



CONTEMPORARY POST-HUMANISM: TECHNOLOGICAL AND HUMAN SINGULARITY.

POSTHUMANISMO CONTEMPORÁNEO: TECNOLOGÍA Y SINGULARIDAD HUMANA

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ABSTRACT:

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Posthumanism entails the idea of transcendence of the human being achieved through technology. The article begins by distinguishing perfection and change (or growth). It also attempts to show the anthropological premises of posthumanism itself and suggests that we can identify two roots: the liberal humanistic subject (autonomous and unrelated that simply realizes herself/himself through her/his own project) and the interpretation of thought as a computable process. Starting from these premises, many authors call for the loosening of the clear boundaries of one's own subject in favour of blending with other beings. According to these theories, we should become post-human: if the human being is thought and thought is a computable process, whatever is able to process information broader and faster is better than the actual human being and has to be considered as the way towards the real completeness of the human being itself. The paper endeavours to discuss the adequacy of these premises highlighting the structural dependency of the human being, the role of the human body, the difference between thought and a computational process, the singularity of some useless and unexpected human acts. It also puts forward the need for axiological criteria to define growth as perfectionism.

RESUMEN:

Palabras clave:

Perfeccionamiento,
posthumanismo,
humanismo,
identidad,
autonomía

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El Posthumanismo lleva consigo la idea que la trascendencia del ser humano debe ser obtenida a través de la tecnología. El artículo empieza distinguiendo los conceptos de perfección y de cambio (o crecimiento). También intenta mostrar las premisas antropológicas del mismo post-humanismo, sosteniendo que tiene dos raíces: la de sujeto del humanismo liberal (autónomo, sin relaciones y que, simplemente, se realiza a sí mismo a través su propio proyecto) y la interpretación del pensamiento como un proceso computacional. Desde esas premisas muchos autores afirman la necesidad de que el sujeto ya no tenga confines bien definidos y que se contamine con otros seres. Según estas teorías, *tenemos* que llegar a ser post-humanos: si el ser humano es pensamiento y el pensamiento es un proceso computacional, todo lo que pueda tratar la información más amplia y rápidamente es mejor que el actual ser humano y, al mismo tiempo, tiene que ser considerado la vía para realizar su verdadera plenitud. El artículo intenta discutir la adecuación de estas premisas, y lo hace teniendo en cuenta la dependencia estructural del ser humano, el papel del cuerpo, la diferencia que hay entre el pensamiento y un proceso computacional, la singularidad de algunos actos humanos inútiles e inesperados. También propone la necesidad de identificar criterios axiológicos para que se pueda decir que un crecimiento es un perfeccionamiento.

1. Introduction

Talking about posthumanism today could venture on the double path of a superficial simplification of the issues and, therefore, a tragic misunderstanding of its deep significance. What does posthumanism mean? What kind of change can lead us to talk about someone or something that can only be described with a reference to human traits and features as dumped in the past?

Nietzsche used to talk about the idea of an *Übermensch* as to say: a man that has arrived beyond the threshold of man. He is not a hero - although sometimes we could think so because of the bad translation into "Super-man" instead of "Over-man"-, but he is a subject that has brought the human to his own essence as to say, to the fulfilment of its rationality and will. Such fulfilment can only be thought of as losing the boundaries of something that is simply *given*. We do not have to abandon earth, but rather discover its greatness. The earth has become small, he asserted, because the hopes of the last man are small. There is a strong metaphysics in this idea, although an immanent metaphysics. We have not arrived to what we are, and this strange "we", the human beings, have to leave what they are to become what they can truly be. That is why he asserts that «what is great in man is that he is a bridge and not a goal: what is loveable in man is that he is an over-going and a down-going»¹. In this perspective what is actually valuable is the pure will: Feuerbach fulfilled the passage from the Hegelian absolute to the will of empirical man, whereas Nietzsche (and Schopenhauer) proclaimed the pure will as the essence of reality and, most important, as the transcendental task of each man: we have to trespass to will of life, will of will, will of power.²

I suggest that going back to the Nietzschean idea of *Übermensch* can help us to understand the contemporary discourse on posthumanism: this idea does not present itself as an invitation to a metaphorical killing of human being, but rather as an achievement of what

she or he can truly be and has to be. Mainly, we find the term posthuman as the result of an enhancement through technology and pharmacology. It has to be the outcome of the change (or elimination) of features of the human condition (i.e. aging process) and of an enhancement of her/his intellectual, physical and psychological capacities³.

