Human Enhancement and the Post-Human; the Converging and Diverging Pathways of Human, Hybrid and Artificial Anthropoids

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ABSTRACT

The expression "human enhancement" could be placed in the ontological, cognitive, and symbolic dimension in which we conceive and experience the faculty, that is constitutive of human beings, of giving name and thus consistence to things, relations and phenomena in general. It is necessary to point out that this symbolic dimension of emerging technologies has been obstinately and jealously anthropocentric, at least in the modern Western world. In this contribution, I aim to develop a philosophical account of post-human enhancement that allows us to conceive a future society of humanoids – humans, hybrids, artificial beings – who are free and equal. This expression – "post-human enhancement" – is to be understood as referring to symbols and phenomena different from those associated with "trans-human". Post-human is to be interpreted here as material, not anthropocentric but rather interspeciesist, osmotic and relational, horizon of effective sharing of experiences, dangers and challenges. In contrast, trans-human is meant to refer to the transcending of humans into the pure ether of an 'ideal', immaterial network made up only of software, and lacking of relations with any material beings in the ecosystem or cosmos. On my account, reframing the debate about human enhancement means to guarantee widest possible conditions of non-hegemonic or expansive conscious contextuality of legislative and decisional systems. I focus rather on the social circumstance whereby we see ourselves as subjects that already co-inhabit multiform social identities, in changeable and hybrid bodies and identitary images, in potential or latent conditions of moral and political asymmetry. These conditions, I hold, are therefore to be preventively identified and neutralized.

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Introduction

The "strengthening and improvement of the human being by means of targeted technological, specific, repeatable and measurable interventions, in specific areas (for example, body, behaviour, personality, intelligence), and directed at reaching stages of efficiency or adequacy or excellence, or completeness or beauty greater than the normal" can be defined as *Human Enhancement.* The noun alone indicates the equipment suited to increasing or improving the quality of a performance, of a value, or of a status. Furthermore, under certain, yet not entirely clear, circumstances, this can be equivalent to *Optimierung*, expressed with a term borrowed from the second natural western language, other than *Anglo-American*, in which there is propagation of scientific formulations, technological applications and the most sophisticated reflections concerning the field of investigation in question. Having said that, not all the procedures of optimization (*Optimierung*) can in fact be referred to as *Enhancement* (Straub, in Sieben, Sabisch-Fechtelpelter, Straub, 2012). For example those innovative and accelerating remedies aimed at the mere restoration of a condition of health with respect to the 'normal' standard. Therapy, no matter how sophisticated, cannot generally be considered enhancement, except for all those cases in which we produce, in certain conditions of connectivity between the human and technical sides, a qualitative surplus capable of endowing the 'patient' with superhuman skills, for example due to the *holistic and recursive* link existing between some kinds of prosthesis and the host organism (Coenen, 2012). In this case, the borders between therapy, *Optimierung* and enhancement tend to vanish. It is therefore only true on paper that the aim of *overcoming/going beyond*, of *ulteriority*, with all the distinctions that we shall see, and not that of reintegrating a condition of health – or lost normality, is the primary and exclusive characteristic of human enhancement.

As should clearly be understandable, in order to face the theme, from any point of view and for any pertinent context, it is necessary as a first step to presuppose a standard. There is need for a criterion, if not of normality, at least of a generalised statistical shared agreement of certain qualities or characteristics, taken for granted as indisputable or self-evident and therefore binding as comparative criteria. The aspect of regulation or legislation, prescriptive by extension, here alludes not so much to the obligation of following the rules of a norm of behaviour, which cannot be excluded, as we

shall see from the range of debates on 'human enhancement', but to that typical of the hypothetical or technical imperative. According to this type of prescription, given an x, at this point in time we are dealing with the basic starting point and point of comparison, and if we want to reach the level higher than x, termed y, we must do this or that, with these methods and these means, in relation to that specific subject, according to this timing, and so on.

No one usually asks the question of whether 'the starting x' can be perceived and identified, in the average number of cases, according to a logic, a grammar, a semantic code that is different from those that make them what they are. Things are postponed and with implicit automatism, delegated to 'normal science', to the acquisitions and knowledge that make up the background and framework of our daily certainties. This statement of the existence of a minimum benchmark that is true for a good majority of human beings imposes a connoted and committed declaration which, in turn, imposes a change in the coordinates and direction of our thinking.

