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Artículo de investigación

Human transformations through technology

A Contribution to a Historical Study on Transhumanism[*]

Transformaciones humanas a traves de la tecnolologia*

Un aporte al Estudio Histórico del Transhumanismo *

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Abstract

The human enhancement through of human capacities in the use of technology have object of imagine and building techniques, in order to potentiate the physical and mental activities of individuals, have been the object of study of the current philosophical called Transhumanism.

This article, present the research contributions of the doctoral thesis work entitled "Roboethics and transhumanism: a singular scenario in the bioethics of the technology", a document built for the academic scenario of the Doctorate in Bioethics, at Military University Nueva Granada, Bogotá, Colombia. which starts from a state of the historiographic art of transhumanist, organized methodologically through four historical stages, whose result envisage the conceptual and theoretical articulation of the construction of it.

Keywords:

Transhumanism, Human Enhancement, Biotechnology, Scientific Dissemination.

Resumen. Las transformaciones en las capacidades humanas a través del uso de la tecnología, han sido objeto análisis a través del tiempo, las técnicas imaginadas y creadas con el fin de potencializar actividades físicas y mentales de los individuos, es y han sido objeto de estudio de la corriente

pensamiento filosófico denominada Transhumanismo (h+).

Para el presente artículo, se presentan los aportes investigativos del trabajo de tesis doctoral denominado ¨roboética y transhumanismo: un escenario singular para la bioética de la tecnociencia¨, documento construido para el escenario académico del Doctorado en Bioética, en la Universidad Militar Nueva Granada, Bogotá, Colombia. que parte de un estado del arte historiográfico del pensamiento transhumanista, organizado metodológicamente mediante cuatro etapas históricas, cuyo resultado vislumbran la articulación conceptual y teórica de en la construcción del mismo.

Palabras clave:

(Transhumanismo, Mejoramiento Humano, Biotecnología, Divulgación Científica)

Introducción

Human transformations through technology, in order to potentiate the capacities of individuals, is and has been the subject of study of the current philosophical thought called transhumanism.

The concept "Transhumanism" comprises two linguistic elements which are related; the prefix "trans" which comes from the Latin "tras" or "trans", whose meaning is "through" (RAE, 2014, p. 2153). And the concept "Humanism" is related with the daily life activities, its problems, the human's life: "It is true that Humanist, in its origins, indicated the literate's work, that role goes beyond the

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[2] "Philosophies of life (of Extropical perspective) seek the continuation and acceleration of the evolution of intelligent life beyond its present

university, and gets into the active life, lights the daily life problems (Reale and Antiseri, 1988, p. 31).

This semantic conjunction, goes beyond what could be termed as ¨ beyond the human ¨, the authors: Hottois, Missa, & Perbal, (2015) in the Encyclopédie du Trans/posthumanisme refer to the term "transhumanism" as:

"Est un mouvement philosophique de transition vers un stade postérieur d´evolution de l´espéce humaine (…) récupére l´Humanisme traditionnel afin de lui adjoindre les techniques – d´amélioration- de capacités physiques et cognitives dans un but de dépassement des limites –naturelles, biologiques- et d´adaptation perpétuelle au monde (p.163)[1].

Authors like: More & Vita-More, (2013) in its publication The Transhumanist Reader: Classical and Contemporary Essays on the science, technology, and philosophy of the human future describe transhumanism as a philosophy of emergent life, motivated by cause Of the evolution of science and technology.

Philosophies of life (such as extropian perspectives) that seek the continuation and acceleration of the evolution of intelligent life beyond its currently human form and human limitations by means of science and technology, guided by life-promoting principles and values" (p. 1)2.

It is then in this context - through the human-and-through the problems of everyday life - that emerges the concept of ¨ transhumanism ¨

human form, motivated by human limitations through science and technology, guided by principles and values that promote life" Author's Translation.

whose scenario of philosophical reflection, is motivated by the historical use of those technological tools, which they idealize an unlimited perpetuity of human biological capacities, seeking to free them from the physical and cognitive wear of the passage of time.

A historiography of transhumanism, presented and supported by four historical narrative stages, enable a dimensioning of human thought, in line with the historical evolution of human idealism against the possibility of an increase to longevity of life, or failing that, in the pursuit of immortality.

