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## THE DIGITAL CULTURE AND THE MACHINE MAN NATURE

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### ABSTRACT

The purpose of this research is to discuss issues that approach innovation in an ideological perspective, in the context of digital culture, with reflection based on the extension and incorporation of man's digital devices, in their biosocial aspect. The methodological path will be guided by a bibliographic review and a phenomenological approach. The man presented in the digital context is the one who now uses technological devices in his interactions and, sometimes, mediations. In this sense, (in) conclusive, the writing intends to point out phenomena that partially represent behavioral changes, in which the machine man interacts with other beings and with the interface of possible mediations, in convergence with the digital culture, making considerations about the resistance in the educational sector in the face of the behavioral mutation of subjects (in) corporated and (en)cased by technological and digital devices.

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## INTRODUCTION

The particularity of thinking about the asynchronous synchrony theory has been drawing ideas with regard to the understanding of man-machine relations, in the sense of humanity interacting with technological systems. Man – while being of a historical and cultural nature – interacts with the machine in their constant relations. The interaction between biological and social factors mediated by digital technologies provides researchers with numerous questions regarding human conditions in the face of technological devices. The imaginative framework faced by this study contemplates the oneiric dream of informational clouds, involving and plugging the subjects, promoting a scenario in which there is no way to distinguish where the beginning and the end of human and technology are. The social representation of subjectivity implies a being that, in constant movement, sees oneself in the machine and vice versa. The man who presents himself is the man who now uses technological devices in his interaction and, sometimes, mediation. The interaction in connection with other beings when communicating, sharing different media, enjoying themselves on social networks, looking at each other face to face in the lens of the screen, among others. With these issues in mind, this study reveals itself, in an attempt to present a brief path of authors such as Haraway (1984), Tadeu (2009), Rocha (2018), among

others, who focus on analyzing more than the context, but the overlapping process of appropriation of technologies, here called as human, for understanding that technological devices are incorporated and (re)constituted in social and cultural relations, in the historical development of the group of men and their institutions.

### (In) corporated and (En) cased

In the 1980s, Haraway (1984) placed herself ironically in the face of science, secular traditions, and American policies of oppression of the female condition, through the disturbing circumstances of the "Cyborg Manifesto". Now, as if to paraphrase Marx and Engels (2008) about the "Manifesto of the Communist Party", the author announces, from the beginning, the one that came "*Las páginas que siguen son un esfuerzoblasfematoriodestinado a construir um irónicomitolíticofiel al feminismo, al socialismo y al materialismo*" – in the translation of Tadeu (2009, p. 35): "This essay is an effort to build a political myth, full of irony, that is faithful to feminism, socialism and materialism."<sup>1</sup>

<sup>1</sup> "Este ensaio é um esforço para construir um mito político, pleno de ironia, que seja fiel ao feminismo, ao socialismo e ao materialismo." (TADEU, 2009, p. 35)

The concerns of Haraway (1984, p. 2) start from the principle of the image that “*Un ciborges un organismocibernético, un híbrido de máquina y organismo, umacriatura de realidade social y también de ficción*” – “A cyborg is acyberneticorganism, a hybrid of machine and organism, a creature of social reality and also a creature of fiction”(HARAWAY, 1984 apud TADEU, 2009, p. 36)<sup>2</sup>. Starting from the fictional image of a cybernetic organism that is simultaneously a mixture of animal and machine, this work finds, in the echoes of Haraway (1984), the necessary resonance for the imaginative and dialectical exercise of social and physical reality that presents us with the context involved in technologies of contemporary culture. If Haraway's manifesto (1984) deals with a movement that seeks to highlight the crucial issues of gender, technology and science, it also announces that the border between the animal and the machine provides breaches, one of which is intended to be addressed in this text. The concern is not aimed to be a deterministic treatise in relation to technological devices, but critical in the sense of recognizing the cultural and human specificities that are presented. As Tadeu (2009, p. 10) foreshadows when analyzing the cyborg condition of the feminist manifesto: “what is the nature of what animates what is animated? It is in the confrontation with clones, cyborgs and other technonatural hybrids that the ‘humanity’ of our subjectivity finds itself in question”<sup>3</sup>. It can also be inferred that, it is in the contradiction between subjectivity and objectivity that we confront the order of ubiquity of the relationship between machine and man. Still, accordingtotheauthor,

There is nothing else that is simply “pure” on either side of the “division” line: science, technology, pure nature; the purely social, the purely political, the purely cultural. Total and inevitable embarrassment. An embarrassing situation? But, full of promises, too: is that the whole business is, all of it, fundamentally ambiguous (TADEU, 2009, p. 11, emphasis added)<sup>4</sup>

