

THE POSSIBLE NEW IDENTITIES IN SCIENCE AND PHILOSOPHY (*)

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ABSTRACT

In the last couple of decades, many attentions have been devoted to both cyborg science as the big science and complexity science as nonlinear science which share the same common features to supply the “knowledge” to provide new raw material for the prosperity of mankind.

On the other hand, as stated by postmodernists, we are living in simulation world where the reconstruction has already started. In this new age, since all the identities deconstructed, no one can claim that the identity of physicists and philosophers will be exempt from losing their human behaviors.

More recently, I approached to describe the new identities of the physicist namely “cyborg-physicist” as *simulakr* and “post-physicist” as *zuhur*. I investigated the differences of these identities in cyborg science and in complexity science under the guidance of some simulation theories on social systems.

In this paper, according to philosophy of complexity science and cyborg science, I will consider the possible influences of my “cyborg-physicist, *simulakr*” and “post-physicist, *zuhur*” descriptions to philosophy of education system as well as philosophy world.

Keywords: Contemporarily Education, Cyborg Science, Complexity Science,

1. Introduction

According to the vision of the modern education systems emergences of disordered human dynamics can not have any contribution to sustainable development of the society. Because of that modern paradigms in science and philosophy are mostly regulated for the isolation of these emergences in modern research of education. In other words; in particular, disorder, uncertainty, coincidence and surprise are considered as no-role in building up the modern education systems.

On the other hand, during to the Cold War, both USSR (East) and the USA (West) started a fight to be il capo di globalization by supporting especially high-cost scientific research (big science [1]) under the umbrella of improving sustainability of

modernity. After the Cold War, due to this fast inflation in science, the process of education accelerated through global learning projects.

We are also aware of how the world of human becomes more and more complex every day. The modern simulation mechanisms (i.e. progress, optimism, rationality, absolute knowledge) in social and human sciences rapidly started to lose power. Increasing number of scientists in sociology and psychology and philosophers, called post-modernists, began to criticize the projects of modernity while being well equipped with western education [2].

In this paper; cyborg science [3] and complexity science [4] that are both based on computerized paradigms as science of all sciences, will be shortly summarized. One of the workable theories of these rapid progresses for the social dynamics in human societies, simulation theory, will be shortly reviewed for educational researchers. For the aim of this paper it will be consulted simulation theory of Jean Baudrillard [5] (for the human behaviours in ordered social dynamics with modernity reality). In addition to Baudrillard's theory, It will be also focused on "Disorder-Sensitive Human Behaviours, DSHB" simulation theory which is recently proposed by myself to critique disorder-sensitive human behaviours and social dynamics as disorder agents in simulation world [6]. Finally, the future role, mostly in education world, of cyborg scientists/philosophers who are emergences of cyborg science/theory (*simulacra*) [3, 5, 6] and post-physicists/post-philosophers who are emergences of complexity science/theory (*zuhur*) [6] will be considered by DSBH simulation theory.

2. Cyborg Science and Complexity Science

"Cyborg Science" [3] have been based on computerized paradigms of western knowledge. It is nominated to overcome the problems of global science with high technology and to give a new vision to the political configurations in evolution of global educational programs as well as in the scientific and philosophical societies (the international research collaborations, the scientific publications, etc). Already many scientists and philosophers work to construct a bridge between the big (powerful) science and cyborg science through international, scientific and educational collaborations. But it should never be forgotten that cyborg science can be also exploited by "the global powers" to foster their own militarist, economical, political and cultural interests rather than solve the global problems of the world, like water, food and ecology, especially in times when the human body becomes more machine-like. Also, one of the first aspects of the costs of the industrialization based on cyborg science, is pollution (the hazards of radiation, the Green-House effect, desertification, etc.) which is rising fast. Cyborg science is also coding the technogenetics of the body and its dependency on energy is rapidly increasing. Unfortunately, our world has unlimited energy sources such as wind, nuclear and solar. For this reason, how human being could stop the developmental methods and technological projects of forming a cyborg-like (machine body) being, as well as the control of a cyborg's communication and behaviour to "cyborg science" [2, 3].