First Stage: Transhumanism as Mith / Religion

This first instance refers to transhumanism as a form of human idealism linked around the dynamics of "immortality" and "Amortality", narrative facts that envelop that insatiable search for human struggle, in the attainment of mechanisms that eliminate from its that "end of life", attribute that metaphorically, was only attributed to the nature of mythologies and gods.

The idea of death from the imaginary of immortality, is part of the historical narrative of the dialogue of men, the epic narratives, describe how man faces an idea of termination of his life, his chains present in time, as well as his mythical imaginary that overflow all reality and fantasy.

In the historical narration of Gilgamesh, typical of the Sumerians of the 26th century B.C., where the king of Uruk, the main character of the epic poem of his own name, recounts various adventures motivated by a

discipline, wisdom, courage and daring, symbolizing the rejection of that defeatist attitude to the end of life, (which is only of higher beings).

Yuval Noah Harari (2014), based on the Sumerian epic of Gilgamesh, identifies that "when the gods created man, they laid down that death was an inevitable destiny, and man must learn to live with it" (p. 296). However, the author describes later that: "For men of science, death is not an inevitable destiny, but simply a technical problem, (...) people die not because the gods so decreed, but because of various technical failures (...) and each technical failure has a technical solution "(p. 296).

In the same way, in the biblical accounts of Christian nature, appear in the Old Testament, biblical characters called "Antediluvian Patriarchs", men whose stories in life testify virtuosity in the service of a "God", providence that conferred them the identity of being the longest living humans in life.

In the day that God created man, in the likeness of God made he him. (…)And all the days that Adam lived were nine hundred and thirty years (…)And all the days of Seth were nine hundred and twelve years (…)And all the days of Enos were nine hundred and five years (…) And all the days of Cainan were nine hundred and ten years (…) And all the days of Mahalaleel were eight hundred ninety and five years (…) And all the days of Jared were nine hundred sixty and two years (…) And all the days of Enoch were three hundred sixty and five years (…) And all the days of Methuselah were nine hundred sixty and nine years (…) And all the days of

Lamech were seven hundred seventy and seven years, and he died (Genesis 5: 5 – 31).

And Noah lived after the flood three hundred and fifty years. And all the days of Noah were nine hundred and fifty years: and he died. (Genesis 9:28-29).

By Gray & Rae (2007), based on the biblical account of the "patriarchs", especially "Matusalen", the longest man in the narrative, incorporating into the transhumanistic stage the concept "Methuselarity", as an anthropological idealization, through strategies Biological ones that point towards a long-lived construction, looking for a null ageing through evolutionary researches of the biological order, obviously improving the gerontological field.

The defeat of aging will be the end of that stage, as it will postpone indefinitely at more advanced ages so that people never reach it (...) It is also about the eradication of the almost incalculable amount of suffering, experienced not only by the elderly, but also by their loved ones and caregivers (...) and there is also the minor detail of economic saving that the eradication of aging would behave for society (p. 6)

At the philosophical and cultural level, Taoism builds an ideological scenario around an immortality of body and soul in human beings, narrative studies of cultural researcher Eva Wong (2005) refer to the description of the spirituality of Taoism, based on immortality. A first narrative instance of human immortal, does not differ much from human mortals, except that they have a longevity of greater life, provided by the care of their body and soul, based on human virtuosity in the search for a balance between body and soul (p. 59).

A second instance, refers to earthly immortals, who mingled with mortals, increase their longevity of life due to the narrative use of activities typical of wisdom, provided by magic, divination and alchemy (p. 95). The author describes narratively in the Taoism, the intervention of the immortal in spirit and the heavenly Immortal, whose characters have been promoted by meritorious works on earth, anthropological models that become ideological references human beings for a spiritual realization in the social communities and their cultural entrenchment (p. 15).

In this same scenario, the Arabic alchemist Ŷābir ibn Hajjn, in Latin known as-Geber-, used the term "tarwin" as synonymous with "beyond immortality", in this recounts the possibility of a manipulation of life through alchemy, because its use is potentially infinite, through manipulation of the elements of nature: "The science of equilibrium, its manipulation makes it possible to produce precious metals by observing and improving the methods of nature" (Turner, p. 190).

Al-Razi refers to the construction of a human immortality attributable by the refinement in the use of the elements of nature. For Watson (2005), it is historically attributable to this alchemist, the search for a perfecting in the methodology of the separation of the natural substances-and the artificial substances, whose conjunction and disjunction of their elements, identify clearly the proper stage of a laboratory.

