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FROM THE SUFFOCATING MATERIALITY TO THE COMPUTERIZED BODY: A SPIRAL DANCE BETWEEN CORPORALITY AND CYBORG EXISTENCE BASED ON AN ANTHROPOLOGICAL ANALYSIS OF THE MOVIE *GATTACA*

ABSTRACT

It is intended, in this paper, to set up some of the possible relations between body and technology in the sci-fi movie *Gattaca*, from some contemporary anthropological debates about the body. Trying to make such relations and its criss-crosses clearer, we interrogate which representations and speeches on corporality are shown in *Gattaca*, focusing the body computerization that operates in the movie context, and associating it to the ideas of Donna Haraway and David Le Breton. As we are about to see, although at the first moment the perspectives of these authors may seem to be in opposition, their reasoning logics, in some cases, walk in parallel.

keywords

Anthropology of body;
Cinema; Cyborg; Domination
informatics; Body.

INTRODUCTION

In this paper, we intend to shed an anthropological view over the movie *Gattaca*, in order to bring up, among several possible discussions, that one concerning the computerization of the bodies of the characters, as well as the reflection on how a kind of debate which is approached in the movie is parallel to some discussions about body into contemporary anthropology.

Considering cinema not as a replica, but as a possible way of understanding daily life, besides being a propeller and reproducer of a series of meanings which are shared by a certain colectivity – that is, understanding movies as ways of projecting images of behaviors and interactions socially built –, we stand, according to Rose Hikiji (2012), as “anthropologists-spectators”. The methodology herein is the etnographic analysis of the movie, and in this way we report ourselves to other approaches in anthropology which have been discussing from cinema (Adelman et al 2011, Leirner 1992, Muri 2003). It is through the anthropological “conceptual lenses” that we intend to go through the relations set with the body in the sci-fi movie *Gattaca*. Thus, the elaboration of meanings, the relations between characters, the appreciation and depreciation of physical elements, the assignment of meaning to those who have a body modified by technological intervention, have significant importance to explore the ways in which the relations with the body happen in our daily life (from a western contemporary perspective). Questioning from the movie plot is also questioning about yourself, when into this western context, so that science fiction, as imagining the future, is not apart from the contemporary; it works, perhaps, as an exacerbation, as a creative hyperbole of the present, a reflective hypertrophy of the possibilities of the world.

Therefore, trying to make the relations and criss-crosses which can be set between the movie plot and the contemporary debates about body clearer, we question which representations and speeches about body are shown in *Gattaca*. To make a reflection on that, we seek to understand a division put in the movie, between what is taken as natural and what is taken as artificial/implanted in human beings. Besides that, we seek to identify which aspects are considered necessary to the human condition and which values are assigned for them in the analysed film.

What can be observed in the movie regards in general a conception of human condition that has as an essential cornerstone the technoscientific non-interference on the bodies (and where this interference is seen being turned to the body in a superlative way). In the beginning, in the movie plot, the characters who have a changed physical constitution are introduced as improved humans, in which the condition of the presence of a body physiologically sick no longer exists. We see, however, how

these physiological interferences are constituted as a menace to what make humans “*humans*”, making the main character intervention necessary so that humanity (or else, what is more necessary to its possibility condition) do not perish, taking with itself all the spectrum of good qualities associated to it. In this plot, it is possible to observe how certain relations are built between nature and culture, where the first shall be protected so that the condition taken in *Gattaca* may be saved: the human condition. This is due to the bonding, in the movie, of the human condition to aspects taken as given, as natural.

Debates on the body, human nature, nature and culture are frequent in anthropology. If, on one hand, in the classic anthropology many approaches privileged the split between nature and culture – like, among others, Durkheim e Mauss (1979), Hertz (1980), Mauss (2003) –, and the assertion of a basic unity of the humanity – inherited from the discussion of authors like Tylor (2005), which reached, for instance, the work of Boas (2010) –, other approaches have pushed us to rethink our conception of human and the boundaries between humans and animals (Geertz 1989, Ingold 1995, Latour 2012). Authors like Donna Haraway (2009) and David Le Breton (2004; 2012) are connected to these discussions, which will suit, in this paper, both as bibliographical references and interlocutors of the debate in the movie. As references, they will help on the reflections about a series of speeches, practices, representations and meanings linked to the usages of the body and to technology in contemporaneity. As interlocutors of the debate presented, they will show different paths traced as reasoning logics before the fastening of *body* and *technology*. It is important to remind that Le Breton e Haraway write different texts in terms of format and purpose: Haraway builds a manifesto which intends to interrogate the idea of a biological body; Le Breton, on the other hand, writes a theoretical academic text about the body, that uses the perspective of the author as an empiric material¹. Here, we believe that, despite the differences among perspectives, when compared they profit important elements for the analysis (Strathern 2006).