The concept of posthumanism is a derivation of the previous idea of transhumanism. In quite a famous text of 1957, the biologist Julian Huxley wrote that «we are beginning to realize that even the most fortunate people are living far below capacity and that most human beings develop not more than a small fraction of their potential mental and spiritual efficiency. The human race, in fact, is surrounded by a large area of unrealized possibilities, a challenge to the spirit of exploration»⁴. We are called to realize, he wrote, a scientific exploration of possibilities and of techniques to realize them, with the strong «conviction that human life as we know in history is a wretched makeshift, rooted in ignorance»⁵. The human species, not isolated individuals, can transcend itself, and the name that Huxley found for this belief is transhumanism: «man remaining man, but transcending himself, by realizing new possibilities of and for his human nature»⁶. We have to stress, I think, two features. First of all the reference to a human nature, which brings to light more than a simple possibility (although that is the word he used), because the constant reference to human nature means more properly potentiality. In this perspective, we could observe that it is proper of human beings transcending themselves with projects, new aims, promises, forgiveness, freedom commitments, self-training. Understanding that a new achievement or the improvement of a capacity is possible and trying to get it, is not something new, but is part of the dynamic of human beings as such. On the other side, there is the

¹ Nietzsche F., *Thus Spoke Zarathustra*, Wilder Publications, Radford -VA, 2008, prologue part 4, 22.

² Cf. Fabro C., *God in exile: modern atheism. A study of the internal dynamic of modern atheism, from its roots in the Cartesian cogito to present day*, Newman Press, Westminster Md, 1968.

³ Cf. the explanation of the official "Transhumanist declaration", available on <<http://humanityplus.org/philosophy/transhumanist-declaration/>> [Consulted: 2013.03.18th]], Nick Bostrom, The Transhumanist FAQ v.2.1" Web: www.transhumanist.org. Published by the World Transhumanist Association, (First version published in 1999).

⁴ Huxley J., *In New Bottles for New Wine*, Chatto & Windus, London, 1957, 15.

⁵ Ibid, 16.

⁶ Ibid, 17.

idea that the present condition of human beings is miserable and that the self transcendence is only a matter of scientific knowledge and techniques. It is from this point that arises the idea that the real aim is a technical enhancement, not in terms of having more powerful tools, but meant as something that is embraced inside the human being, that changes him. This second item is not neutral: although it could seem a description, as a matter of fact it is a thesis that needs to be discussed.

2. The idea of enhancement

Before we analyse this issue more deeply, I would like to discuss briefly the appropriateness of the very expression "enhancement", that includes the meaning of perfection. Perfection *per se* is a positive ideal: it is an aspect of the existential dynamism of human life. I think that we can not uphold a position "against perfection", despite the stance implied by the title of the interesting and well known book by Michael Sandel⁷. What we have to do instead is to try to understand what idea is embedded in this use of the term "perfection". Indeed, "to perfect" entails a change, but not all changes do achieve perfection. If we want to describe rigorously, we have to use words like growth, or strengthening, or empowering of a capacity. Perfection does not simply mean bigger, or stronger, but it points forward completion, and needs a normative criterion in order to establish whether this growth is good or not. Of course, I am not saying that such improvement cannot in any case be a perfection, but I am taking into consideration that, in order to value something related to human beings, we need a normative idea of what a human being is, and argue in each case why a transformation of capacity's power would be good or not. On the contrary, if we think that there is not a normative idea of what the human being is, we simply cannot talk about enhancement, and we have to use the more general idea of change.