Ortiz (2006), includes in his academic works the Amerindian history, in which it relates the religiosity and the myth around the context of immortality, its practices, ideas and values frame a scheme of "shamanism", whose scenario becomes elements that trigger this

human transformation to meet life longevity: "Amerindian cultures converge to establish that the human body is multiple and fragile (...) God is like a man, he follows the same life cycle (...) The gods age, his works too "(p. 23).

The historical influence of the narrative story between myth and religion, bases a relevant construction on transhumanistic idealism, its cultural motivations by creating a "mythical-religious" realism around immortality, is initially attributable to narrative characteristics of the relationship man-god, because the magical scenarios – narratives are evidenced by a possible elimination of death, as a technical human problem (Sumerian idealism), a providence based on the construction of the longevity of human life, motivated by the theological human acts against the maturity of the death (origin of the Christianity, Foundations of Taoism), and a modification of human life through the manipulation of the elements of nature and of animated and inanimate matter (pragmatism of Islamism and identity of Amerindian culture).

Second Stage: Transhumanism as Techné

This historical evolution in which the possibility of an idealization of "man" based on greater qualifications is conceived of being an improved object, complemented and perfected, arises by the evolution of the scientific discoveries typical from the 14th 19th centuries.

From the narrative of the 14th century, Dante Aligieri, in the Divine Comedy (Paradise, first chant), uses the term "Transumanare", referring to a "beyond the human", contextualized from a medieval poetic scenario, sought a narrative possibility of

identify a religious and spiritual discourse around a man's transformation.

It is not possible to mean in words the act of passing to a higher degree human nature; but suffice the quoted example to whom the divine grace reserves such an experience (...) All things keep an order among themselves, and this order is the form, which makes the universe akin to God. Here the high creatures see the sign of eternal wisdom, which is the end for which the above order has been created (p. 284).

Pico Della Mirandolla, (1486), leading the list of thinkers of the 15th century, contribute to a philosophical discussion in his "Discourse on the Dignity of Man", considering a vision to identify an "unfinished man":

Who, then, will not admire the man? To this man, who does not err in the sacred mosaic and Christian texts, is already appointed with the name of "all being of flesh", already with that of "every creature", precisely because it is forged, modeled and transformed itself according to the aspect of all being and its ingenuity according to the natural of every creature. For this reason, the Persian euanthes, in this passage where he exhibits the Caldean theology, writes: "Man does not have his own native image, but many strange and adventitious". From here, he said Chaldeans: "Enosh hu Shinnujim vekammah tebhaoth Baal Haj", it means, "man is a varied, multiformed and changing animal of nature" (p. 7).

René Descartes, along the sixteenth century, publishes the document "Treatise of Man"; he reveals the composition of a human body similar to a machine, describing that this ability to see, like a systemic mechanical gear,

allows to glimpse all kinds of movements, Actions which by their nature of the physical order, are descriptibles, measurable and qualified.

I'm going to assume that the body is nothing more than a statue or machine of earth that God deliberately forms to make it as similar as possible to us, in such a way that it not only gives the color and shape of all our members outwardly, but also to introduce in its interior all the necessary pieces to walk, eat, breathe and, finally, imitate all those of our functions that can be imagined coming from the matter and that only depend on the disposition of the organs (p. 675).

The Mettrie, at the end of the 17th and early eighteenth centuries, addresses Descartes' discourse in its materialistic analysis, and reveals the possibility of identifying that the bodies of nature, inanimate or external, can be the subject of modified or exert influence in that machine, which is ultimately what constitutes the human body: "We think and even we are righteous men in the same way that we are cheerful or courageous; It all depends on how our machine is mounted" (p. 41)

The illustration of the eighteenth century integrates Nicolás de Condorcet, with a narrative discourse that makes probable, with greater approach, the evolutionary development of medical science, towards a construction of external mechanisms to the human body that make extensible its longevity of life.

Would it be absurd now to suppose that the improvement of the human race should be regarded as capable of unlimited progress? That a time will come when death would result only from extraordinary accidents or the more and more gradual wearing out of vitality, and that, finally, the duration of the average interval between birth and wearing out has itself no specific limit whatsoever? (Fortham University, 2017) 4.

At the narrative level, the German playwright Johann Wolfgang von Goethe, contributes beyond the prevailing mechanism of the time, to an idealistic construction of transhumanism with his work Fausto (1773); in the second part, the writer narrates the creation of a magical – alchemist scenario that transforms time and space. One of its characters, "Mephistopheles", personifies the time of youth of the principal actor, involving the term "homunculus" (which means in a diminutive form "double of the human") and becomes a symbol of that mysterious product of human interaction with alchemy (chapter two, act I-V).