To Le Breton, the insertion of the usage of technology in the body is strongly tied to the Cartesian conception of the body/mind separation. Such split is opposed to that of the “traditional societies”², holistic, in which the body would be an element that not only relates human with itself, but also with others around it and with the world (Le Breton 2012). In this way, the author calls the attentions to the unpredictable consequences (tending to the negative ones) that the human break with its own body may have to the individual and the building he/she makes of him/herself.

1. We thank the referees of the paper who, among other elements, called our attention to the necessity of making the comparison between Haraway and Le Breton clear.

2. “Traditional societies” is put in quotation marks because it refers to a term used by Le Breton.

On the other hand, Haraway (2009) highlights the possibilities of subversion that are linked to technological improvements. What is at stake is not the continuity or not of human existence, but the suffocating materiality of which this would be responsible. To the author, if the breaking of boundaries between animal and human occurred, machine and non-human animal, the fluidity of categories would become a freeing tool.

GATTACA

If it was necessary to give three keywords to the movie *Gattaca*, we would choose *genetics*, *microscope* and *asepsis* (both meaning cleanliness and something functional, with additional details left aside). We highlight these three words because they are those which most pass through the movie scenes concerning respectively their characters, the relations between people, and the setting. As we may think in a more concrete way, we shall select then three key-colours. Those which are shown the most and that, in a certain way, concern to a certain singular characteristic of the idea that passes through the scenes reveal that *Gattaca* is an orange, blue and white movie, such as the colours of Saturn, planet represented in the plot, as we are going to see further. In this way, the setting is marked by the usage of wide spaces in almost every scene. Either at Vincent/Jerome's (main character) office, marked by shades of blue, or in the open areas, where shares of orange are highlighted, as if the Sun should be constantly setting down.

The story takes place in a “not so far away”³ future in a metropolis which we don't know the name. This characteristic of knowing so few about where or when the story goes increases, we believe, the capacity of imagining ourselves in that situation. As the name of the place is not known and the “not so far away” future owns a measurability characteristic too subjective, what goes on the movie can happen anywhere to anyone.

It is in this future society that we follow the story of Jerome – who, later during the movie, we actually discover to be Vincent, a researcher of Gattaca astronomy corporation. He is around thirty years old and perfectly fits the western beauty standards: white, light eyes, tall. Jerome, we realize yet in the beginning of the film, is an excellent professional. His boss never gets tired of praising him and, besides that, he is about to go on a “great prestige mission”: a one-year journey to one of the satellites of Saturn, Titan. However, there is something very specific in Jerome's character – actually, another person is being him. Jerome is actually Vincent.

3. During the presentation of the movie, the words highlighted in quotation marks make reference to the vocabulary used in the film itself.

In the future society of *Gattaca*, it is a current practice that people who wish to have children make a genetic manipulation in the embryos. This manipulation consists in selecting, from ovules and sperms, the desired characteristics to the future child. This includes even from the choice of the colour of the eyes and hair to the whole elimination of the possibility of developing hereditary diseases, such as heart problems, myopia, baldness and, going far beyond, the manipulation excludes the existence of traces of personality which – according to the speech of geneticists of the movie – are genetically determined, such as the predisposition to drug addiction and violent behavior. People who are born from genetic manipulation are called “valid”, whilst people who are born without the intervention are called “invalid”. These are “children of love”, or yet “conceived by faith”.

Jerome Morrow is a valid. Therefore, he already had good opportunities in life, “virtually granted when given birth”. His improved DNA grants him, in the society shown in *Gattaca*, unlimited possibilities of choosing a job as well as relationships. Vincent Freeman – who is playing as Jerome – is part of the second group, the invalid. When he was born, the probability of dying from a heart disease before the age of thirty was more than ninety percent. When he was still young he develops myopia and slowly he discovers that being an invalid goes far beyond of having a healthy body or not; it regards deeply to how the social relations and possibilities of getting a job will develop.

Vincent wishes since his childhood becoming an astronaut. His goal in life is to get a job as a researcher and explorer in *Gattaca*. However, despite studying constantly, Vincent is always dissuaded by his own family. He simply doesn’t have the least chance of getting a job as an astronaut in *Gattaca* because of his microscopic constitution, his genetic material. He would never be accepted because in the future society proposed by the film job interviews are never done. It doesn’t matter the life background or the abilities developed through life of candidates, since the employer’s choice is exclusively grounded in the examination of candidate’s physiologic material.