1. Occidentalism and Human Enhancement. For a Change of Perspective

The «power to name beings» is that which has so far enabled us human beings to self-define ourselves as such, therefore to be positioned cognitively and strategically in the border zone between nature and the artificial. The (ontological, cognitive and symbolic) dimension in which, till now, we have conceived and experienced this constitutive faculty of giving name and consistence to things, relations, phenomena in general, has been moreover obstinately and jealously anthropocentric, at least in the modern Western world. This is also the contextual location of theoretical-political value in which, in the *most recent* centuries this poietic-classificatory vision has been used by the holders of symbolic power with unopposed supremacy with respect to other regions of the world. These in turn have been orientated, despite the potestative and definatory irrelevance lasting for some centuries and not to the same extent everywhere, towards cosmocentric, holistic and osmotic visions, as regards the levels and configurations of being. Those that we are alluding to are more or less the same societies that were hastily dismissed, with due differentiations up until the 1960s, by the codified jargon in the sociology of modernization and development manuals, as primitive, atavic, traditional and backward. This was at least until, in the more fortunate cases, they had

undergone a process of progress, according to prefixed indicators, along the lines of a (moreover, taken for granted) united pathway with the West.

The statement "we are in an era of Westernism and no longer of Orientalism" expresses on the other hand the hope (not conviction) that the time is ripe for the power-knowledge duo to be re-elaborated, despite permanent restraints and resistances, within an 'intercultural context'. This is so that the power and the pragmatic and disciplinary knowledge, including studies of political theory and international relations (Rivera, 2005, Labanca, in Cavallarin, Henry, 2012) assume rigorously more inclusive characteristics not only with respect to geo-political and cultural contexts until now directed at 'our' eyes by Orientalistic definatory opacities, *but also with respect to 'non' human and 'non' organic spheres of material existence*. These former spheres have for centuries been part of the imaginary and conditions of life and material and symbolic exchange in those very same regions of the world (Henry, 2011a, 2013). Paradigmatic examples: the circumstance of inorganic matter, in all its configurations, and automatons are very much at home together in modern Japanese society. These are the derivates of a vision and image of the world that is infraspecist and holistic, internally differentiated and internally communicating, neither anthropocentric nor Cartesian, which alone lets us understand the solution given by Japan to the challenges presented by the automation of social and working processes. The aspiration to see in the near future androids (and not only the non-mimetic robots like Asimo)[1] strolling along the streets together with us, in the role of interlocutors and not only servants within a society of relational beings much wider than the current one, is neither the dream of a visionary, nor that of a fanciful screenwriter of *anime* or *manga* (Taganishi, 2008). On the contrary, it is the strategic aim and "social" *raison d'être* of FuRo – Future Robotics Technology Center, branch of the Chiba Institute of Technology, one of the most prestigious and competitive centres of Japanese robotics research. The future has a very ancient nucleus, which is nevertheless a very pulsating one.

That is to say, in other modernizations that cannot be assimilated in a single model, and moreover hard to identify in the West, there immediately stand out particular bonds between *enhancement and a certain accepted meaning of*

[1] This is the name, given by his creators in honour of the father of robotic science fiction Isaac Asimov, to the small 'service' robot, similar to an astronaut – a child who welcomes with courteous phrases and bows, recognising and showing the way to the guests who arrive at the research institute in which he was created.

post-humanism, to be taken in the holistic, metamorphic and osmotic definition, not anthropocentric but rather interspecist, and anti-dualistic, as mentioned above. On the one hand, in these narratives of bonds and alliances among species and the dimensions of reality there is clear evidence of the characteristics of copresence, contiguity, transitivity, co-belonging of the different levels and forms of materiality and life. On the other hand, the ontological and axiological dualisms that are opposed in those images of the world are manifold. It is the dichotomy between both rational-spiritual dimension and material dimension, and also between immanent dimension and transcendent dimension, and also between humanity and other organic and inorganic forms of existence. In fact, these visions of reality and pragmatic images of the world, such as Shinto, Taoism and other sophisticated versions with much more ancient animist roots, do not reveal 'a night in which all the cows are black' (Henry, 2011b). On the contrary, they presuppose and legitimize systems of relations that are symbolic-material, stratified and structured axiological and potestative, according to sophisticated and pondered taxonomies, put to the test for centuries by social repercussions within the respective collective contexts.