The term enhancement is nowadays used to indicate growth beyond therapy purpose. Juengst, for exam-

ple, writes that this term is usually used «to characterize interventions designed to improve human form on functioning beyond what is necessary to sustain or restore human health»⁸, but on this point Conrad argues that we can hardly understand what "beyond" means because the same definition of health is changing and is not universally accepted⁹. He asserts that there is a social influence on defining what is normal or not, so that the line between what we deem as a necessary treatment and what can be unclear as enhancement can shift, as well as the definitions of diseases change. He brings the example of a hypothetical drug that can empower memory: a widespread use of such a drug could cause increased diagnosis of memory deficit disorders because of the repositioning of the boundaries of the "normality". If it is true that there is a statistical reference for the measuring of the "normal" range of features or capacities and that the sense of it can be different in a different social context, it does not imply that normality is undetectable. Conrad mixes up description, desires and normative levels; human action can change reality, but the starting point is not wrong only because of the human desire (or needs, or even possibilities) to transform it. Even if the perception of the level of performances socially required can change – for example, because everybody uses a drug for memory –, this does not necessarily imply that people that are not on enhancers with a medium or average level of a memory are pathological. The loss of any normativity of the human body and faculties transforms any supposed enhancement firstly in a simple fact (it's a change) and then in a normative element. Moreover, as soon as the new "standard" grows up, the empowered level that has been achieved is looked as pathological. This point is crucial to understand enhancement: a proper description is indispensable for any evaluation.

8 Juengst E.T., «What Does Enhancement means?», in Parens E. (ed), *Enhancing Human Traits: Ethical and Social Implication*, Georgetown University Press, Washington D.C., 1998, 29-47, cit. 29.

9 Conrad P., *The medicalization of society. On the Transformation of human Conditions in Treatable Disorders*, The Johns Hopkins University Press, Baltimore, 2007, 71 y ss.

7 Sandel M., *The Case Against Perfection: Ethics in the Age of Genetic Engineering*, Harvard University Press, Cambridge MA, 1999.

Some of the supporters of the pro-enhancement position assert that we have been using enhancement for a long time: shoes are an enhancement for feet, clothes are an enhancement for the skin against cold or heat¹⁰. However, these examples absolutely lose the difference between enhancement and tools. It would be more interesting to refer to vaccination, because of the change it causes in the organism, but here, too, we forget a critical distinction, which is the fact that a vaccination facilitates the organism to develop its own antibody. It is like a sort of training: a vaccine helps the body to prepare in advance the defence against some illnesses or diseases as it could be obtained after a successful fight against an illness. It is not at all an enhancement beyond the boundaries of a therapeutic purpose. On the other hand, it is true that, in contemporary society, people use enhancement a lot of times: for example, when we implant silicon prosthesis to increase the breast size without any clinical or medical indication (as would be in case of a mastectomy), or employ drugs in order to improve sexual performance in the absence of a clear physical dysfunction, or use doping in sport competitions. All these examples have to be defined as enhancement rather than treatment. We could also think of the use of deep brain stimulation not only to correct neurological diseases (i.e. Tourette Syndrome or some Psychiatric Disorders)¹¹, but also to raise social attitudes and brilliant behaviour when demanded¹².

Although I consider more appropriate the use of more neutral words like growth or empowerment (as we said before), finally it is possible to define enhancement as a chemical or technical intervention in order to cause the growth of a human trait beyond a therapeutic purpose. However, it is still not enough to understand

enhancement itself. To do that, we also have to distinguish different issues: the consequences in the subject and in the society of the improvement of a capacity (intellectual, physical or psychological); the different ethical matter implied by modification produced on themselves or on new generations; the possible change of the relationship between subject and reality; the idea of the creation of a posthuman subject (what does it mean?). All these issues require a deep analysis, but, first of all, I think that it is of primary importance to understand the theoretical background in which each one of these singular topics lay on.

3. The 'Human' whence posthuman comes from

Too often, many discussions on modification of reality are settled on the thought that reality is like a gigantic living Lego. As with the little bricks of the famous toy, someone could build, undo and then rebuild another scenario or object without any important long term drawback for the totality. But reality is not the simple result of different combinations of Lego bricks.

Since many years, many women and men resort to different drugs searching for euphoria or to experience hallucinations, or to take a break from the burden of life. As everybody knows, this practice causes serious health damages. What if we could program the moods and feelings without these harmful organic consequences and, most of all, if we could perfectly control of it? In one of his most famous novels, Philip Dick¹³ writes about a situation in which a machine can do this task, allowing the user to choose among hundreds of possible moods. This practice facilitates to engage the tasks of a working day but also to escape from the perception of an unpleasant (dramatic or not) situation. It could seem a wonderful possibility. However, by looking at it we can discover some insanity in it because of the incapacity to appropriately evaluate reality. Dick writes: "I was sitting here one afternoon," Iran said, "and naturally I had tamed on Buster Friendly and His Friendly Friends and he was talking about a big news item he's about

10 Cf. Bostrom N., Savulescu J., «Human Enhancement Ethics: The State of the Debate», in Savulescu J., Bostrom N. (eds), *Human Enhancement*, Oxford University Press, New York, 2009, 1-22.