It is important to highlight that, besides being a common practice, genetic manipulation is not within reach to all people. The procedure, by its high cost, was only possible for those who had certain economic condition. It is put then a determination: it is only possible to work on something that gives considerable financial result if the person is a valid, and it is only possible to be a valid if the person is born in a financially privileged family (once that the cost of genetic manipulation is high). In this way, the cycle is almost completely closed between material wealth and being a valid.

The story goes then following Vincent's path to find a way to become an astronaut. Despite his constant study and the several attempts, his invalid genetic material didn't open to him the possibility of working in another function than that of a cleaner. Vincent joins Gattaca doing this function and for some time he works into spaceships, but only cleaning them.

However, determined to by a space traveller, Vincent seeks other ways of joining the astronomy corporation. Regarding that his genetic material is what prevents him, he decides to make a deal with Jerome – who he met through an intermediate –, a valid who, after being hit by a car (further in the movie we discover it was not an accident, but a suicide attempt), became paraplegic. The physical resemblance between the two of them is great, and becomes greater because the main character passes through a series of procedures that grant him the resemblance: changing hair colour, using eye lenses, and even a bone implantation surgery to have Jerome's height. Having continually studied and now, with the genetic material of his valid partner, Vincent is admitted in Gattaca – not anymore as a cleaner, but as a researcher – and takes the identity of Jerome Morrow in exchange of keeping him surrounded by a comfortable life.

Becoming Jerome, the main character makes his career in Gattaca and is assigned to a journey to one of the satellites of Saturn. Everything goes well until one of the officers of the astronomy corporation is murdered. As usual, all the facilities of Gattaca are literally aspirated for the gathering of vestiges which possibly could reveal the murderer. In this moment a critical phase of the story starts to run. One of Vincent's eyelashes (who, in that part of the movie, is being Jerome) is gathered and the character is promptly considered the main suspect. Why? Well, even if Vincent was not working for months in Gattaca in his old cleaning job, and that there was no connection between him and the officer murdered, his genes show "inclination to violence". Vincent practically becomes guilty by suspicion. All the investigations focus in finding him.

After Vincent continually dodges from the investigations, the police eventually finds out that the real guilt for murder was another officer from Gattaca, who committed the crime due to the menace the victim represented to the continuity of one of the missions of the corporation. The officer murderer, ironically – at one moment when he is put under suspicion – states categorically: "Have a look on my profile again, detective. You will see that I don't have the inclination to violence" (Niccol 1997).

It is interesting to notice that Vincent bypasses the tentacles of domination, of control, that avoided him to become astronaut, making use of a strategy that involves reappropriating the same tools of domination in a way of subverting them. The control which appears in the microscopic

environment is broken when Vincent uses Jerome's organic material to accomplish his goals.

THE COMPUTING OF BODIES AND COMPUTING OF THE WORLD

Vincent's fathert: You will only enter a spaceship to clean it.
Vincent speaking: My father was right. It didn't matter how much I lied in my curriculum... My true curriculum was my cells [...] I belonged to a new low class... Not more determined by social status or skin colour. No. Today, discrimination became a science (Niccol 1997).

In the part that this item begins with, it is clear the great importance given to genes in the society shown in *Gattaca*. The analysis of the genetic chain of individuals, their predisposition or not to diseases, their physical capability biologically existent and visible from the information contained in physiological samples regulate the possibilities of individuals to get or not jobs or even to have affective relationships themselves. That is, from these analyses unfold both a set of stigmas (Goffman 1975) responsible for give concept to an individual as less capable or apt and positive traces listed as virtues.

The importance given to genes is mainly due to the split of the individual from his own body, a consequence of the split that, according to Le Breton (2012), characterizes "the modern body". The body is split up from the cosmos, the other bodies and itself⁴. The web of relations body/individual/subjectivity, that before was bound in each and every of its points, passes then through a breaking which marks the incoming of new ways of both thinking human condition and, related to it, thinking the interventions that technoscience exerts on the bodies, the influences and effects in the way people get related.

Le Breton (2004) calls the attention to the process of *computing* by which individual are passing through. According to him, every form of life, nowadays, tends to be seen in the technoscientific universe as an organized sum of information. The animated world was transformed in a message that either was decrypted or waiting so. This idea gets more tangible if we think in some aspects of *Gattaca*: the computing in the

4. The individual a) is no longer interconnected to the world, from the matter that compounds him and that no longer finds correspondence with another in the Universe, b) is no longer related to a group, due to an emergence of a social structure of the individualistic kind, and c) is no longer related to himself, because the relation between the individual and his body consists more in *having* a body than *being* a body (Le Breton 2012).

plot of the movie becomes visible in the way individuals are identified or still being identified. The identification does not go anymore through face or fingerprints, but through genetic *information* contained in physiological substances of people. The identity is so bound to genetic *information* – thus the process of computing – that even if Vincent's face is spread as wanted for the murder of one of the officers of the astronomy corporation, nobody could even mistrust him.

