HOMO TECHNOLOGICUS VERSUS HOMO CIVILIS
Socio - Cultural Impact of the Bionic and (BIO) Technological Applications on Humans

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ABSTRACT

Faced with a science tirelessly creative, able to act not only on the body but also the entirety of life of individuals, it is necessary to understand what is the transformative impact of each person, and the set of critical thresholds that hinder the translation of research results into real products for a territory. Understanding the collective impact of the new bionic and (bio) technological does not mean only touch the concept of health but, above all, the social welfare. A term related to all those tools that can improve the quality of life of each of us.

KEYWORDS: (Bio) Technology, Life, Transformative Impact, Mutation of Identity, Strengthening the Body, Behavioral Changes.

INTRODUCTION

The prostheses to replace and extend the limbs, pacemakers , artificial organ transplants - the most recent being that of a kidney created in a lab from human cells and rat - are examples of a technology that is embodied in our nudity in order to normalize a body decreased. But there's more. To the normalization, in fact, there is also the strengthening and the possibility to overcome the human physical limits. We can think about the wearable exoskeleton, the chip under able to multiply the functions of the organism. The generation of clusters of innovation is continue, and the aim is to improving the lives of senescent - in numerical growth - of the new generations and the current ones. Think of the robot-nurse connected to an 'intelligent' home to assist the elderly, keep keys and medicine. Or think of the 3D organ printer with an ink of cells and proteins,that can also provide to the future parents the perfect 3D resin copy of the fetus. Or again, the chip under skin capable of alerting the police station nearest to activate a video camera. These are just some examples of innovative technological tools linked to the existence of the individual and the population. But it is good to ask yourself if watching to a lot of research and development corresponds to actually use the finished product. If it is true that technology, economy and society co-evolve, it is true that the technologies follow their own logic: technologies are not entirely malleable to the economic and social

signals. For example, Italy is full of extraordinary discoveries which, however remain in the laboratory without generating site in their collective well-being. It is all about social acceptability? Difficulty in tracing down a single policy? Or atrophy between research system - medium and economy?

OBJECTIVES AND RESEARCH METHODOLOGY

The bionic applications and (bio) technology are the most advanced of the technical and scientific development of our days. Understand their transformative impact on the individual and population means to overstep the boundaries of medicine and transplant surgery. In fact, the proliferation of scientific knowledge is changing not only the conception of what a human being, but also the health and of the disease. The (bio) technologies, in fact, cut across all levels of human existence up to open and complete the concept of health with the psychological well-being of man. To be clear, the implantation of a chip under the skin is not limited to monitoring and normalization of the body, but it also opens up the strengthening. For example, sensors that measure physiological parameters are the same are the same as those that can read a person's experiences, digitally encode it and then replicate them in the mind of another: a real upload of our mind. And if the recovery of the optimum condition of health appears to be the main purpose of a microchip implant in the eye that can restore sight to those who have lost, the augmented reality Google glasses - currently on the market – offer overcoming the physical limits. These particular tools allow to transmit a stream of data (maps, messaging, train schedules, information on the person you look at it) through a transparent lens. Or think of the glasses to protect the privacy thought light emissions mislead the recognition programs somatic, creating "noise" that confuse the picture. Not only recovery of lost function, therefore, but also improving the quality of life. But, to what extent these new possibilities offered to us by technology are applied in our country? What are the reasons why technologies designed and implemented at universities and research institutes are still perceived as utopian and almost impossible to carry out?

The research project is developed by taking into account two types of interventions that invest directly human life:

1. 1 .Bionic approach
2. 2 .(Bio) technological approach

In addition, the impact of bionic and biotechnological applications is studied by building two models:

1. 1 .Macro utopian model
2. 2 .Micro realistic models designed to understand and measure the application potential and the socio-cultural impact on a real territory.