With a deeper theoretical argument of the philosophical order, Nietzsche (1900) appears in the scenario, glimpsing in its analyses. Those arguments make possible the construction of a new man, demystifying of its historical legacies, the birth of a existentialist salvation from the domains of science, thus enabling the germination of a new "human race", which he called "Übermensch" (in Spanish "Superman").

Nietzsche, in his works, as Zarathushtra (1891), The Gaya Science (1882), and the Anti-Christian (1895) expressed, it appears the ideal of acceptance of life, based on an eternal return to Earth, enabling an idealistic construction of a man transformed by the possibilities of your own creations: "What is it that must occupy the site of humanity on the scale of beings? (Man, is it an end?); what type

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of man should be created; must be wanted? which type will have more value, will be more worthy to live?" (p. 10-11).

In this second stage of "transhumanism as Techne", it is imperative to emphasize that the philosophical elements of the relationship man-science and its character "Beyond the Human", examine with greater relevance, the relations "man-machine", "Alchemy-Transformation", "force-movement", as well as possibilities of describing a reality through" measurable, descriptibles and quantifiable" processes, identify this stage of historiographic construction by the force of a philosophical-anthropological analysis, an idealistic vision of a man's immortality that reconsiders elements of the development of the technique (Téchné) and its transformation towards a human enhancement.

Third Stage: Transhumanism as Narrative for Human Improvement.

In the twentieth century, transhumanistic idealism goes from being a philosophical pretext to becoming an emergent scenario of the narrative field, based on techno-scientific relationships of order. In her novel "Frankenstein or Modern Prometheus", Shelley (1818), argues that a possible conjunction in the manipulation of natural forces, the use of alchemy, mechanical experimentation and advances in medical knowledge, sufficient elements for what that narratively germinates as a spectacle in the creation of life, manipulation of living beings and a possible human transformation.

Jules Verne, in his writings, classified as the extraordinary voyages (Touttain, 1966), - narratively including 54 novels-, among which

we find: Five Weeks In Balloon (1863), Voyage To The Center Of The Earth (1864), Twenty Thousand Leagues Of Submarine Voyage (1870), Around The World In Eighty Days (1873), And The Breathtaking Adventure Of The Barsac Mission (1918), incorporates the human actions and their relationship with the techno – scientific advances, making possible the identity of a narrative scenario, whose elements overcome the physical limitation s in the human being.

The philosopher Nikolai Fyodorovich Fyodorov (1829-1903) writes the Philosophy of the Common Cause (1906), whose tales integrate the prolongation of life, immortality, and even, the resurrection of the dead by techno-scientific applications, whose latent possibility is discovered by the gradual advancement of technique and science.

With the narrative explosion of the twentieth century, Haldane (1924) appears in the scenario, telling the possible effects of genetic manipulation as a workshop of possible invention for human transformation; he highlights the four main sources of human invention that have changed its history: The animal, plant and fungi domestication, as well as the artificial control of the conception; the latter is integrated into the emerging discourse of the Transhumanism, through the possibility of a genetic manipulation.

The chemical or physical inventor is always a Prometheus. There is no great invention, from fire to flying, which has not been hailed as an insult to some god. But if every physical and chemical invention is a blasphemy, every biological invention is a perversion. There is hardly one which, on first being brought to the notice of an observer from any nation which has not previously heard of their existence,

would not appear to him as indecent and unnatural. (p. 12). 4

Eliot (1935), looking for a construction of a futuristic narrative language without being excluded from the stage of the time, articulates in his play *The Coctktail Party*, identifies the term "Transhumanized", as first conceptual narrative approximation, identifying the incorporation of the term as a transformative technological mechanism in human relationships.

In 1950, as a product of the social transformation due to the conflicts by the first World Wars, the "Club de Savanturiers" was born in Europe, promulgated by the French writer Jacques Audiberti (1955), who retakes Bruno's philosophical contributions (1548 – 1600) to describe the term "Abhumain" (English translation "Humanism"), a concept that identifies that traditional vision of man as the center of the Universe (anthropocentrism).