Not even such an accepted meaning and modality of realization of human enhancement is immune to shadows or risks of irenicism, of fatuous and pernicious 'technophile' optimism. However, it is NOT legitimate for it to be identified *tout court* with a supermanistic and anthropocentric vision, bound by relations with the ecosystem, non-human species, matter and the cosmos, of technological enhancement applied to the human dimension.

2. Post-human Enhancement versus Trans-human Enhancement

The poietic-cognitive and lexicographical dimension, that is of thought, of language and codes, of experience and action, in which the basic nomenclature is situated, widened in the intercultural and interreligious sense described above, defines – *including the human, and the organic, non-organic and artificial non-human,* the *post*-human horizon.

This expression – post-human horizon – is to be understood as referring to symbols and phenomena different from those associated with trans-humanism, in which, for that matter, the adjective 'post-human' is often used in the sense of transcending what we are now. The trans-humanism alluded to here is to be understood in the accepted meaning, reconstructable on the basis of texts and

hyper-texts, of an ideology directed towards the passing/abolition of the status of 'being human' in terms of finite and incarnate living beings, of which the myth/prevision of *mind uploading* (Moravec, 1988) is only the first step. The trans-human condition is coherently intended by its proponents as "phase of transition between or animal ancestry and our post-human future" (www.extropy.org/principles.htm). The objective of overcoming – meant as a technological going beyond carried out by the human being towards a further stage of evolution – is indicated by proposers of the doctrine as being pursuable by means of the systematic struggle against the limits of our condition, and through cybernetic strategies which are configured in radical cases as *dematerializing* procedures.

However, also in the version that is more 'moderate' and closest to the cult, mediated by the productive imperatives of *cultural capitalism*, of perpetual physical and mental youth (Esfandiary, 1973; www.extropy.org, http://transhumanism.org), these practices, measures, policies, technologies, hypothesized and/or designed, always address the constitutive imperfection of our species: the finitude, the helplessness when faced with the most serious cases and adversities, the conclusive and irreversible decay and caducity of our body and faculties (Caronia, 2008, Coenen, 2009; Woyke, 2010 in Coenen, Gammel Heil, Woyke). Mortality is the enemy, in particular the burden (not the mind) is seen as an inscribed seal, object to be bemoaned, and entry point of Θανατος.

One of the most emblematic myths which has been circulating for almost a century as narration anticipating the specific most radical trans-human tendency (dematerializing) is not so much extreme physical improvement (with every possible technological means and through original contaminations between 'organic' and 'mechanical'), but rather the identitary fusion of the thinking individuals of the Web and the overcoming of their corporeity[2] Anticipations of this myth of transcendence (annihilation) of the body in pure mental and cerebral functionality can be found in the literature of the 1920s and '30s of the XXth century (Bernal, 1929, pp. 29, 43).

In this case we would have an overcoming that is understood and pursued as definitive annulment of what 'was' human, due to the engineered manufacture

[2] Valid examples due to their diverse versions of the global imaginary include the plot of the film *The Lawnmower Man* (not of the short story by S. King, on which it was based), the *cyberpunk* programme and it derivatives, both taken to some of its extremes (Gibson, 1984, 1987, 1988), and some episodes of the first Star Trek series.

of a humanity transcended not only in other than itself but in an alterity immeasurable with the material dimension, and capable of technologically realizing the condition that has for centuries been described as transcending dimension. In order to give contrastive examples still taken from the religious tradition of the monotheisms, the most usual symbolic reservoirs of myths of immortality for westerners, we can consider the following: according to the trans-human profession, immortality, the ultimate end, is not even reached with the transfiguration of the body (the myth of Ezekiel's prophecy, or of the Christian resurrection of the dead on the Day of Judgement), but with its cancellation, in favour of the elevation of the spirit – mental faculties (the immortal soul, the *neshamah*, the third and incorruptible form of the soul, in the Hebrew lexicon), in a rational dimension. This latter is relational, certainly, but in the sense of communication among incorporeal beings, as are the angels, or the eons, the intermediate rational beings of which Kant speaks in order to exemplify the model of quintessential *egalitarian* republic, in which all rational beings (in this case, material and immaterial) are equal, with the only exception of God. In the radical trans-human transposition the place of God, in the relation between immaterial equals with a unique unequal and supreme immaterial, is taken by the Web.