On the other hand people are surrounded with a complex web of civil societies, national-international organizations, non-governmental organizations and digitalized information. In this age, human beings constructed by cyborg are losing their object

status. The social dynamics of bodiless systems are becoming virtualized and the hyper-reality part in the simulation world is rapidly expanding. One has to be reminded that the simulations of identities structured by modernity's impositions will never replace reality [5, 6]. For this reason, the simulation mechanisms defined in Jean Baudrillard's simulation theory [5] will be developed to control human beings and they will be replaced by ordered consuming social dynamics dependant on globally marketed high technology. So no one can claim that the identity of scientists and philosophers will not be deconstructed and they will be exempt from losing their human behaviours in simulation world.

In 1960's, the chaos theory revolution via computers has proved that Newtonian mathematical technology (integral and differential calculus) had limited applications. And in the last couple of decades it's successful applications (i.e. non-linear science; simulation theory, complexity theory, coincidence, self-organization and surprise) in both natural and social sciences motivated postmodernists (mostly philosophers) to critique hegemony of modernity also in the human societies [7]. In particular, one of them, "Complexity Science" is presented as the science of all sciences in all scales [4, 7]. As in cyborg science, the computer is a solo paradigm in complexity science to understanding emergent behaviors. It is an ideal candidate to determine agent interactions in complex systems as well as to code complex systems with self boundaries from organic systems to human social systems, from financial movements in stock exchange (money!) to global crashes in world market (petroleum!), from traffic jams (Istanbul traffic is good example!) to guerrilla actions (suicide bombers!). According to complexity scientists and philosophers [4, 7], a crowd is a perfect example of such an emergent phenomenon which emerges from a large number of interacting people. And they specify the collective action in human social systems such as; the learning communities, violent of actions of different groups of people who are fighting for control of the same resources, e.g. land or political power [4, 7]. Additionally complexity philosophers are still talking about whether or not the complexity science is postmodern [4, 7, 8]. From one side, the complexity researchers believe that complexity science will lead us to transform our view of the universe, from other side they don't agree "yet" on rigorous definition of the complexity. But most of them already consider common ingredients as composing complex system [4, 7, 8].

3. Simulation and Education

What happening short range (lecturers) and long range (publications) in non-linear process are the characterizations of complex systems. Because of that education itself is simulation mechanisms as dynamic of the human social systems in learning communities since open public lectures started in history. Today's educational simulation mechanisms are also rapidly and globally growing with great impression particularly in long range correlations by internet and media. The main use of computer based simulation in education is to allow the students to learn relationships and principles between real and imaginary world [8, 9]. Apart from today's simulation mechanisms as self organized systems in education world [9], as stated by postmodernist philosophers, we are living in simulation world where the reconstruction has already started [2, 7, 8]. In this new age, since all the identities

deconstructed, no one can claim that the identity of scientists, philosophers and educational researchers will be exempt from losing their human behaviors. As a result of this post-modern compromise, recently, numerous metaphorical simulation theories as critique theories are presented for the dynamics of human societies. For example taking into account of Jean Baudrillard's simulation theory [5], scientists, philosophers and educational researchers who are interested with cyborg science (I call both of them as cyborg scientists [10]) could be stated as "simulacra" at the virtual world. Through Baudrillard type simulations (ordered with modern reality) cyborg scientists as simulacra will produce hyper realities to cover their identities as scientists, philosophers and educationalists which they will eventually lose. They will camouflage the reality of searching ways to replace the human being by a computer dependent "cyborg scientist". These computer dependent simulacras will remove the human being away from militarism, fast money exchange in the economy, big money consuming international space and high energy experiments. Furthermore we understand from Baudrillard's simulation theory [5] that scientists, philosophers and educational researchers who are not involved in the cyborg science, first of all, can not be "simulacra's" and they can not be the hyper-reality of a simulation world. They can not also replace a reality in modern world, and can not contribute to the sustainable of the big sciences (cyborg science) in the simulation world. Recently I proposed a simulation theory ("Disorder-Sensitive Human Behaviors, DSHB" simulation theory) to be proposed to critique the complex human beings and the society [6]. This theory suggests that the "chaotic awareness" is the reality principle of disordered simulations of a disorder-sensitive human being or of the collective action of such people. In this theory, *zuhur* (emergence; Arabic *Zahara*) of disordered simulations unlike images (*simulacra*), do not happen with the concern of demolition, and while reacting to a reality, do not claim to have a continuous surreal contribution to civilization (the domination of modernity). According to this theory, *zuhur* of disorder simulations with the reality principles of chaotic awareness will also play a major role in the destruction in the world. In addition to Baudrillard's simulation theory, by DSHB" simulation theory one can conclude that the competition between *zuhur* and simulacra in the destruction in the simulation world has already started within the human, family, society, science, art and literature world, national and international constitutions. The most hostile of the conflicts between the *zuhur* and simulacra is the war of civilizations which has a global scale.