11 About some ethical issues related to the Deep Brain Stimulation cf. Colombetti E., «Etica delle neuroscienze», in Sironi V.A., Porta M. (eds), *Il controllo della mente. Scienza ed etica della neuromodulazione cerebrale*, Laterza, Roma-Bari, 2011, 208-221.

12 See for example the report of Paul Colyns (Belgium) at the seminar of President's Council on Bioethics in Washington D.C. June 24th-25th 2004. The transcription of the congress is available on the web page of the President Council of Bioethics (see <<http://bioethics.georgetown.edu/pcbe/transcripts/june04/june24.html>> [Consulted: 2013.06-20th]).

13 Dick P.K., *Do Androids Dream of Electric Sheep?*, Del Rey, New York, 1996.

to break and then that awful commercial came on, the one I hate (...). And so for a minute I shut off the sound. And I heard the building, this building; I heard the—" She gestured. "Empty apartments," Rick said. Sometimes he heard them at night when he was supposed to be asleep. (...) He had let the information remain second hand; like most people he did not care to experience it directly. "At that moment," Iran said, "when I had the TV sound off, I was in a 382 mood; I had just dialled it. So although I heard the emptiness intellectually, I didn't feel it. My first reaction consisted of being grateful that we could afford a Panfield mood organ. But then I read how unhealthy it was, sensing the absence of life, not just in this building but everywhere, and not reacting – do you see? I guess you don't. But that used to be considered a sign of mental illness; they called it 'absence of appropriate effect'.»¹⁴ Too often we do not think that there is any equilibrium in the human being, in the different domains of reality, and also between human being and reality¹⁵. Of course, having a peaceful and satisfied mood is subjectively better than despair, but what is changing in the capacity of understanding reality? This is not a moralistic argument: we are a part of the reality, we are connected with all the other; faking reality means to fake the understanding of ourselves. When a feature, a faculty or a capacity of a human being becomes mute or extremely played up, the equilibrium could be compromised. It is quite ingenuous to think that there are not broader consequences when we deeply and unilaterally change a trait of our own being. This does not mean that, for this only reason, any change is always wrong, but that we have to think of it and discuss about it. As Barbara McClintock wrote and Evelin Fox Keller stressed¹⁶, when we consider just the causal efficacy of a single variable, we do not even try to imagine other unexpected consequences in a large period. McClintock asserts that such a narrow idea of

causality is responsible of a lot of catastrophes. Damasio's studies on the cerebral impairment explain, for example, how the complete absence of emotion can make rational decisions practically impossible¹⁷: abstractly, we could think that silencing passions and feelings could be a good way in order to be more rational, but the outcome of their absence proves to be an irrational behaviour.

We could add many examples from both the scientific field and from science fiction, but what is crucial to highlight at this point is the premise that underlies the idea of an enhancement of human being in order to transcend her/ his situation and make her/him a post-human.

When in 1999 Hayles tried to explain "how we became post human"¹⁸ (notice that the verb tense points to the past: the Author thinks that we have already become –not that we will become - posthuman), she addressed four characteristics of posthumanism: 1) it «privileges informational pattern over material instantiation, so that embodiment in a biological substrate is seen as an accident of history rather than an inevitability of life»; 2) it considers consciousness (meant as the seat of human identity) «as an evolutionary upstart trying to claim that it is the whole show when in actuality it is only a minor sideshow»; 3) it considers the human body «as the original prosthesis we all learn to manipulate, so that extending or replacing the body with other prosthesis becomes a continuation of a process that began before we were born»; 4) it configures the «human being so that it can be seamlessly articulated with intelligent machines»: there wouldn't be any essential distinction between "bodily existence" and "computer simulation"¹⁹. The generator of all these challenges is the idea expressed in the prologue of the same text: an erasure of the body in order to allow intelligence to become a property of the formal manipulation of symbols rather than a faculty of a subject, something proper of

¹⁴ Ibid, 3.