Conversely, the post-human is to be understood here as material horizon of effective sharing, that is built on the deepened knowledge and on the grounded interpretation of differences, of vulnerability, of finitude, and of the creaturality of all organic and inorganic beings, both natural and artificial. Above all, as regards the latter class of *unprecedented*, or at least unfamiliar to most, class of beings, such an objective should be pursued without confusion of category, because it can be reached only by means of a rigorous conceptual and definatory analysis.

The problem is that human enhancement can take both paths, post-human or radical trans-human.

In the first case, the overcoming of the limit is equivalent to trespassing in other territories, heterogeneous but related and not preconceptually hostile or incompatible. In the second case, the same term indicates the overcoming/annulment of the human and *ontic* condition as we knew it, the transcending of humans into the pure ether of an 'ideal' network made up only of software, and lacking relations with any material being in the ecosystem or cosmos.

For this reason it has been necessary to undergo a preliminary category distinction between post-human condition and dematerializing trans-human condition. We must now proceed by adopting a 'minimalist' and counterpoint-based methodology with respect to the disciplinary variants of enhancement. In this way it will be possible to clarify by negative approximation – that is what we DO NOT intend to say or deepen – the nucleus of the few applicative exemplifications/modalities of human enhancement taken into consideration. We shall also be able to trace the risks of dematerializing trans-human turning-points, if there are any, and endogenous hazards, in the use of these, somewhat limited, exemplifications.

Otherwise, there can be the risk of a latitudinary and omnivorous vagueness of the concept of human enhancement. This may be such as to cover only superficially the points of view and predicative expressions and semantic descriptors typical of many fields of knowledge and experience. Such a 'poor conceptual infinity' is more than incumbent, and such as to become a paralyzing inescapable certainty, with risks of inducing indifference and saturation in those dealing with the theme of the *overcoming* of conditions (any whatsoever) in which we humans find ourselves, starting from the most varied interests.

Some mention of the 'phantasmagorical palette' of disciplinary variations: for the applied sciences, the prefixes 'neuro', 'bio', 'psycho', 'pharma' and 'nano' among others, are those which characterize the sciences which are at the forefront in setting their sights on an enhancement of the human properties and qualities that are object of their own field of observation and intervention. This is without forgetting massive use within the context of aesthetic plastic surgery and cognitive sciences. Furthermore, for the pure sciences, the German term of *Optimierung*, which in some contexts is used as synonym of *enhancement*, in mathematical jargon means the search for the best standard for a complex system. This is simply to give a minimal idea of the semantic pluriverse and misleading superimpositions that can emerge due to the 'ingenuous' and not too overcharged use of the formulation.

We shall not make reference to previous applicative modalities of the phrase 'human enhancement', but only to those, through reference to the post-human condition as mentioned above, associated with bionics, mechatronics and the spill-over effects of both, when reclassifying the subjects involved and assessing the preconditions and consequences are of implanting artificial cybernetic grafts in living organisms. The difference considered to be

conclusive is that between mechatronic implants grafted into 'peripherical' organs of the body and implants located in the centre, among others but primarily, of the ipseity and individual personality of 'us' humans: the brain. In other words, the so-called (in jargon) cyberware is the set of electronic devices (mechatronic in most cases) that are grafted with a therapeutic and rehabilitative purpose into the human organism. It can be sub-divided into not merely wearable surgical prostheses, and 'interfaces' between systems of binary codification and sections of the cerebral mass, that is between bodyware and headware.

3. Cyberware and its facets. Distinctions of a Single Genus?

We can ask ourselves whether the distinction between electronic prostheses (not merely wearable) and cybernetic interfaces is effectively necessary in terms of category or is legitimate only at a pragmatic level. That is to say, they are two phenomena located on a continuous line. There is no difference of ontological (only structural) range between bodyware and headware, once the intervention has been carried out with equipment installed in the body by means of precise surgical operations, appropriately connected and functioning – to ensure long-lasting efficiency - with *permanent* electronic arrangements and *connected to the nervous system*. Furthermore, the biological and neurological signals in question are activated in the appropriate organic sites, and the appearance or operative modality of the device that triggers them does not seem determinant, as long as it is directly or indirectly interconnected to the brain.

Let us return to the mechatronic examples: the prostheses (cochlea implants) inserted into the internal part of the ear (cochlea) involve persons who due to a serious impairment of the auditory hair cells are strongly disabled. This equipment presupposes a 'relatively' non-invasive surgical operation. In any event, the internal components of the device are implanted in the cranium and durably connected to electrodes located near the cochlea, in the internal ear. This is in order to stimulate the vibrations of the otherwise damaged ear drum which in this way enables the auditory nerve to transmit the sound information to the brain. In my opinion it is decidedly arguable to have the presumption of considering 'peripherical' the main organ used to perceive the world in the polyphony of the vibrations of the elements, of the planets, of the tides, of the melodies of composers of all cultures.