The Works developed by the "Club de Savanturiers" (1950), allowed the narrative reconstruction in fantastic tales with human – nature relationship, the categorical construction for characters such as: Monsters, vampires (human and the quest for immortality, ogres (human transformations from human relationships and its immersion as part of nature), hobbits (a relationship between the human being and its physical evolution, according to the environment), minotaurs (reminder of greek mythology to describe the relationship human – animal) and demons (relationship between human and overnatural powers) (Boutel, 2017)

Julian Huxley (1887 – 1975), considered by various narrative authors of science fiction as the father of the Transhuman Futurism, is

acquired the term "transhumanism" for his work done in the text New Bottles For New Wine (1957).

In this publication, Huxley makes possible a human transcendence through the very evolution of being, arguing that any mechanism (external or internal) to human capacities, which is aimed at achieving an increase towards this objective, will allow man to appropriate of his own existence.

Evolution in the human sector consists mainly of changes in the form of society, in tools and machines, in ideas, in new ways of utilizing the old innate potentialities, instead of in the nature of those potentialities, as in the the biological sector (p. 23).

As a narrative explosion, science fiction writers are categorically called "futurist narrators", since their techno optimism derives from the application of the possibilities of human transformations and the fruit of the impact, generated by the fantastic imagination, they put on stage the context of science fiction in two stages.

The first stage is framed by the writers Arthur Clarke (1917 – 2008), Isaac Assimov (1920 – 1992), Robert Heinlein (1907 – 1988), Stanislaw Lem (1921 – 2006), and a second stage by Bruce Sterling (1954 -), Greg Egan (1961 -) y Vernor Vinge (1944). They respond to a fantastic idealism, whose futurist scenario, optimists with the human's overcoming, suggest a new society, mediated by the constant change in the technosocial transformations, product of the spatial colonization and the advances of science to achieve them.

A second stage, is the one that contributes most to the construction of transhumanistic

thought (without the first being exclusive), because its dynamic narrative refers to a scientific modelling of human nature that dilutes that line between what is considered as "possible and not possible" own human invention, its assumptions reach science dimensions that exceed human capacities.

From this conjunction in narrative construction arises the first form of structurally theorizing transhumanism, providing a critical and formal sustenance much more evident, for this, Natasha Vita-More (1982), writes the "Transhumanist Manifesto", the which was amended and increased by several authors for 2012, with the name of Transhumanistic declaration (More & Vita-More, 2013, p. 54).

The Anthropo-narrative idealism, framed under the search for the possibilities of an immortality of the human being, is transformed by the techno - scientific advance that surrounds and suggests the circumstances of post-conflict of the wars, the actions in front of the human perpetuity become a mechanism to fight biotechnology against old age and death. Harari (2016) confirms it as evolutionary historical evidence of human beings:

Modern science and culture differ entirely in their view of life and death. They do not think of death as a metaphysical mystery, and certainly do not consider it to be the origin of the meaning of life (...) Death is a technical problem that we can and should solve "(p. 33).

Fourth Stage: Transhumanism as evolution, towards a transformation of human capacities.

In this fourth stage, Transhumanist thought transforms the conception of human nature from an idealism based on human immortality (which culturally and historically alone was attributable to the gods), towards a state of scientific search for the elimination of death (Amortality: Not death, to defeat death), since it assumes to it like technical problems of the human beings, which is possible to correct and to really achieve the guarantee of an eternal youth.

In the 21st century, there appear, in the transhumanist scenario, specialists which stablish a techno – enthusiasm in several scientifial aspects: Bostrom, N. (2005), (2014), Bostrom & Savulescu (2017), Chace, C (2015), De Gray & Rae, (2007), Esfandiary, F.M, -Narratively known as FM-2030- (1989), Hottois, G (2015) Goertzel, B & T (2015), Hansell & Grassie (2011), Kaku, M. (2008), (2011), (2014), Kurzweil, R. (1999), (2005); More & Vita-More, (2013) and Yudkowsky (2017).

These authors, extensive in valuable arguments in a multi-junction, pluri and transdisciplinary, lead to the real possibilities of a scientific techno breakthrough for the fields of health sciences (neuroscience, pharmacology, biology – in their states of microbiology and nanobiology, botany, food science, oncology, veterinary and sports medicine), computational sciences and engineering (communications, robotics, artificiality – in its various fields of artificial life and intelligence, materials science, electrochemistry, renewable energy, physics and thermodynamics), as well as ecology and geosciences (aquatic, terrestrial and spatial).

