higher education nowadays when the main stress is being made on the knowledge acquired a priopi, not a posteriori. It is high time thinking about the quality of the educational system preparing 'narrow-profile' specialists. They may act as 'bolts' in actor-network models that have lost their individuality and ability to any reflection. What future will they have? Will they be able to adapt to the rapid changes of the modern technically innovative world as they don't possess enough knowledge to overcome the borders of their narrow professional sphere? I think these questions don't get any answer as the applied character of the modern higher education system doesn't provide a specialist all range of competences for critical thinking of the perceived information to turn it into "alive" knowledge. As a result, the higher school function is not to teach skills of independent work anymore. It doesn't teach methods and mechanisms of self-education during a

specialist's professional life or ways of searching solutions for professional tasks. It doesn't form the professional scope of views or the depth of thinking. It is characterized by a collective action resulting in subjectivity disappearance in the net interaction, which requires from every participant his 'building-in' a model with the functions being delegated him in advance.

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