This becomes clear in the following scene: investigation reaches its peak, and in every monitor of the computers of the astronomy corporation is being shown the face of a wanted individual, in this case Vincent's. One of the officers of Gattaca approaches Vincent's table (who is being Jerome) and asks him about an information on computer screen, just above the warning of "wanted". The officer gets face-to-face with a photograph of the suspect and the man himself, and yet he could not distrust anything. The dialogue is just:

Officer: — Is this the route of approximation that we had discussed?

Jerome/Vincent: — Surely, officer.

Officer: — Very well. Very well (Niccol 1997).

If once the birth of western individualism concurs with the promotion of the face as a sign of human singularity in comparison to the others, a maximum symbol of its body as a possession (Le Breton 2012), now individualism is not anymore connected to face, the identification is not anymore done by an ID photo – what is observed is not anymore the colour of the eyes, the colour of the hair, the shape of the nose or the format of the eyebrows, but genetic information, the predisposition or not to diseases, the possibility or not of tending to violence. The identification goes from the external, material and visible in the present time to the internal, microscopic and probable in the future time. Bodies thus become to be computerized. To the computing of individuals it is added the scientific capacity of measurability. Everything is previously determined from genetics, as it gets clear in the dialogue between one of the officers of Gattaca and one of the investigators of the murder – when the first is explaining the "recruiting philosophy"⁵ of the astronomy corporation:

Officer: — Perfect bodies and minds are essential... So we can go further and further!

Policeman: — And you monitor them closely.

Officer: — So they give their maximum potential.

Policeman: — And exceed?

5. Term used by the officer himself to refer to the way the employees of *Gattaca* are hired.

Officer: — Nobody exceeds his own potential.

Policeman: — And if exceeded?

Officer: — This would just mean... That we didn't measure him correctly (Niccol 1997).

Le Breton (2004) himself quotes *Gattaca* as a source of reflection about the reduction of a human being as a whole, his path and experiences, to a simple genetic datum:

In Andrew Niccol's *Gattaca*, two worlds co-exist. An elite is made up of men and women who are the result of *in vitro* fertilization and whose genes have been carefully selected with the aim of creating a perfect 'product' in terms of intelligence, health, beauty, etc. The rest of the population, born without medical control, are thought of as inferior products and are destined for relatively menial tasks. When the main character goes for a job interview, the company does not ask about his qualifications or his reasons for wanting the job, and instead simply analyses the structure of his DNA (Le Breton 2004, 18).

According to the author, this worldview necessarily disables a morality system because the image of the individual simply doesn't have depth or substance enough to be duly responsible for his acts. The human himself is deleted in the course of this demotion of *self*. Thus, he criticizes this species of genetically programmed destination, for he considers that genetic discrimination mistakes genotype for phenotype, virtual for real, genetic message for organism operation, statistics for reality of the individuals. Genetic predisposition for a disease is not a fate nor an evidence of the disease itself, it is an indication of a probability (Le Breton 2004). It is in this sense that the identification of the individuals is not anymore bound to an external and present element (the face) to be focused on the microscopic and in what didn't happen yet, but that has the possibility of existence in the future (as the predisposition for diseases). This is very perceptible in the dialogue between Vincent and his parents, when the last are trying to dissuade the main character of trying to get a job in *Gattaca*, reminding him of the 99% probability of dying of a heart attack:

Mother: — You have to be realistic. With your heart problem ...

Vincent: — Mom, there is a probability that I don't have anything.

Father: — One in a hundred.

Vincent: — I'll take the risk, ok?

Mother: — But they won't (Niccol 1997).

It seems that the society pictures in *Gattaca* is very similar to that which Le Breton puts as close of existing:

a near future in which a minority of individuals with carefully selected and manipulated genes will dominate a population that is 'natural', and therefore 'inferior', from a biological point of view. For Silver, the risk of there being two human species in the future is entirely plausible given the inevitability of genetic engineering being applied to the embryo. The dignity of man⁶ will henceforth be the dignity of his genes (Le Breton 2004, 18).