4. Challenge of Simulation Emergences in the Community of Scientists and Philosophers via Research of Education

Today, while all the identities given by the modernity are in erosion, one can not claim that academics, intellectuals and researchers will stay away from the deconstruction metaphor and not lose the identities that they had gained possessions with. Particularly, one needs to ask ironically; will the reformation of bodies of a scientist, a philosopher and a researcher show such divergence as in the example of an invading USA soldier in Iraq vs. the resisting suicide bomber? Their bodies represent the same technology with the digital equipment and the bombs they carry. The American soldier shows predicted physical behaviours under the influence of camouflaged simulations of saving humanity, bringing justice and peace for humanity; the concepts which he believes to be his possessions (ordered simulation). And resisting suicide bomber shows behaviours of chaotic awareness to protect

her/his land that comes from a culture and tradition that due to historical facts did not play any role in forming modernity (disordered simulation) [6].

DSHB simulation theory also informs us that the emergence of a scientist/philosopher/educationalists (I call them all together as post physicist [10] different than cyborg scientist is possible. The post-physicists will be *zuhur* of the disorder simulations (DSHB's Simulation) mostly in trans-disciplinary non-linear science and its applications in educational research, and in its metaphorical critique theories in philosophy. The manifestation of the post-physicist [10] is written with the aim that scientists, first of all as non-linear science (mostly complexity science) researchers, will not be emergence of the concern of the exclusion from high energy international research, such as the CERN experiment which is camouflaged by the virtual simulation of finding "god's particle". And post physicist will not participate in schizophrenically uncertain experiments for the global technology and energy domination. It is not manifested emotionally, with the expectation of scientists who will achieve freedom from global threat of cyborg science, be in search of new ways in all areas, and devote themselves to honesty with humanity and perversion with modernity, without any hesitation. The manifest, with the DSHB simulation theory, could be considered post-utopic text (complex utopia text [11]) in salvation of the humanity as well as being a critic of the science world of the future. At least for this fundamental reason, one can consider that the revolution in education in this age would be shaped by both cyborg scientists and post-physicists in different ways.

How can it be possible for post-physicists to stay alive when cyborg scientists work on improving cyborg science using the ordered simulations? It is definitely not possible to predict the outcome of this condition, today. But we know that some regions in world, having the complexity (a collection of many social dynamics agents) whole for the *zuhur* of post-physicists, also have one of the most versatile environments for them to stay alive.

It can also be stated from DSHB simulation theory that one of the most attractive and most fruitful geographies for the *zuhur* of post physicists are in the Middle East. Because, in the Middle East the reality principle still stands excluded from modernity as this region has disorder-sensitive dynamics, and is fed by the Gnostic and Heterodox philosophy [10, 11]. And ethnical, religious, cultural dynamics are agents of disorder simulations. Because they are interacted with each other with the description of chaotic history data with no central directions. In this age the post-physicists as *zuhur* of these disordered simulations will respond to the new global occidental educational projects that their people are facing or will face quite soon. Therefore they must be actively involved in efforts to build an educational cooperation in this region by following the main human characteristics of high education and scientific activities.