Furthermore, the mechatronic implants (bodyware) which today replace or integrate the damaged parts of our body are built to interact repeatedly with the somatic, neurological and psychic context, not only with the bio-physical substrate in which they are inserted. To the greatest extent this is true for the limbs, first of all the hand, which can no longer be seen as in the past, and this can be affirmed on account of the dynamic and profound compenetration existing between the most advanced prototypes and the psycho-physical-biographical-ideal identity of the subject, and also due to the anthropic camouflage of the organ, which is much more successful than in the past.

On the one hand, there are interfaces also here, not only in the exclusively cerebral grafts; they operate by repeatedly connecting the nerve terminals and the silicon chips that guide and govern the mechatronic limb. They enable the subject to perceive, albeit with relative discontinuity, the motion and the limb carrying out the movement as if they were the body's 'own'. The central control room of the holistic (bio-chemical-neuro-psycho-socio) plexus when interconnected and positioned, which each individual is, is always involved.

On the other hand, the 'coverings' of the limb are imagined and designed so as to have configurations that are increasingly closer to the original organ, the human skin. There will be fewer and fewer of the disquieting 'metallurgical' forms, which still disturb western citizens/users. There is still widespread deep and irrational repulsion towards the possibility of uniting human biological purity (an individual) with artefacts (a prosthesis of steel or other metal) deriving from industrial mechanical or mechatronic manufacturing. A prosthetic device *without imitative biological covering* is seen as the most unashamedly unnatural and inorganic *res extensa*, a modality of material that is so clearly artificial because it is 'machinal'[3]. Furthermore, it is the thing that is furthest away from the incorporeal and rarefied enlightenment of human thought. This is, obviously, according to the negatively hyper-reactive sensitivity regarding the 'hybridisations' between body and machine typical of the western hemisphere.

Let us recall how only a few decades ago 'external' prostheses were perceived, as visually and structurally alien and abnormal with respect to the organicity of the human body. They were perceived, in the worst cases, as hideous, and in the best cases as ignominious, both by the person who had to 'suffer' in order to stem the effects of a disabling trauma, and also by the family

[3] This neologism, from Latin roots, is preferred to the term 'machinic'.

and the social context. Only the most subdued and softer versions of these 'vile' devices were, let us not forget, the hooks and wooden legs of 'always negative' personages belonging to the adolescent imaginary.

Coming to terms with some of the 'abominable' nightmares produced by our deepest theological and speculative legacy should crank us up a level compared with tales, and enable us to accept a socio-cultural therapy against 'contact phobia', together with a therapy, counterbalancing the first, which opposes the 'cyberfusionistic' syndrome of the post-human variant. According to the latter, the materialistic model of the Homme Machine becomes the technophile dystopia, socially prescribed and collectively pursued, of the perfect Human Machine.

4. Bionic Beings and Cyborgs – Meaning and Usefulness of the Distinction

From this point of view, we must not underestimate the implications, also in terms of fundamental rights, for subjects involved which can originate from a *mistaken*, unsuccessful, intervention of enhancement, even worse if ascriptively imposed from outside and not reflexively accepted, as would be the case of a service conforming to the modelistic-normative and technocratic aspect of a preventive/systemic 'enhancement'. Even more serious is the case of an intervention which was not intentionally desired and pursued individually (Koops, 2013). This warning is particularly appropriate to those situations regarding beings – not only imagined, but of the near future – which are empowered by mechatronic components that are proportionately predominant with respect to the organic components: cyborgs.

It has been said that the cyborg 'lives' in the popular imaginary but moves, in accordance with a brief but dense history, in the more concrete domains of material and immaterial production, laying bare the potential and hazards of the often conflictual relationship between 'human being' and machine (Caronia, 2008). Due to its technical-manipulative viscosity and its link to cybernetic ideative and productive processes, human enhancement *should* never assume the features of *Human Engineering*, even if there is still need to translate this '*Sollen*' into a grammar, a syntax and biopolitical pragmatics of social conflicts (Bazzicalupo, 2010, Haraway, 1997). What is more, it would be catastrophic and aberrant if who pursued enhancement as an item on the political agenda were blind to both individual, biographical and contextual differences, and also to the axiological implications that inevitably derive from

initiatives of 'hybridization'. In this regard, it is the inventors, manufacturers and therapeutic practitioners involved who must firstly assume responsibility, although not exclusively. At this point we must briefly take a look at the mechatronic typologies of these forms of hybridization.