Connected with the issue of computing of individuals there is the critique that Le Breton (2004) makes to the breaks of boundaries between human and machine. In fact, this complete computing of human being gets clear in a situation presented by Le Breton (2004) himself: Walter Gilbert (one of the promoters of the Human Genome Project), in a lecture he gave, took out of his pocket a CD and said to the audience: "*this is you*". It is as if human subjectivity was dissolved in its own DNA. The issue that Le Breton (2004) puts is that the belief that human being is nothing more than joining a sperm and an ovule, and the notion that dignity of an individual is merely a result of a genetic chain – instead of the way in which this individual is socialized, educated and the interactions he/she traces along his/her development – is "the most extreme expression of a strictly 'informational' conception of the human; a conception which actually robs the human being of all dignity." (Le Breton 2004, 3). The author, when criticizing the human computing, also criticizes (without taking these two points apart) post-humanism, stating that this would be purely technical and completely utilitarian, characterized by a desire of improving the human being exclusively from a technical perspective – not in a way of improving life quality, but to evolve in terms of rationality, performance or simply economic profit.

The transmigration of man⁷ into a perfected artificial body means that bionics has become a vehicle for genetic engineering, which in turn implies the interface of man and machine. These interventions are affecting human race in the same way that agriculture has had an effect upon crops and livestock, which is to say the creation of artificial species narrowly designed for commercial reasons (Le Breton 2004, 17).

6. Here the author uses "man" to refer to "human". I take the opportunity to highlight that, as a political position, everytime the word "man" comes to refer to "human" or "humanity", there will be a footnote to emphasize the disagreement with the use of male gender as universal.

7. Here the author uses "man" to refer to "human". See footnote 6.

To Le Breton, this dissolution of the individual has severe consequences both from a practical and a moral point of view, for it extinguishes the concrete human individual and the limiting boundaries of humanity in relation both to machines and to animals. From authors like Bruno Latour (2005), we can suggest that the way Le Breton establishes the perception of the relation between body and machine is a modern way of reasoning (where there are clear subject divisions in doing science, for instance), insofar as it is supported in the ontological distinction between humans and non-humans.

The notion of information (in the fields of biology or information technology) breaks down the distinctions between man⁸ and machine and paves the way for the humanization of artificial intelligence or genetic interventions. It also breaks with classical ontology, destroys distinctions of value between man and machine, and constitutes a major moral shift in contemporary societies. [...] The coming together of the living and the inert (the organic and the inorganic) under the aegis of information opens the way for a general indifferentiation, and points to the end of distinct biological kingdoms: man, animals, physical objects and the cyborg are no longer fundamentally distinct as they are in traditional humanism (Ibid., 2).

Considering the critics and questioning put by Le Breton (2004; 2012) regarding the computing of human, to the variability of conception of human condition connected to political interests, and even to the changing of this condition itself and its limiting boundaries, we shall analyse now the position of Donna Haraway (2009) who, at the same time following a parallel reasoning path, contrasts many elements and branches in different ways of the position of the author above.

THE COMPUTING OF BODIES AS TRANSGRESSION

Vincent, after a meticulous bath, takes out a urine recipient from a fridge and tie it to his thigh. Shortly thereafter, he inserts a drop of blood in a false fingerprint and stick it carefully in the tip of his index finger. These are routine procedures before he goes to Gattaca, where he works as a researcher under the identity of Jerome (Niccol 1997, excerpt of a field journal).

8. See footnotes 6 and 7.

Donna Haraway (2009) explores the emerging relations of intimate connection between technologies and bodies – whether through computing, or through using prostheses, or in what concerns the revision of the conception of human condition – from the image of the cyborg. The author uses the cyborg to work with the crossings and boundaries, the ability of creating chimeras, of human-machine entities, virtual communities, besides other forms of social and biological life. From a perspective that refutes the speeches of purity or natural categories – in which makes reference to the seek of a consensus on the human condition – Haraway (2009) makes possible and proposes different ways of analysing how subjectivity and the agency of individuals are being transformed. The cyborg, as a technological artifact and as a cultural icon, is central to understand the relation between bodies, information technologies and technologies used as prosthetic extensions (Hogle 2005).

Haraway (2009) pays attention, like Le Breton (2004), to the computing of the world. According to her, we are in the middle of the transition “from an industrial, organic society, to a polymorphous, informational system” (Haraway 2009, 59), so that it is happening a rearrangement of the social relations in the areas of science and technology that are also changing forms of domination. We passed “from the old and comfortable hierarchical dominations to the new and scary networks which I called ‘informatics of domination’” (Ibid., 59).

This “informatics of domination” – connected a lot with what we have already said about *computing* of individuals and the world –, when rearranging the forms of interaction of its participant individuals with themselves and with other elements that surround them, is not changing the condition of things in a binary pass from something natural to something artificial. It is not a passage from a previous condition, from something that is taken as given or innate to a construction or to something artificial. Here the boundaries between nature and culture, between natural and built, as well as many others begin to be undone, what already begins to demonstrate the author’s positioning, which is contrary to a classification of humanity as separated from animals and machines.