¹⁵ An interesting analysis of the existential consequences of an hypothetical immortality can be found in Jonas H., *Technik, Medizin und Ethik. Zur Praxis des Prinzips Verantwortung*, Suhrkamp, Frankfurt, 1985, chapter XII.

¹⁶ Fox Keller E., *The Century of the Gene*, Harvard University Press, Cambridge, MA 2002; Id, *A feeling of the Organism*, Freeman, New York, 1983.

¹⁷ Damasio A., *Descartes' Error: Emotion, Reason, and the Human Brain*, Penguin Books, London, 2005.

¹⁸ Hayles K., *How We Became Posthuman? Virtual Bodies in Cybernetics, Literature and Informatics*, University of Chicago Press Chicago, 1999.

¹⁹ Ibid, pp. 7-8.

the human life-world. It does not matter the material one is made of, because what is valuable is the information passing through the "hardware".

It is important to focus the anthropological theory that posthumanism shows: it is settled, in fact, on the base that human being is only his thought and consciousness, while thought itself is a disembodied computable process. We can discover in it, I think, two roots.

The first one is the liberal humanistic subject which starts from the Cartesian anthropological scission, and passes through the idea of an autonomous and unrelated subject that simply realizes her/himself by her/his own project. Despite the enormous attention we tribute to the body and the quantity of knowledge concerning the role of physicality in identity, the idea of a human being as a sort of inhabitant in a body is still alive²⁰. The second root can be found in the interpretation of thought as a computable process and of reality as a pattern of computable information. We cannot understand posthumanism without facing these two points. "Human" means consciousness and thought; consciousness and thought are computable process. The Nietzschean 'will' now has to be related to this new landscape, and has to realize that the power is a functionalist power. Why, then, post-human and not simply human? The reason is simple. If the human being is thought and thought is a computable process, anything that is able to process information in a broader and faster way is better than the actual human being and has to be considered as the way towards the real completeness of human being itself.

From this point of view, the body is only a changeable and replaceable substrate; and technology becomes a feature of human ontology. Consequently, there would be aspects of the human being (not external goals, but ontological traits) that could be achieved only through technology²¹. The oxymoron of posthumanism

is that even if it starts from a material perspective, it soon loses the body. This happens because the body is understood, as Braidotti asserts, as a surface where multiple and changeable informational codes can meet, starting from genetic code up to the code of information technology²². The core is what Donna Haraway calls confusion or violation of boundaries: essentiality is not relevant anymore because reality is information and, thus, the key of reality is the passage of information. The problem does not concern the definition of an object (what is this? And, then, what are we allowed to do in order to respect what it is?), but the construction of interfaces that permit the passage of information from one substrate to another one. She considers that there is a violation of boundaries because, the confines between human beings–animals do not exist by now, as well as the distinction between natural and artificial is nonsense. «In relation to objects like biotic components, one must not think in terms of essential properties, but in terms of design, boundary constraints, rates of flows, systems logic, costs of lowering constraints»²³. Ultimately, the world is translated in a problem of codification and the only real threat would be an interruption of communication. In this way, heterogeneity disappears, and the instrumental control is in our hands. The result is the appearance of a new kind of human being. The idea is clear: «Any objects or persons can be reasonably thought of in terms of disassembly and reassembly; no 'natural' architectures constrain system design»²⁴ and for this reason «the machine is not an it to be animated, worshipped, and dominated. The machine is us, our processes, an aspect of our embodiment. We can be responsible for machines; they do not dominate or threaten us. We are responsible for boundaries; we are they»²⁵.

20 There are a lot of neo-lockian positions that, in different ways, bestow human identity only on consciousness or thought. We could easily remember many mental experiment of head transplant -i.e. cf. Engelhardt H.T., *The Foundation of Bioethics*, Oxford University Press, New York, 1996-, as well as the famous story by Zuboff of the Brain in a vat: Zuboff A., «The story of a brain», in O Connor T., Robb D. (eds), *Philosophy of Mind: Contemporary Readings*, Routledge, London, 2003, 185-194.

21 Technology here has to be intended in a broad sense,

including different drugs, psychopharmacology, deep brain stimulation, genetic engineering, artificial life.

22 Braidotti R., «La molteplicità: un'etica per la nostra epoca, oppure meglio cyborg che dea», Introduction to the Italian edition of Donna Haraway, *Cyborg manifest*, -Haraway D., *Manifesto cyborg. Donne, tecnologie e biopolitiche del corpo*, Feltrinelli, Milano, 1995-.