In scientific advances in gerontological biology, we find Prof. Aubrey de Gray, who

through the SENS Foundation (Strategies for Engineered Negligible Senescence), has been developing genetic order identification processes, with the aim of producing effects on the longevity of human life, its latest advances are the construction of Project 21 (SENS, 2017), whose financing of the public and private sector worldwide, dynamizes a new form of production of investigative results in this field.

Bostrom evolves the field of transhumanistic analysis that comes emerging at the level of production in the construction of engineering, its publications: Anthropic Bias: Observation Selection Effects in Science, (2002), Global Catastrophic Risk (Bostrom & Circovic, 2008), Human Enhancement, (Bostrom & Savulescu, 2009), Infinite Ethics, (2011) Superintelligence: Paths, Dangers, Strategies (2014), allow illustrate the advances in the transformations of human capacities, based on the cognitive revolution, artificial life, and artificial and robotic intelligence.

From this transhumanist viewpoint, it is evident that the construction of artificial intelligence scenarios and robotics work, raises the debate on possibilities of transforming human capacities in various scientific fields, breaking the narrative barrier of the previous stages, and placing in a context, the creation of instruments that match and/or surpass human intelligence.

Michio Kaku, an expert in scientific evolution from the physical developments of the subject, in his analysis of scientific divulgation, he describes the scientific advances that transform human capacities. His literary trilogy: Physics of The Impossible, (2008), The Physics Of The Future (2011) and The Future Of Our Minds (2014), describe the

immersed scientific step of society, based on robotics and the optimistic changes that this can provoke in individuals.

Ben Goertzel, transhumanista apasionado por el estudio de los avances en Inteligencia Artificial y arquitecturas hibridas (humano-maquina), describe en su artículo Artificial General Intelligence and the Future of Humanity (2013), identificando que la dinámica desarrollada supera la construcción de ingeniería, temática que comienza a coger fuerza en escenarios de políticas económicas mundiales que ya se asumen desde el año 2009, -World Economic Forum- (Davos - Suiza), cuyo tema central es indispensable para el fortalecimiento de las políticas de mercado y la construcción de nuevas necesidades de las sociedades emergentes.

Eliezer Yudkowsky participated in the first congress of "Ethics of Artificial Intelligence" (University N. Y, 2016), and as director and chief investigator of the Machine Intelligence Research Institute – MIRI, (Yudkowsky, 2017), in his publication: Artificial Intelligence as a Positive and negative Factor in Global Risk, (2008), he exposes the translation from a philosophical-transhumanistic language to one, based on the construction of intelligent systems and the proper communication of science.

For 2015 – 2016, the comprehensive analyses towards an extension of human capacities achieved by Bostrom and Yudkowsky, extend the object of transhumanistic analysis to results obtained in engineering, in general and robotics in particular, leaving an evolution to transhumanism as a banner of leadership in the topic, which already begins to leave the stage of science fiction and is consolidated as a real concern in the ethical and moral fields,

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because its control is null, and the advances are more by the time.

In this fourth stage, where the Transhumanist scenario is consolidated as a champion of the techno-scientific evolution at the service of human activities, it leads the construction of a scenario that quickly germinates in the search for human transformations through technology, whose speed, acceleration, scope and efficiency will be possible by the evolutionary model of techno science called Technological singularity.

Conclusiones

The evolutionary construction of Transhumanist thought has been present in the historiography of man's development, its contributions suggest a transformation of the narrative order, towards a techno empirical construction, whose results in the last years have been linked to particular developments in the biotechnology fields, motivating changes in the cultural and social order of our people.

A technical vision of the potentialization of the human capacities, not only have been object of discussions of the western philosophy; it is of meritorious acceptance by Amerindian cultures, whose origins to the length and width of the American territory, have been precursors of motivations in the physical and mental transformations of its inhabitants, whose historical results show an evident participation in the construction of transhumanistic thought.

The human transformations and their modifications in order to potentiate their capacities, are the subject of emergent study by the bioethics of the technoscience, whose

analytical positions have suggested positions for or against the technological immersion in the body of human beings.

These scenarios of the order Tecnofóbico and Tecnofilial, whose elements allow a construction of new spaces of analysis, evolutionaryly called "Ethics of Artificial Intelligence", whose dimensions suggest a techno-scientific relationship in computational sciences and the human, until emerging towards a construction of a ¨Roboethics", characteristic of the extensive dynamics of robotics, whose dimension suggests the passage of a transhumanism towards a posthumanism.

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