BIONIC APPROACH

Bionic approach means the artificial creation of what already exists in nature: a true imitation of organic. A few years ago, talking about bionic mainly meant to draw the figure of the humanoid robot. The neuromorphic engineering, designing electronic circuits able to mimic the nervous system of the animal world, capable of creating artificial sensory systems, allows the robots to be "intelligent" as capable of taking behaviors more and more close to those of humans. Next to the "intelligent" robot interactions are studied even more sophisticated between man and machine with the creation of artificial organs that allow the survival of man suffering from specific diseases, but also to enhance some faculties of the human being . Now, while the former are accepted with many doubts on the ethical level (known to all ethical debates on the application of certain technologies), the second face barriers to be accepted, implemented in the body and, therefore, in society. If the pacemaker, the femoral prosthesis are now widely accepted, the contact lenses in augmented reality, designed at the University of Washington, which are micro computers that can add information about the person looked at the images , such as the ' identity, are perceived as a futuristic and utopic reality. But what is the social and cultural impact of all this? What changes psycho- behavioral focus on the individual?.

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(BIO) TECHNOLOGICAL APPROACH

(Bio) technological approach means intervention of technology on biology. But it is a technology as a science that affects all aspects of life, including the psychic and mental health, able to change the way of being a person. The symbiosis between artificial and natural generates, in fact, profound changes, which are not simply related to the manipulation of the body. The (bio) technologies span the individual as a whole to make a cyborg psychic. We think excessive use of the internet, the race at the last iPhone model: a "digital addiction ", ie , a drug of the third millennium . Smartphones and tablets are now capable of generating real withdrawal symptoms, already classified and divided into syndromes in recent manuals on mental disorders . But a paradox emerges : if , on the one hand , the creation and research of technological tools increases dramatically , on the other hand , atrophy territorial brakes and fails to take the form of fertile ground for the empirical development of this technology . The same proposal for electronic voting there are many obstacles in its implementation. But what makes the real territory still unprepared to accept in full the innovation? It is all about politics and economics?

MACRO UTOPIAN MODEL

The aim of the macro utopian model is the creation of a hypothetical paradigm, able to outline the most important aspects of the relationship between technology and the individual. Investigating the latest scientific research that fall on the physicality of man, the macro model intends to delineate a size " as it might be ." Not only normalization of the body, not only solutions to diseases, but also strengthening of the latter. This step is essential for the opening of the so-called post-human, where physical intervention has as its aim the development of superhuman abilities. In fact, if we look with an utopia tecnofila the potential of today's technology, we can understand the extent to which the human being is capable of dissolving in the car, and the extent to which we are ready to implement such a change.

MICRO REALISTIC MODEL

In contrast, the micro realistic model is aimed at understanding the real impact of technology on man and society. In such a context, the Italian territory is being studied to represent the state of the art and to postulate the possible socio-cultural transformations made   by bionic applications and (bio) technology. Also, is of fundamental importance in understanding if there is a directly proportional relationship between the incessant scientific discoveries in the field and the fallout on the actual territory. For example, a study theme appears to be the gap between normalization and improvement. In other words, today the (bio) technologies and bionic components have the overriding objective to "repair" the body, such as pacemakers or prosthetic limbs, etc. ... , but there are research facilities on the territory, Universities and research centers , which already have equipment (think 3D printers capable of playing anything and, therefore, also a limb) and the results to be made accessible, but they are not, at least to the extent that should / could be. From here the questions we ask in the center of this study: to what extent research and application are connected to each other , and more importantly, what are or should be the communication strategies, political and economic to reduce this gap and to ensure that the developed technologies are perceived as a chance to improve the welfare of the citizens.