Roughly, the computing of the world could be defined as the

translation of the world in terms of a encrypting problem, i.e., the seek of a common language in which all the resistance to the instrumental control disappears, and all the heterogeneity may be submitted to disassembly, to reassembly, to investment and to change (Ibid., 64, author’s highlight).

Concomitant to the idea of an informatics of domination, Haraway (2009) highlights how cyborgs show themselves present both in contemporary science fiction and medicine: hybrid creatures between animal and machine living both in natural and artificial kingdoms. The author proposes, with the reflection on cyborgs, the advantages of thinking a confusion of boundaries and responsibility in its construction.

The cyborg is the image adopted because through it “nature and culture are restructured: one cannot be any longer the object of appropriation or incorporation by the other” (Ibid., 39). The shade of each of these limitations, as well as its hierarchies, are questioned. The defense of human privilege, whether through language, the use of instruments or through social behavior, is broken, once the cyborg emerges exactly from the transgression between the human and the animal, such as between the boundary between organism and machine and the boundary between the physical and the non-physical. Haraway’s myth of the cyborg then means “transgressed boundaries, powerful fusions and dangerous possibilities – elements that progressive people may explore as one of the components of a necessary political work” (Ibid., 45).

The explosion of dichotomies then comes to be a political weapon of facing this informatics of domination. It is like leaving aside an identity – whether it is human, or machine or animal – to get associated through political parenthood, kinship and coalition. Cyborgs, says Haraway (2009), are illegal children of certain political, social and economic practices, computing practices that seek to subjugate individuals, master them by means of realities developed according to interests, of dualisms which are essential to practices of domination. However, cyborgs subvert the order by reappropriation of the tools of domination. If we are in an “informatics of domination” era, cyborgs make use of writing, literacy, and signs that keep hegemony to rewrite it, restructure it, re-tell it.

Writing is prominently the technology of cyborgs – surfaces recorded of the late 20th century. Cyborg politics is the fight for language, it is the fight against perfect communication, against the single code which translates every meaning in a perfect way – the central dogma of the phallogocentrism. That is why cyborg politics insists in the noise and advocates pollution, taking pleasure away from the illegitimate fusions between animal and machine (Ibid., 88).

These couplings are responsible for subverting the structure and the ways of reproduction of the “western” identity, of the dualisms nature/culture, human/animal, organism/machine, mind/body, deity/human.

To Haraway (2009), from a certain perspective, a world of cyborgs could mean the absolute imposition of a control network over the planet. From another, a world of cyborgs mean “social and corporal lived realities, in which people don’t have their strict kinship with animals and machines, that they don’t fear identities permanently partial and contrary positions” (Ibid., 46).

While Le Breton (2004; 2012) makes an analysis of the computing of the world and point out as resulting aspects from that the political and social implications, the split of the individual and his/her own body, and the changing of the conception of human condition – taking this element as something potentially dangerous –, Haraway (2009) also pays attention to the computing of the world to what she calls “informatics of domination”, from which emerge the cyborgs: entities that no longer bind themselves to the human condition – nor seek to bind to it – but that fluidize themselves one another by their metamorphosis into data, into writing.

Haraway’s cyborgs are the individuals who, standing before the “informatics of domination”, do not prostrate themselves, they do not regret losing their humanity condition, they didn’t cry over their transformation into information; they turned upside down the domination using for that the same tools of domination and of keeping hegemony. It is like if the cyborgs could say: “Were we transformed into pure information? Alright, we then use this breaking of boundaries to get associated in new ways, to also break with the violent dichotomies which don’t cope with the colours we have, we trace rhizomatically our relations in a way to (re)establish connections both with ourselves and with that which escapes to the thickness of our flesh”.

This situation gets very pungent in *Gattaca*: Vincent – as we have already noticed – is submerged in a society in which his life, his relations, his possibilities of existence, are bound to his genetic information, which is taken as the very parameter of his identification. Bearing in mind this microscopic form of domination, he takes Jerome’s physiological material, a valid person, to accomplish his professional aims. In this sense, he appropriates himself of tools of domination (the physiological material whose samples are continually gathered and analysed) to break with the order which avoided him to be an astronaut and which had as a way of controlling exactly the physiological material. Following this kind of reasoning, we may think in the main character of *Gattaca* as a cyborg: by means of technology – what appears when, after an encounter with Jerome, there is a transformation process of Vincent (increasing his height, developing techniques to cheat control etc.) – the boundary between Jerome and Vincent, who begin to have a fluid relation, their existences being even totally bound, is broken.