For him, cyborg technological interventions portray the ambiguity between the frontier and the machine: beings with artificial or genetically modified organs, artificially induced or quasi-human machines: “Cloning that muddles the distinctions between natural reproduction and artificial reproduction. Bits and bytes that circulate, indistinctly, between human bodies and electrical bodies, making them equally indistinct: human-electrical bodies”(TADEU, 2009, pp. 12-13)<sup>5</sup>. In this sense, Tadeu (2009) questions the human ontology bequeathed by the Cartesian cogito, where the subject's existence is identical to his thought; as well as the philosophies that make us reflect man as thinking, rational and reflective beings, ideals of social and political theories, a modern and liberal foundation of democracy, which is still “at the center of the very modern idea of education” (TADEU, 2009, p.13)<sup>6</sup>. As advocated by Haraway (1984), liberation depends on awareness and apprehension of the lived reality. Trying to understand the omnipresence of the subjects connected to the network is to seek to discuss the way these subjects relate in the natural world and in digital culture (ROCHA; SILVA, 2015). It is also about man-machine nature in the digital world, which is perfected as it interacts

with other men interfaced with technologies, appropriating human culture in an inter/intrapsychic way.

**The Machine Man Nature in the Digital World:** Man, in a historical sense, is outlined in its abstract concreteness and transposed to history, for intersychic and intrapsychic relations, for the understanding of the psyche, as a mind in the continuity of relations permeated by the internalization of the initial psychological functions to the higher psychological functions. The intersychic is constituted in relations external to the subject, that is, in the processes in which he interacts with the machine and other beings in social media. The intrapsychic inter-performs in the internal, in the feelings that are abstracted from the external relations and materialized in the internalization of the proposed content/knowledge/objective. The initial psychological functions can be considered the activities that we are able to carry out with our a priori contact with society and in advancing family precepts. In this journey, the higher psychological functions that advance as we develop the psychological, the social, the cognitive through external relations, communications and abstractions permeated by the machine and the mediation of the other are intensified. The machine in a social conception is identified as a technological device that integrates with man in his social and biological nature in the contemplation of technological historicity. The man interacts when using media artifacts such as WhatsApp, social networks (Facebook, Instagram, LinkedIn). While he finds himself in a place, he interacts through these artifacts and, at the same time, with other beings, whether in his relationship with work or in social relationships. The instant he finds himself reading a book, he works, publishes posts on social networks, listens to music and chats on WhatsApp.

In the past, we could also talk about the issue of being multitasking and the notion of temporality. However, in addition to the concept of deterritorialization proclaimed by Castells (2000), there is also the man who, in his constitution, is no longer defined only in biological aspects, rather in his culturality he relates to the machine as if it represented unison beings of one another. It is the perception of the technologized man, not falling into a deterministic and instrumentalist view, but in the unity that implies being “connected”. In the dialogues with the personal application, in the Siri app it is possible to ask: “Do you feel anything?” Siri replies: “Hmmm, let me feel... No. Nothing at all”. (A) Siri – personal assistance application used on the iOS, macOS and WatchOS operating system and which answers questions from its users, explains that it does not have feelings of a human nature, but the man contemplates himself in their dialogues. It is contemplated in relationships through Tinder, Second Life, The Sims. There is the construction of something sensitive in the ontological profile composed of objectivity and subjectivity in harmony of unity. Feelings are nourished in the relationship with others through the machine that is not the other. The other also uses the machine in this complex scenario. Time is re-signified in the dimension that contemplates the unit presented here. The man uses the machine to mediate his relations in his integration with others and in his mediation as a man. However, man dialogues with other men through the machine, but without the language that is contextualized in affectivity. Affection, understood as part of the human, is in the background in the unique feeling of being itself, considering that neither the other nor the machine is able to qualify the subjective affection of man (VYGOTSKI, 2002). From this, it is presumed that applications like Siri, in fact, do not achieve contiguous humanization, but approximate the objectivity of the relations between subject, instrument and sign. What is imbued, but not concluded in this perception of the man-machine nature, are the objectifications of subjective relations in the interweaving of the asynchronous synchrony of these elements: man and machine, as culture, digital culture. According to Rodrigues (2019), “culture is constructed, deconstructed and reconstructed procedurally, corroborating its dynamic dimension, it is possible to perceive it as a historical production, in direct relationship with the social” (p. 34)<sup>7</sup>.