We know from some literature (Henry, 2013, Tagliasco, 1999, Haraway, 1991) and from recent successes in rehabilitative prosthetic robotics, that cyborgs ideally represent the type of anthropoid that are neither totally organic nor totally mechanical (more precisely, mechatronic), whose numerous configurations are located however along a single line. Moreover, according to Donna Haraway (Haraway, 1991), the distinction between headware and bodyware does not hold, as regards category, like, in the opinion of the author, bionics and cyber-mechatronics are *conceptually* analogous. Nevertheless, we need the categorical distinction as a *criterium* to distinguish case to case the extremely various empirical phenomena.

At the two extremes we can find, on the one hand (that of the human bionic being), the greatest extent of dominance of living tissues, with only limited electronic and bio-mechanical (prosthetic) inserts: the case of the individual rehabilitated by prostheses, or bionic. Bionics is, in fact the science of systems in which functioning is based on that of natural systems, or those that present specific analogies and characteristics with respect to them. This discipline enables the creation of artificial organs that are perfectly interchangeable with natural organs, damaged or destroyed by traumatic events.

On the other hand (that of the cyborg), we must contemplate a minimal degree of organic components, imagining an artificial contraption endowed however with the most sublime organic component, neither external nor superficial, however characterizing the human being more than any other: the brain. Only in this second case, of minimal but distinguishing organic presence, would we really have to do with a cyborg. In reality, it is considered that the two terms, bionic and cyborg are equivalent in terms of category and that they are located along a continuous line.

Bionics, more specifically, enables the creation of artificial organs that can replace or in certain cases can be more powerful than the natural components, whenever the treated subject has been undergone pathological disabling or even total destruction of the organ. In this case the operation necessarily constitutes an enhancement due to the radical nature of the damage, requiring replacement of natural components with artificial components still more sophisticated than the original ones. In fact, performing the functions of the

organism is generally possible at the cost of using 'supererogatory' technology, which, in order to obtain an essential result, must reproduce a performance at a higher level. Or perhaps this is a way of saying that scientists and medical practitioners maximize the usefulness of the operation to up the ante and get better results.

The contacts with electrophysiology and neurophysiology are what enable an increasingly better interaction between bionics and medical and rehabilitative research, aimed at restoring motor and cognitive functions. It is not by chance that from this disciplinary branch, by means of the biunivocal relation between science and imaginary, there originated already from the 1980s some very *realistic* fantasy characters, protagonists of television series – such as *The Million Dollar Man* and *The Bionic Woman* – which became cult series and which are still available on the Internet. In the world of comic strips, still earlier than that of the cinema, a precursor was Iron Man (also a super hero), who is saved from certain death by sophisticated armour made up of a plate of sensors and electromagnetic devices that prevent shrapnel from reaching his heart. In this way, the prosthesis necessary to save life becomes at the same time an instrument of unusual strength and wide-ranging potential, such as to require equally painful and radical transformations of the personality and identitarian make-up of the protagonist.

It is therefore difficult to accept a super-humanistic connotation for such characters, which, if anything, are symbolic proof of the structural and insurmountable creatural fragility that is common to the living. The brutal alternative is between a clear leap beyond the human condition of common mortals and physical and cerebral death. Human enhancement can sometimes be a necessity that is accepted *unwillingly*, not an act of arrogance or expression of delirium of omnipotence. If anything, it is symptom of a profound ontological weakness, or of unflagging, perhaps criticable, attachment to life and the world, which has been dealt with elsewhere (Henry, 2013).

One can certainly dread also in such a rehabilitative application a serious risk, innate in bionic and post-human enhancement; this is not a frenzy of omnipotence annihilating the embodiment of the identity (as for the dematerializing trans-humanism), but rather an obsession of biographical immortality, to be pursued at all costs. In this case such a syndrome would not have phantasmal characteristics of an immaterial and reticular type, but if anything of a hyperhedonistic and solipsistic sort. Moreover, it would produce socially asymmetric and unequal effects. Only the powerful of the Earth could

afford to perpetuate the numerous and expensive operations of bionic limbs, to the point of becoming complete cyborgs, no longer *perfectable, of a limited number on account of economic asymmetry and undisputable overlords of the non-cyborgs*. The perfect and classist human machine.