CONCLUSION

The advanced scientific progress thus opens the way to several reflections. For example, the bionic eye and the resulting increased reality really enhance the human being? When you go beyond the "repair" and the recovery of the natural capabilities of the human body what really happens? Are we becoming more free individuals or increasingly subject to a technological control and consumerism of our body? In fact, the cyborg is the combination of the utopian vision of the post-human creation and the figure of a person driven by the desire of control and appropriation. The cyborg is the emblem of the becoming, of the possibility of a continuous change. But who leads us to change and to modify our bodies? Is it a real

need or just a desire? Perhaps today's desires can be realized more easily. However, the process to enhance ourselves follows accurate market policies. Multinational corporations, in fact, become the promoters of the innovations that we can wear or embody. The figure of the cyborg, in fact, is considered as a body capable of consuming and being consumed. It consumes because constantly conforms to the standards generated and required by the market and it is consumed because it offers the market a chance to integrate on the human body objects of desire. The advanced scientific progress, in fact, not only provides the possibility of posthuman images generated by a perfect blend between technology and nature, but also intertwine relationships with flows of consumption. The consumption technology and the modern information age help to create a body that continues to be a privileged object of control and power. This means that there is a strong ambivalence. The body of the contemporary individual is suspended between the power and strengthening of its functions, and the subjection to a power capable of acting on the life of each of us. The autonomy and the ability to choose what we want for our body join the subjection of a power that follows -first of all- the logic of the market. The opening of physicality to all possible metamorphosis of today, proposes as an essential element a body that produces and consumes. It is necessary to ask ourselves, in fact, the extent to which the mix of technology and the body is able to create cyborg bodies, or stop at simple cyberbodies, given that while the cyborg bodies refer to the emancipatory and imaginative qualities, the cyberbodies are "high-tech bodies" which follow the laws of the market. In fact, the figure of the cyborg as posthuman figure able to return lost bodily functions, begins to disintegrate. Today, professional medical interventions are not only aimed to cure certain diseases, but they are demanded by consumers. The need is replacing the desire. The contemporary individual incorporates technological elements to align with the news suggested by the global market. For this reason we can speak of cyberbodies: bodies subject to market and consumer culture.

REFERENCES

1. *Arendt H.,(1998), The human condition, University of Chicago Press*
2. *Bauman Z., (1998), Globalization. The human consequences, Columbia University Press*
3. *Bauman Z., (2005), Liquid life, Polity Press, Cambridge*
4. *Bauman Z., (2007), Consuming life, Polity Press, Cambridge*
5. *Bauman Z., (2010), Living on borrowed time. Conversations with Citlali Rovirosa - Madrazo, Polity Press, Cambridge*
6. *Bazzicalupo L., (2008), Il governo delle vite, Mimesis, Milano*
7. *Bazzicalupo L.,(2012), Ambivalenza nell'immaginario e nella rappresentazione del corpo nei dispositivi biopolitici, II Convegno C.R.I.S.I.S., Teramo, 1-2 Marzo*
8. *De Nardi P., (1999), Sociologia del limite, Meltemi, Roma*
9. *Dilthey W., (2012), Einleitung in die Geisteswissenschaften, Vandenhoeck + Ruprecht Gm, Germany*
10. *Figiani M., (2008), Oltre l'impersonale, in L. Bazzicalupo (a cura di), Impersonale. In dialogo con Roberto Esposito, Mimesis, Milano*
11. *Fromm E. (1976), To have or to be?, Harper e Row, New York*
12. *Gehlen W., (1990), Philosophische Anthropologie und Handlungslehre, trans. by G. Auletta, Guida, Napoli*
13. *Locke J., (2010), An Essay Concerning the True Original, Extent, and End of Civil Government, trans. by A. Gialluca, RCS, Milano*
14. *Morgenthau H. J., (1948), Politics Among Nations. The Struggle for Power and Peace, New York, Knopf, trans. it. Politica tra le Nazioni. La lotta per il potere e la pace, Il Mulino, Bologna, 1997*
15. *Palese E., (2011), Da Icaro a Iron Man. Il corpo nell'era del post-umano, Mimesis, Milano*
16. *Parsi V. E., (1998), Interesse nazionale e globalizzazione, Jaka Book, Milano*
17. *Rousseau J. J., (1762), Du contract social; ou, principes du droit politique, University Press, Amsterdam*