5. CONCLUSION

The global revolutions and global study of learning in natural and social science is being defined and shaped by both cyborg scientists and post physicists in different ways. In order to make the internationalization, globalization and integration succeed, scientists, philosophers and educational researchers in both science have to release,

time after time, high quality works in class (education) or in lab (research) and put on an enthusiastic and serious show at political venues.

In all global problems, the worst scenario would be the possibility that mostly cyborg science could be used by global powers for their own political and economical incomes. Simulation mechanisms of global technology and communication (media) will contribute to the process of cyborg scientists. In this case Cyborg Science in study of learning can never provide solutions to central search for peace, harmony and tolerance. One of the possible simulacra of this schizophrenic simulation could transform cyborg scientists that they mercilessly throw human being within themselves away. But, with reference to DSHB simulation theory, the destructions in the world will not happen only as the simulacra, which are the emergences of the ordered simulations with reality principle of western knowledge. Emergences of disorder simulations with the reality principles of chaotic awareness (*zuhur*, in this case: post-physicist) will also play a major role in the destruction in the world.

The competition between *zuhur* and simulacra in the destruction in the simulation world has already started within the human, family, society, science, art and literature world, national and international constitutions. The most hostile of the conflicts between the *zuhur* and simulacra is the war of civilizations in global scale. It will not be a surprise that the conflicts between *zuhurs* and *simulacra* (for the aim of this paper; cyborg scientists and post-physicists) in simulation world will play the central role in “clash of civilization”. Since there is a potential risk of human homogenization through a regional study of learning community or a global study of learning community, this competition could be able to change the world better, and improve the quality of life, but it is also true that it could have adverse effects on the world. It is not going to be a surprise that the conflicts between cyborg scientists and post-physicists in scientific and educational simulation world will play the central role in “clash of civilization”. Since there is a potential risk of human homogenization through a regional study of learning or a global study of learning, this competition could be able to change the world better, and improve the quality of life, but it is also true that it could have adverse effects on the world. However, referring to DSHB simulation theory, one can have hope for post-physicists of long living disordered simulations with chaotic awareness, in scientific and educational world, for the chance of creating a new world where humans can live in peace.

For example, let's have a look what happens in the Middle East. This is not domino case in which agents are linearly interacted, this is a typical complexity case. Because in this geography, apart from modernity simulation mechanism by education, internet and media, ethnical, cultural and historical dynamics still interact with each other with long and short correlation and with no central directions as agents of disorder simulation. The *zuhurs* (this paper focused on post-physicists) from this region of the world will respond to the new global occidental projects that their people are facing or will face quite soon. Therefore they must be actively involved in efforts to build an international cooperation by following the main human characteristics of high education and scientific activities. The organizations, established by post-physicists will advocate the duty of scientists and of philosophers in taking responsibility for the consequences of their work that uses high technologies in research and education through both cyborg science and non-linear science. Such organizations can also initiate a period of everlasting peace for the people in these

regions. But there is an open-ended problem. How can it be possible for post-physicists to stay alive in Middle East, since the copies of cyborg scientists/philosophers in this geography work on improving cyborg science using the own realities of disordered simulations? It is definitely not possible to predict the outcome of this condition, today. But we know that this region, having the complexity (a collection of many interactions of cultures, political events and heterodox philosophy) whole for the *zuhur* of post-physicists, also has one of the most versatile environments for them to stay alive.

DSHB simulation theory states that it is hopeless for post-modernity to lead and to control the destruction in order to keep the western civilization in power. And Baudrillard's type simulacra in simulation world that replace the reality will not be sufficient enough for the sustainable progression of the scientific and educational world as well as western civilization. Referring to DSHB simulation theory, one can have hope for *zuhur* of long living disorder simulations with chaotic awareness, particularly of post-physicists in scientific and educational world, for the chance of creating a new world where human being can live in peace.

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