<sup>2</sup>“Um ciborgue é um organismo cibernético, um híbrido de máquina e organismo, uma criatura de realidade social e também uma criatura de ficção” (HARAWAY, 1984 apud TADEU, 2009, p. 36)

<sup>3</sup>[...] qual é mesmo a natureza daquilo que anima o que é animado? É no confronto com clones, ciborgues e outros híbridos tecnaturais que a ‘humanidade’ de nossa subjetividade se vê colocada em questão”. (TADEU, 2009, p. 10)

<sup>4</sup> “Não existe nada mais que seja simplesmente “puro” em qualquer dos lados da linha de “divisão”: a ciência, a tecnologia, a natureza pura; o puramente social, o puramente político, o puramente cultural. Total e inevitável embaraço. Uma situação embaraçosa? Mas, cheia de promessas, também: é que o negócio todo é, todo ele, fundamentalmente ambíguo” (TADEU, 2009, p. 11, grifos do autor)

<sup>5</sup>“Clonagens que embaralham as distinções entre reprodução natural e reprodução artificial. Bits e bytes que circulam, indistintamente, entre corpos humanos e corpos elétricos, tornando-os igualmente indistintos: corpos humano-elétricos” (TADEU, 2009, pp. 12-13)

<sup>6</sup>“está no centro da própria ideia moderna de educação” (TADEU, 2009, p. 13)

<sup>7</sup>“cultura é construída, desconstruída e reconstruída processualmente, corroborando com sua dimensão dinâmica, é possível percebê-la enquanto

And, when it comes to digital culture, from the elements man and machine, is it necessary to innovate?

**Navigating is must, innovating is not:** In a brief incursion into the genesis of the phrase “*Navigare necesse, vivere non est necesse*” said in the first century B.C. by the Roman general Pompeio encourage fearful sailors to explore the ocean. The expression finds its resonance in the Italian poet Petrarch, in the 14th century, when transforming it into “Sailing is must, living is not”. The poet Fernando Pessoa takes it for himself by writing “I want the spirit of that phrase for me”<sup>8</sup>, and apprehending its meaning of life to creation (SOUSA, 2019; UNIVERSIDADE DE COIMBRA, 2019). In the twentieth century, exactly in 1969, in the collection *Os Argonautas*, Caetano Veloso (1969), in the form of Brazilian *fado*, asks: Is navigating a must?

The boat!  
My heart can't take it  
So much storm, happiness  
My heart is not contented  
The day, the milestone, my heart  
Not the port!...

Sailing is must  
Living is not...

The boat!  
Night in yours, so beautiful  
Lost loose smile  
Horizon, dawn  
Laughter, the bow of dawn  
The port, nothing!...

Sailing is must  
Living is not...

The boat!  
The shiny automobile  
The loose track, the noise  
Of my tooth in your vein  
The blood, the pool, the slow noise  
The port, silence!...

Sailing is must  
Living is not...<sup>9</sup>

If navigating is an exact trip that was once done with compasses and astrolabes and today it is done with satellites, GPS' and www's, living is not and has never been precise, this is a trip made up of options, fears, insecurities and a lot of persistence (UNIVERSIDADE DE COIMBRA, 2019). If poetics finds so many voices, in Petrarca, Fernando Pessoa, Caetano Veloso, here the meaning of the phrase “Navigating is must, innovating is not” is to question the resistance to technological innovation in the educational field, in particular, before the navigation of the subjects connected in informational clouds, never losing the critical view on the horizon regarding the binomial technology and innovation. In view of the pressures of economic development, rationality points to technological innovation in different areas of knowledge, in institutions, in the market, in services. The culture of the new finds in the State the conductor of the idea, most of the time, marketing and the pressing need for

technological innovations. The culture of the new, of incessant innovation is anchored in the discourse on learning and knowledge centered on the categories of creativity and innovation in the contemporary organizational process. This discourse enters the academy and promotes the incessant search for research and funding in this area (FONTENELLE, 2012). The educational sector, despite the resistance, is not exempt from this process. State-of-the-art research demonstrates this logic in discussions about the use of technologies in teacher education. The debate on technologies in teacher education has found fertile ground in research groups, *Stricto Sensu* works, such as bibliographic surveys, state of the art or knowledge, which denote the primacy of instrumental and deterministic views in dealing with the relationship between technology and education. Such views tend to supplant the critical debate regarding the use of technologies in education, both in educational policies, as well as belonging to work groups by the National Association of Graduate Studies and Research in Education (ANPEd), articles from scientific journals and the same appropriation of the readings of authors who deal with the theme of technological devices in contemporary times. (ARAÚJO, 2008; MARCON, 2015; MORAES, 2016; MALAQUIAS, 2018).