23 Haraway D., «A Cyborg manifesto», in Szeman I., Kaposy T. (eds), *Cultural Theory, an Anthology*, Wiley Blackwell, Chichester-West Sussex, 2011, pp.454-470, 459.

24 Ibid.

25 Ibid, p.466.

Here, we have a powerful scenario: it is an (immanent) metaphysics because it pretends to talk about the whole reality; it pretends to explain the truth of reality saying that it is not what appears: the real truth is information and its functional manifestation; it allows controlling reality simply by exchanging information. The elimination of boundaries between things, including human beings, is the obvious result. Human being is, at the beginning, the only one who can understand and control this information, but for the same reason, her/his completeness needs, as noted above, an intimate symbiosis with technology. He is called to do it. It is what Heidegger wrote interpreting Nietzsche: the "over-man" is the one who brings the human essence to its truth and takes charge of this truth²⁶.

Hayles tries to bring the body back into the middle of this process and distinguishes between a good and a bad posthuman: the latter would be a nightmare, consisting in beings that «regard their bodies as fashion accessories rather than the ground of being»²⁷. The way to avoid this result would be to keep the control on technology, constantly and retrospectively recognizing the difference between us and the technology enclosed in our being. But from this perspective that is impossible: if we can change our own body in order to change functioning, regardless of the way in which we obtain it, we are accepting the loosening of the boundaries. If reality is the information and the functions that this information allows to perform, there is a mutual inclusion of human being and technology: the human project needs technology which redefines, by changing her/him, the human project. It is a system, and the properties of the system are not the properties of its parts. The reason of the part is embedded in the functioning of the system. A fully realized posthuman being would be a subject that has such a deep connection with technology (chemical drugs as well as information technology) that she/he is not at all aware of it.

If we think of the human being as an unrelated, autonomous being and perfectly master of himself,

the necessary consequence is that we have to think of the body – which allows us to do a lot of things, but also which is born and grows up, becomes ill, can loose strength, can hinder thought or cause a lack of memory – as a tool; a tool that we have to use at will, and dismiss when it is damaged, or that we can change to make it more powerful. On the wave of a disembodied subject, consciousness and thought – presented as the whole human identity – need some kind of material substrate, but not necessarily human flesh: every human function, including consciousness, is considered as information that can be processed by different substrates. The self is the result of all those processes, it is like a pattern of information. If the problem is the power and the control of information, then the human being is presently incomplete, and completeness can only be achieved through technology.

Posthumanism is the extreme consequence of a modern humanism. At the same time, the posthuman discourse itself is a framework that reintroduces and reinforces that idea of human being. However, its crucial flaw lies in its anthropological perspective: the human being is not the modern liberal subject and thought is not a computational process.

4. The specificity of human being(s)

Too many times we forget that the human being is primarily a bodily subject, even if she/he is not only her/his body. In the economy of this text, we can not fully discuss the role of the body in personal identity²⁸, although it is in close connection with the posthuman subject, but we can easily see that there is no human thinker without a body. The beginning of the existence of any of us is not a thought, but the position of a concrete body with its limits, boundaries, potentialities, traits. A body that precedes conscience and self-consciousness. When something occurs to our body, it occurs to us, not to a tool of ours. As Hegel says, «Violence

²⁶ Heidegger M., *Nietzsche*, Harper San Francisco, San Francisco, 1991, Vol. III.

²⁷ Hayles, *op.cit.*5.

²⁸ About this issue cf. Pessina A., «Venire al mondo. Riflessione filosofica sull'uomo come figlio e come persona», in Cariboni C., Oliva G., Pessina A., *Il mio amore fragile. Storia di Francesco*, XY.IT Editore, Arona, 2011, pp.63-93; Colombetti E., *Incognita uomo. Corpo, tecnica, identità*, Vita e Pensiero, Milano, 2006.

done to *my body*, by others is violence done to me. Because I feel, contact with or violence to my body touches me immediately as *actual* and *present*. This constitutes the difference between personal injury and infringement of my external property; for in the latter, my will does not have this immediate presence and actuality»²⁹. We could add: not only because I feel, but because I am not without my body.