Having this, it gets clear that what Haraway proposes is that, once there isn't a chance on how to escape from the domination by computing (as it happens in *Gattaca*), that we then re-mean the instruments of domination in a way to subvert them (like Vincent does when he uses Jerome's biological material, described in the excerpt that begins this item). Following this kind of reasoning, the author doesn't criticize nor regrets the re-conceptualization of human condition; she previously teases those who seek to protect this condition: "Why our bodies should terminate in skin? Why at best should we limit ourselves to consider as bodies, apart from humans, only other beings also wrapped by skin?" (Haraway 2009, 92).

For it is not a proposal of a new human condition, and yes, of a new existence condition, that it is not limited nor seeks to keep itself within physiological, moral or material boundaries, it constantly overflows and reconfigures itself – having as unique essential characteristic the endless and continuous construction:

There are no impulse in cyborgs to the production of a total theory; what exists is an intimate experience about boundaries – about their construction and deconstruction. There is a mythical system, waiting to become a political language which may be constituted in the grounds of a way of seeing science and technology, and challenge the informatics of domination – in order to possibly act in a powerful way (ibid., 98).

At the same time that Haraway (2009) and Le Breton (2004; 2012) diverge to what concerns the escapes to break with the domination present in the computing processes – Le Breton (2004; 2012) meeting with criticism on almost compulsory technologization, and Haraway (2009) criticizing these processes at the same time she proposes the subversive appropriation of domination tools – we may approach them together regarding nuances of the individuals. In *Gattaca* we observe the standardization: what happens is almost an orthopaedics of the subjectivities encompassing all individuals in the same normative category, turning the colorful into grey; the iridescent into beige; the contrasts, neutralized. The fact is, whether criticizing standardization – assigning to it the technoscientific interference in the bodies, and consequently in the human condition, as did by Le Breton (2004; 2012) – or proposing new ways of existence – possible by the computing of individuals and by the re-meaning of it, as does Haraway (2009) – the ultimate aim to which the return is desired – almost in Le Breton's (2004; 2012) nostalgia – or the range in a close future, if not in present – through Haraway's (2009) cyborg – is recapturing the colorful, the nuance, the connection with the cosmos, with itself and with the others. After all, isn't it this connection, split into Le Breton's (2012) "modern body", that suggested with Haraway's (2009) cyborg?

HUMANS AND CYBORGS – CONNECTIONS AND CRISS-CROSSES (FINAL WORDS)

When we think in *Gattaca* in a broader way, we see how the movie is putting on debate a kind of dispute for the salvation of humanity between technoscience and recapturing of a humanity with an almost religious character. Notice: the plot of *Gattaca* puts situations of a future society in which human imperfections – coming from the body – were corrected. The story of the movie goes on and technoscience, that was before shown as a panacea of existence, becomes to be seen as a control tool, as regulation of the individuals, and as, as a consequence of theses actions, changing the human condition and even its destroyer – as it is possible to observe in Jerome's path, who even though in a condition of “perfected” human being tries to commit suicide.

In this way, what was before the complete solution to life problems (the improvement of existence) lifting it up almost to a condition of divinity, becomes a source of inhumanity, the loosing of an essence which in the movie is taken as special (as something that gives meaning to life and is substantial to the maintenance of what characterizes us as humans). In the end, the argument of the film approaches to a position that considers human condition, although not perfect, something in high esteem.

In this way, *Gattaca* has a positioning almost nostalgic of a body pre-individualism, pre-Cartesian split, by showing a body associated to the human it incarnates, a body that wasn't taken as surplus, as an object far from being, a body that connects to human in itself, to the others and to the cosmos.

Le Breton (2012) considers that the relation of the human with his/her body is woven in the imaginary and in the symbolic, that is, the body is not a mechanism. If the symbolic dimension of the body is excluded, the body would be dissociated from the individual becoming a mere manipulable object, simple raw matter from the transformations of which is target.

Then, two proposals of solution to the human incompleteness caused by the dualistic dissociation not only of the spirit or the soul related to the body become noticeable, going more subtly from the individual of his/her own body: one meets what the movie shows us and the species of *nostalgia* that comes together with Le Breton's (2004; 2012) ideas – the conception that we must retake the condition prior to the split that worked between the individual and his/her own body, and that configured the existence of the “modern body” –, and another that converges to Haraway's (2009) ideas of *re-meaning technoscience* and of creating networks among individuals so that the Cartesian individualism bound to the hegemonic use of *informatics of domination* breaks.