Also considering on the other hand the possibility of a democratization of the social good 'bionic-cybernetic enhancement', there still exists the repulsion and fear of the combination of what is human and what is artificial, of which we have spoken as regards western societies. However, these reactions do not seem to be triggered with such immediacy in another case, already widely urbanized in the (mainly) male imaginary, and of which we shall speak in the next paragraph.

5. Under the Ambiguous Sign of Sexed, Transgender and Artificial Humanoids

It can be observed how the thesis regarding the plasticity and manipulability of human corporeity terrifies many when its outcome is dystopic figuration, but realistically obtainable in the near future, of a cyber human being or perfect human machine[4].

In a second case, not categorially different from the first, which is however abhorred due to its 'symbiotic blasphemy', is that in which we hypothesize, imagine or desire a humanoid (golemic creature, or android, or cybernetic being) which is sexed and used for erotic purposes.

We are alluding to a combination of visions and sometimes unconfessed aspirations deriving partially, but not only, from middle-eastern, in particular Hebrew, mythographic tradition. Without doubt, the fact of hypothesizing the sexual use of humanoid bodies, both male and female, can find confirmation in an ancient and documented tradition of kabbalistic reflection on the usefulness and appropriateness of golems, as Idel in particular showed us in his fundamental work on the prototypical artificial humanoid (Idel, 1990, Henry, 2013). This *traditio*, however, no matter how noble its lineage from a

[4] A reaction of rejection that is not comparable can occur with respect to a different example; when special techniques are used for specific artistic performances directed at going beyond the *limes* between nature and artifice these are often considered as belonging to the particular case of the *cyborg*; such as the so-called body-machine performers, which is surely closest to being human given the temporaneity of the grafts and the corporeal manipulation of the artist, although it is aimed at exasperation of vision according to which organism and machine appear to the spectator as if they were in full symbiosis. Cf. Tagliasco (1999), p. 81.

mythographical and symbolic point of view, is not as influential on the imaginary as the expressed or unconscious desires of many (principally male) humans, at a global cultural level. The latter, ennobled by a distinguished western and oriental literary and cinematographic tradition, would be happy to possess an artificial geisha, a mechanical doll, like the cold, silent, untiring and luminous artificial lover of Fellini's Casanova, or rather a *woman cyborg*, made up of all the women that they could hypothetically desire, and suitable to satisfy (at least presumptively) each and every erotic and emotive need. In a passage from *Zeno's Conscience* there is a renown example which anticipates by more than a century, with respect to 'natural' feminine examples, the mental and emotive disposition which is welcoming as regards 'feminine cyborgs[5]:

> "I was sincere as in the confession box. I did not like woman in her entirety but ... in pieces! Of all I loved the feet if well shod, greatly the neck if slender or even if strong and the bosom if light, light. And I went on counting the female anatomical parts, but the doctor stopped me: 'All these parts make the woman whole.' At that point I said an important word. 'Healthy love is that which embraces a single and whole woman, comprising her character and intelligence.' Up until then I had certainly not encountered such love and when this happened it made me suffer, but it is important for me to have seen the illness where the doctor saw health and that my diagnosis came about" (Svevo, 2010, p. 39).[6]

With regard to this, in comic strip creations and science fiction there often circulates the idea of time travellers and astronauts who request the possessors of cybernetic and mechatronic knowledge to supply them with artificial

[5] It is an invasive heterodetermination as can only be the still dominant and ruling male vision, which imposes *enhancement* not only via aesthetic surgery, but also 'a' stereotypical and sexist model of perfect wife/companion, as depicted and crticized in 'The Stepford Wives' of Bryan Forbes and the recent remake.