Linked to, and starting from, this bodily existence, we have also to reconsider the idea of an autarchic subject. A rigorous description of human being reveals that she/he is not entirely autonomous: her/his autonomy is always written in dependency³⁰. We are all generated from someone else, we learn a language in a community of speakers, we need care to pass from what we can ontologically do (simply because we are humans) to what we effectively can do if there are the conditions to do it (or, using Nussbaum's category, to pass from basic to internal and combined capabilities). In other words: we come from a relationship, and we need relationships in our life and, still more, we need them for a flourishing life. To develop one's body as well as to build language skills, to learn individual and social practices, we need time and help from others. We can become ill, we may lose strength and capacities and need even more care from others than what is usual. The human being is unintelligible when conceived outside relationship. Even without going deeper in the analysis of our constitutional dependency, it is clear that the suggestion of a totally independent human being is unrealistic.

Similarly, we have to correct the idea that knowledge and thought are a computable process. It is impressive how many texts confuse processing data and understanding their meaning. At the same time, memory is not simply a storage of records. The same purpose of transmitting data requires some kind of previous understanding of the data itself. We can transmit a lot of information through devices in and outside the body, but the real question is not about the efficacy and effi-

ciency of this process, but about what is important to transmit, what we have to choose to be transmitted and why. That is one of the reasons why anthropocentrism is unavoidable. Although posthumanism is demanding to leave it and accept the blending of our boundaries with other beings, anthropocentrism is inescapable: in order to put peculiar traits of human being on the outskirts of our attention, we, the human being, have to know it and want it, understating the reasons that only humans can, eventually, find out. The hypothetical acknowledgement that we do not have any higher value than other beings, needs an intellectual and willing act (a free action) that performatively proposes our different ontological value again.

At this point, we have to take into account a relevant counter-argument. As some authors suggest³¹, we have to think of perfection in an evolutionary perspective as to say, in terms of adaptation to the environment. Since human beings are building instruments and culture, by defining a new environment, the subject has to change: every cultural acquisition has a dynamic feedback that transforms the same human being. In order to do it, in this technological landscape, we are supposed to embrace technology inside us. In other words, it is because of what we are that we should pass over anthropocentrism, understanding our need for relationship with other beings, organic or mechanical. Human identity required crossbreeding. It is the human action what makes it necessary: by changing the context where we live, the boundaries between human being and technological devices fall. Perfection would mean adapting us to this new setting.

This thesis has its force but it confuses again different levels. We have to notice the paradox of a perspective that starts from an unrelated human subject and finishes by putting at the top the idea of relationship with the other, although it is a technological other. In any case, adaptation to the environment is something common to many living beings with the aim of survival, from microorganism to complex animals. What is pecu-

29 Hegel F., *Elements of the Philosophy of Right*, Cambridge University Press, Cambridge, 1991, cit. p. 79.

30 About the relation autonomy-dependency, cf. Musio A., *L'autonomia come dipendenza*, Vita e Pensiero, Milano, 2006.

31 Marchesini R., *Post Human. Verso nuovi modelli di esistenza*. Bollati Boringhieri, Torino, 2002.

liar of human beings is, on the other side, the fact that they change the environment adapting it to themselves and not the contrary. Humans are able to formulate intentional purposes. This intentionality requires to judge if a change is something good for what the human being is, and not only in order to adapt to what the human being is not. The modification could bring some benefits, but if this transformation means losing human identity, it would be contradictory to say that it is better for the human being itself because she/he would not be any more. Being controlled by what we build in order to control reality is a complete loose of target, it would mean hetero-direction. We could arrive to this conclusion only if we accepted the idea of technology as the destiny of mankind. But, as we explained before, technology can be an ontological destiny *if* the core of reality was encoded information *and* the inner human identity consisted in decoding and controlling information. In this case, technology would permit to transcend the actual limited situation, to govern more data and, therefore, realize ontological traits of the human being itself. But, as we are showing, this anthropological view is, simply, untrue.

There are many reasons why I contest the very idea of a transcendence achieved through technology, but here I will only take into account the knowledge issue. If transcendence was the mere passing over the limit, it would be constantly frustrated by the new line of limit. We would have to constantly upgrade ourselves in the attempt to achieve a higher technical level of information and control, losing quite soon any reference to the corporal human subject. On the contrary, the same capacity to know the limit as such is a form of transcending it. It is because we realize that we do not have (and we will never have it, not even when we use advanced technology) all the possible information on reality that we are going over our limited situation; the human being is able to recognize the part as a part, without interpreting the part as the whole. It would be impossible if we were totally close in the finitude.