Le Breton (2004; 2012) takes a position in favor of a preservation of the human condition which, in a certain way, is bound to the proposal of rethinking the technoscientific incisions in the body and rethinking the social and structural consequences which are working due to the absence of reflection about computing the world. Likewise, the author suggests to reflect about the inability of noticing the symbolic and non-measurable aspect that indefinitely binds the individual to his/her body, and therefore influences on the condition of humanity. The alignment of these ideas is what also passes through, in a subtle way, but very visibly, the proposal put by the movie: a criticism about the use of technology, once this makes us waive the human condition, changes the essential randomness to existence of this manner of being in the world.

Contrarily to Le Breton's (2004; 2012) reflections, we glimpse Haraway's (2009) proposals. To the author, there should not be a worry about preserving a human condition. Preserving it would be the maintenance of binaries (such as nature/culture, man/woman, organism/machine etc.). The *informatics of domination* is problematic, but if we take part of it and re-mean it, it will be possible not only defeating Cartesian dualism but also changing dualistic (and superficial) sources of oppression:

Firstly, the production of a universal theory, totalitarian, is a big mistake that leaves apprehending – probably forever, but surely now – the greater part of reality. Secondly, taking the responsibility of the social relations of science and technology means refusing an anti-scientific metaphysics, a demonology of technology and, thus, to embrace the skillful task of rebuilding daily life boundaries, in partial connection with the others, in communication with every part of us. It isn't only about the idea that science and technology are possible means of great human satisfaction, as well as a matrix of complex dominations. The image of the cyborg may suggest a way of escaping the labyrinth of dualisms by means of which we have been explaining our bodies and our instruments to ourselves (Haraway 2009, 98-99).

The icon of the cyborg encompasses the idea that one can choose his/her own impersonation or incorporation. At the same time when the body becomes surplus, computerized and apart of the individual that becomes his/her owner, there is a species of returning to a condition prior to this body/individual split. This happens because the body becomes a site of relations, not a mere case with agency. In this way, the body (with the disruption of boundaries between machine, animal/human and animal/non-human) comes to join back to the individual and, why not, to the cosmos.

Trying to show what we are saying in a more tangible way, we organized the scheme in the Le Breton/Haraway table, in order to clarify the visualization of the relations we propose to think on:

table
Le Breton/
Haraway. Source:
Halina Rauber-
-Baio (2013).

	Le Breton/ <i>Gattaca</i>	Haraway
Human condition	To be preserved	To be discarded
Computing of the world	O autor denuncia os perigos	The author highlights the <i>informatics of domination</i> and proposes (re) appropriation and re-meaning control tools
Proposal for a less subordinated existence...	...to scientific control: return to an existence prior to the individualistic split	...to scientific control and to dualisms: transformation of individuals into information in order to break the ontological and oppression relation keeper boundaries

Le Breton approaches to a final position put by *Gattaca*, but at the same time there is a position in the movie that is related to what Haraway proposes if we think in the way as the character Vincent subverts the microscopic control when using Jerome's organic material to accomplish his goal of becoming an astronaut – Vincent is simultaneously a cyborg and a paradigm of human being untouched by science. It is in this way that the authors make a debate related to what is put in the movie. Their ideas put at the same time a kind of problem of the film, debate in which *Gattaca* approaches more to Le Breton's (2004; 2012) criticism, even though, in a certain way, there are the characteristic appropriations of Haraway's (2009) cyborgs.

Despite the differences, it seems to us that at last, both proposals are converging to the same point: it is necessary to think in connections and relations of individuals among themselves, along with themselves and with the cosmos – including, we dare to say, all forms of existence, whether animal or mineral. It is about the symbiosis with the world, not in the way of a standardization, but of an enriched and enriching perspective, the seek for a co-architecture in building knowledge and knowledge over itself. This way of connection gets clear in Vincent's final words in *Gattaca* when he is about to leave Earth:

To somebody who wasn't made for this world, I must admit... suddenly it is difficult to leave it. They say that every atom of your body once was a star. Maybe I'm not leaving. Maybe I'm going home (Niccol 1997).

translation

Guilherme

Augusto Guedes

text received

03.14.2016

text accepted

09.21.2016

It is about (re)taking the capacity of seeking for the own nerves through the skin of the world, such as someone who seeks the roots of trees through earth; it is about of flooding the lungs with the air that surrounds the planet for centuries and letting yourself dancing in spiral with stardust.

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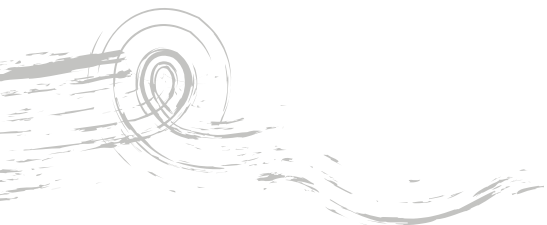
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