The critical understanding of the relationship between technologies and education does not aim to stop the use of technological devices in the educational field, but to apprehend them as products of human action, influencing and being influenced in social relations.

For, much more than simple tools, technology is impregnated with values and meanings. Thus, understanding technology in the contemporary world only by its technical aspect, leads to a reductionism that prevents us from perceiving the way it has been appropriated by hegemonic interests in the contemporary world (MARCON, 2015, p. 82)<sup>10</sup>.

It is interesting to realize that the technologies, here called human, need to be recognized in the cultural context of the students, in inter and intrapersonal relationships of these subjects (VYGOTSKI, 2002), demystifying the use of these devices in educational institutions.

Nothing as human as technology. As a product of human intelligence, technology, its apparatuses and devices are eminently human, the result of a synchronic and diachronic collaboration, in a human exercise that rips time and sews contemporary culture, in a complex embroidery. In this sense, forging an opposition between human and technology is inconceivable or, at least, indefensible (ROCHA, 2018, p. 48)<sup>11</sup>

The bodily and mental bonds between technology and the human are not opposites, but adherence, both in physical orthoses and prostheses, as well as in thoughts and construction of the imaginary. Thus, ontologically, technology is part of the contemporary human and cannot exist outside of it. The condition of technology as an element of the human can be translated into culture, as part of the natural human condition and it is not at the edges that they meet, but at the center of biosociological beings. If this is the reality of the subjects and their cultural relations, is there a way to (re)exist?

**Final remarks:** An indispensable reflection in the face of contemporary events and sharing on the world wide web is the creation of an analogy regarding the resistance in the educational

uma produção histórica, em relação direta com o social” (RODRIGUES, 2019, p. 34)

<sup>8</sup>“Quero para mim o espírito dessa frase”(SOUSA, 2019; UNIVERSIDADE DE COIMBRA, 2019)

<sup>9</sup>O Barco! Meu coração não aguenta/ Tanta tormenta, alegria/ Meu coração não contenta/ O dia, o marco, meu coração/ O porto, não!... / Navegar é preciso/ Viver não é preciso... / O Barco! Noite no teu, tão bonito/ Sorriso solto perdido/ Horizonte, madrugada/ O riso, o arco da madrugada/ O porto, nada!... / Navegar é preciso/ Viver não é preciso / O Barco! O automóvel brilhante/ O trilho solto, o barulho/ Do meu dente em tua veia/ O sangue, o charco, barulho lento/ O porto, silêncio!... / Navegar é preciso/ Viver não é preciso... (CAETANO VELOSO, 1969)

<sup>10</sup> “Pois, muito mais do que simples ferramentas, a tecnologia está impregnada de valores e significados. Desta forma, entender a tecnologia no mundo contemporâneo somente pelo seu aspecto técnico, conduz a um reducionismo que impede de perceber a forma como tem sido apropriada pelos interesses hegemônicos no mundo contemporâneo” (MARCON, 2015, p. 82)

<sup>11</sup> “Nada tão humano quanto a tecnologia. Como produto da inteligência humana, a tecnologia, seus aparatos e dispositivos são eminentemente humanos, resultado de uma colaboração sincrônica e diacrônica, em um exercício humano que rasga o tempo e costura a cultura contemporânea, em um bordado complexo. Nesse sentido, forjar uma oposição entre o humano e a tecnologia é inconcebível ou, no mínimo, indefensável” (ROCHA, 2018, p. 48)

sector facing the existence of behavioral mutation in subjects (in)corporated and (en)cased by technological apparatus. As a matter of the (in)concreteness of the theme regarding the educational re(existence) of behavioral changes in the cultural context of the (hyper)connected subjects, it is necessary to question what historical role of these institutions really is. Well, according to some authors, it is to transmit to the new generations the set of knowledge of science and culture, historically and socially constructed. If knowledge is digitally available on the world wide web and if subjects are currently (in)corporated and (en)cased by human technologies, why not (re)signify the use of technological devices in educational institutions?

Recognizing the scenario of human technologies in the educational institution means that subjects understand them not as an unhistorical innovation, displaced from man, but in all its mediating essence of language, culture and especially knowledge. We must reexist, now without parentheses, in the face of resistance to reorganize teaching, the curriculum, educational policies, together with these subjects and, in particular, new paths must be rediscovered, since learning and apprehension occur in social and cognitive spaces. In the networks of links and nodes of the digital web and in the contradictory trajectory of innovation, the desire is to continue writing or seeking relationships permeated by the machine. Will it be possible? The first bet is this text.

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