[6] This tradition includes, for example, in the field of male desires: the fair and graceful mechanical Olimpia from the tale of Hoffman, *Der Sandmann*, the cold and perturbing robotic copy of *Metropolis* by F. Lang, the artificial creature built by Dr. Frank-N-Further as object of sexual pleasure in *The Rocky Horror Picture Show*, and the replicant Pris, of *Blade Runner*. On the side of female desire, keeping to just a few examples, we have the android lover and cohort of Barbarella and, outcome of the dark side of the imaginary, the unsettling and handsome Necron, assembled, like Frankenstein, with biological parts from his female creator, the necrophilic virago Frieda Boher, the same referred to in the first number, of the same title, the "fabbricante di mostri" (the monster maker); this Italian erotic comic strip, *Necron*, from 1981, is by Ilaria Volpe and Roberto Raviola, with drawings by Magnus). As an axiologically positive example, even though with tragic outcome, we have Yod, the *cyborg* who receives a complete sentimental and erotic education, according to the plot of Piercy, (1991) *He, She and it*. Many thanks to Paola Bora for enabling me to appreciate this novel.

duplicates of themselves, in analogy with an Amphitryon who is this time consenting, in order to discourage their partners, not contrary to the project, from having the need and opportunity to replace them with other more forbidding human sexual *partners* during their long absences from home. We are referring to androids equipped for sex (Tagliasco, 1999, p. 278).

Of another tone with respect to the previous vision, which however expresses projections, apprehension and widespread desires (not only in the Western world) which should be taken into account, is a third vision, the following.

It is that which, in the field of gender studies, and starting from the works of Donna Haraway and part of the cyberpunk literature, seizes this cognitive challenge as a chance to contrast and contest - through original alliances between socio-anthropological subjectivities and cybernetically connected configurations – the hubris of those who endorse the sacral purity of an exclusively biological origin of the born of woman in rigidly defined sexed bodies by means of mating with natural methods. The latter, the enemies of the 'not born of woman', can be considered as the renewed disciples of the ideology of *limpieza de sangre*. This requisite in itself would be a factor of ontological and moral superiority of the 'original' humans with respect to all the beings that are organically spurious, metamorphic or hybrid that can be hypothesized or that already exist from a genetic, genealogical and sexual point of view: the 'rejects', according to the traditionalists of biological and specist purity, range from artificial humanoids (golemic beings, robots and *cyborgs*) to the constellations of *transgender* humans. In this type of practical-moral attitude, an ascriptive sort based on biological-genetic and specist ideas, which numbers many pernicious examples in the history of intolerance and racism, not only in the West, it is the purity of biological pedigree, the genealogical belonging to a category, and not the good intentions or actions of themselves and interlocutors, that counts as ultimate and distinguishing division between what is acceptable and what is deplorable in the intersubjective relations among reasonable and responsible agents.

Conclusion

In what has been said so far the intent is to give definatory credibility to an enhancement that is post-human, rehabilitating and restoring, and certainly not trans-human, that is supermanistic and directed at the annulment of the corporeity and creaturality open to relationality between finite beings. It is the

meaning according to which all creatures, even more so the most powerful, must be companions in the sharing of pain, as in sharing the aim of limiting the inauspicious impact on the living and whoever is animated, and it moves within the inner-worldly and infraspecist horizon. This opening should for the sake of coherence be even wider apropos hybrid humanoids, of what in effect *we humans* are or become whenever we oppose the hardships of our destiny with the grafting onto our bodies of artificial rehabilitative or replacement devices, becoming cyborgs, closer in this to the inorganic and metallic aspects of our non-human companions (the automatons of the present, the androids of the future), in an opening that is reflexively accepted, and not merely endured (Fadini, 1999). This mutation implies, per se, a widening of the horizon of inclusion of morally qualified subjects and it will take place, perhaps, in a not too distant future. This will happen whenever there is among our interlocutors, within the pragmatic state of coexistence and social life, whatever humanoid capable of foreseeing and accepting the consequences of their choices as regards other subjects involved, however modified or altered they are with respect to a presumed original human model. Whoever is hybrid or bionic bears *written in the body* the hazardous and ambiguous burden of being the target of discriminatory practices legitimized by their not being fully *human* or of being so *unrestrainedly*, beyond what is consented. The seed of racism and xenophobia lies in learning the noxious, but typically human, taste for humiliating he who is *other*. The label can be attached to whoever one wishes, the step is short. What counts is contributing to building, politically, from now on, the conditions contrary to these deviations. They must be the widest possible conditions, of non-hegemonic or expansive conscious contextuality of legislative and decisional systems, focussing rather on the social circumstance whereby we see ourselves as subjects that already co-inhabit multiform social identities, in changeable and hybrid bodies and identitary images, in potential or latent conditions of moral and political asymmetry, which are therefore to be preventively identified and neutralized. "It does not count 'what' you are, but 'who and how' you decide to be". This could become the legislative principle of a society of humanoids - *humans*, hybrids, artificial beings – who are free and equal.

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