Little by little we are understanding that the conceptual premises of posthumanism offer a deformed

description of reality. Another issue it does not take into account is that human specificity is not limited to an instrumental knowledge³²: for this reason we have to think of the completeness (or, better, the flourishing life) in a broader way. An instrumental approach, as well as a deterministic-utilitarian view, cannot explain such peculiar things as unpredictable acts and gratuity: the human being has the power to do something for the good of someone else, despite the awareness of a damage she/he can suffer. She/he can try to do a completely useless thing as training her/himself to become able to do something new, with a self-challenge. It is completely different from including a technology or using a drug: what is important is not the performance itself, but the capacity to arrive to do it by her/himself. Even more: sometimes, when taking a decision about the future, the human being may deliberately not bear in mind some important information related to the others' possible behaviour. It is not a deficit of information, but simply a decision to give someone else another real chance. In other words, humans are able to forgive and to look on another woman or man according them a new full "senseless" confidence. We cannot neither omit to consider a specific and peculiar trait: the need to be recognized and understood, to receive a confirmation of our value from other free men and women, to share ideas and interests, to see and be seen as someone unique, not as an object. We could add considerations about thought as a creative process, able to realize something new with an intentional purpose, or about language, looking at the ability of using symbols in new and different combinations and saying completely different things every time. Humans can also do something worthless things, as admiring beauty. They also introduce beauty and creativity in basic needs like food, by cooking it and even by decorating dishes.

All these traits do not say immediately which kind of empowerment can be accepted or refused, but they do say that the human description that posthumanism offers is simply wrong. Among the supporters of the en-

32 On this argument see the famous text of Horkheimer M., *On the Critique of Instrumental Reason: Lectures and Essays Since the End of World War II*, Seabury Press, New York, 1976.

hancement perspective, Kamm imagines how we could understand and choose the good objectives aiming at which enhancement could be used safely. His conclusion is that «it would be a safe end to enhance capacities to recognize and fulfil our moral duties, at least if the enhancement involved our appreciating the reasons for these duties and not a purely mechanical purpose»³³. It is a good concern, but it goes back to what I am saying. Understanding moral duties is not a physical matter, therefore, unless there is a physical impairment of thought, it's not by changing physics that we can achieve it; secondarily, we can't speak about any moral duties if the human being gives up the possibility to find out any normative issue in reality. Moral duties require axiological judgment, not only informational data, and that is exactly what human beings, not technology, do.

In conclusion, I think that, before discussing any possible and particular enhancement, we have to consider that Posthumanism theory brings two dramatic misunderstandings about men and women. Firstly it loses sight of the question about meaning and, as we discussed above when we talked about the use of the term 'growth' in place of 'enhancement', it is not able to offer evaluation criteria except an unrelated power (physical or psychical) and a data processing. Of course in terms of speed or power, artefacts not are paradoxically bigger than a human being, they overtake him, but the specificity of human being is more complex and richer. Enhancement shifts attention from the uniqueness of the subject to his functioning and performances. But, because of the human transcendence with respect to the technical problem, the question of meaning reappears and introduces the teleology issue; we have to face the question of aim: to enhance some trait - and become posthuman - in order to achieve what?

The second - and perhaps deeper - problem concerns the premises. Many times the debate on posthumanism begins immediately by analysing the implications of the enhancement of different faculties over therapeutic purposes: I think that it is urgent to put in question the

theoretical background in which it is embedded. Posthumanism starts from a liberal and autonomous modern subject, it reinforces this perspective by progressively insinuating the idea that this autonomy can support any change we can introduce: linked with a structural dependency on technology, it contemplates the loosening of the clear boundaries of one's own subject. On the contrary, I think that we have to accept an apparent paradox: it's only by recognizing one's structural being-in-relation and dependency as well as recovering the idea of some kind of normativity of what we are, that a human being can keep her/his own autonomy and act for a real flourishing life.

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³³ Kamm F., «What Is and Is Not Wrong with Enhancement», in Savulescu J., Bostrom N. (eds), *Human Enhancement*, Oxford University Press, New York, 2009, 91-130, cit. 128-129.

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