

Digital Culture:

Under reflections (Eco) and flows (Flusser)

Cultura Digital:

Sob reflexos (Eco) e fluxos (Flusser)

Olira Saraiva Rodrigues and Cleomar de Sousa Rocha

Preamble

Contemporary society is immersed in a new page of history, associated with technological transformation and globalization. In this article, we propose to disentangle some concepts concerning some aspects that characterize this context, having technology and its adherence to culture as points of observation. In particular, the focus is on digital culture and its amalgamation with the spirit of our time, the *Zeitgeist*.

Mathematics took a prominent place in the first half of the twentieth century, supporting other sciences and, as a consequence, generated new disciplines, concepts and areas of expertise. Technology, which emerged in the 18th century (VARGAS, 1994), created a stage where human relations are discussed in the face of this advent, discussions that intensified with computational technology in the second half of the 20th century. The Italian philosopher Umberto Eco was one of the actors on this stage, discussing in the book *Apocalípticos e Integrados* (1993) the phenomenon of mass media - mass media, and his famous positions on the topic, in a discourse of supporters and against behavioral influences and attitudinal that make it possible to intervene in the formation of cultural and social identities. The analysis carried out by the Italian becomes unique when we update the subject, focusing on digital technology, post-mass media and connectivity.

The extremes created by the Italian philosopher give way, on the one hand, to the group that sees in technologies a possibility of advancement and social improvement, with the reinvention of culture and its practices. At the other extreme, there are those who see technology as an instrument of authoritarianism and manipulation at the service of the domain practiced by some companies,

those that command, mainly, the information and technologies existing in the world. This primacy would result in a social alarm that makes society hostage, unable to assess its values and exercise its natural and libertarian movement.

If Eco pointed to the mistakes made by both extremes, his contributions were not overlooked. Nor has its echo ceased to resonate throughout recent history. Umberto Eco ended his analysis with notes for studies, such as the perspective of the unfolding of the media, its impacts and influence on social practices, the articulated movements between the various cultural levels derived from these influences and, in the end, how social values are impacted, modified or created by the force of the mass media.

In short, for the author, the theme is not limited to the historical position favorable (integrated) or contrary (apocalyptic) to the presence of the mass media, but must extend to the understanding of how such mechanisms reverberate in the social fabric.

Likewise, Flusser (2008) critically analyzes the use of systems programmed by technological devices, leading to the exercise of rethinking intelligent, non-mechanized use. Such intelligence appears, precisely, in the way of understanding how these systems are used, and how it can affect a culture.

In view of this, from Umberto Eco (1993) and Vilém Flusser (2002) (2008), this writing intends to think about technology and connectivity, phenomena that reveal contemporary culture, with a reflection on some fields of knowledge, such as economics, public management, education, sociology, among other segments through which scientific studies are focused, from a technological perspective.

Flusserian reflections in digital culture

The word culture can take on numerous meanings, including that of cultivation, civilization and ways of life. In this brief text, its semantic connection links it with technology, notably in the face of conflicts in the socio-ideological valuation bases, as pointed out in the preamble.

In this context, it is necessary to seek answers to the role that the vehicles available in the 21st century should play in order to make manifest the coexistence between generations and the alternatives for an aging society. Likewise, one wonders what culture offers to show the question of man before time.

For some time, it has been noticed that the adjective intelligent is used for children, adolescents and young people who use technological artifacts when they demonstrate familiarity with the various services offered and the numerous gadgets available on the market, in addition to the skill in operating them. Apparently and hypothetically, the aptitude is such that it impresses adults, who learn with less ease and speed than infants and youth.

In the observation of such aspects, the American writer Marc Prensky developed the theory of natives and digital immigrants, establishing as a dividing point the generations of the year 1980¹. Those born after 1980 would, according to the author, have already lived in the context of culture therefore considered digital natives.

Therefore, it is important to pay attention to the fact that culture is based on the person, because it is the result of life experiences, and not the other way around, of a person being born in a culture, as if he, the culture, was something external to the individual and not exactly hitched and exercised by him. Thus, it is possible to be immersed in a culture and not allow yourself to be acculturated, just as it is conceivable to acculture without necessarily being immersed in a culture. This, in itself, makes us reflect on Prensky's theory, even more, with the consideration that the digitalization process does not occur homogeneously in the world, with many places, whose digital revolution has stagnated in theory, not reaching praxis.

If, on the other hand, we problematize the issue of interactivity, considering that at various times social media end up not only parameterizing interactive possibilities, but effectively instructing them, in a perspective emptied of critical criticism, there may be more dense thoughts about who dominates who, if the technology dominates some users or if it is effectively the opposite.

Philosopher Vilém Flusser, in his book *Philosophy of Caixa Preta* (2002), already called attention to the possibility of individuals being mere machine operators, which reflects the possibilities of freedom and creation in a broadly technological society. Although, in this work, the author emphasizes the photographic camera and, consequently, photography, his approach is easily applied to any kind of technical image, including digital ones.

The argument is that tool users learn, or are trained, to operate the machine exactly as expected, without any critical ballast. In other words, they would be new pigeons in the boxes of

¹ Before that year, we have digital immigrants, those who were born before the digital media revolution.

Skinner, the father of behavioral psychology. The user's behavior would not only be controlled, but absolutely manipulated.

Thus, after the emergence of the computer, scholars return to the concepts established in Flusserian reflections, such as that of an employee, for example. Flusser (2008) calls an individual the person who deals with machines (technological devices) and extracts technical images. The author's fundamental criticism is the substitution of learning by programming, in short, automaticity. According to the author, there is no real freedom and a totally free choice expressed in technical images, everything is previously determined and established.

For Machado (2002, p. 155), in his text *Repensando Flusser and the technical images*,

Aparelhos, processos e suportes possibilitados pelas novas tecnologias repercutem, como bem o sabemos, em nossos sistemas de vida e de pensamento, em nossa capacidade imaginativa e nas nossas formas de percepção do mundo. Cabe à arte fazer desencadear todas essas consequências, nos seus aspectos grandes e pequenos, positivos e negativos, tornando explícito aquilo que nas mãos dos funcionários da produção ficaria apenas enrustido, desapercibido ou mascarado².

That said, rethinking these new formative processes, making clear the objective of such a technological project, perhaps it was, for Flusser, the way of freedom proclaimed by the author, through a critical analysis of the use of systems programmed by devices. One, in short, the possibility of revolution. In the reflected observation of some behaviors of young people and children, and even adults, who answer the calls of social media using fashion apps without any criticism and modesty, it leads to the exercise of rethinking the use, smart, for app operators, immersed in their smartphones in all points of the cities.

Initially, technological resources should be seen as a means to streamline and provide communication and socialization solutions. However, it is common to encounter a state of torpor in which users of applications find themselves, being increasingly led to a dependency on connectivity, without even a utility or personal achievement ballast.

The technology, the basis for contemporary culture, is so relevant that it would be unthinkable to sustain culture in its absence. From elevators to computers, banking systems to school enrollments, life is completely involved and resolved, directly or indirectly, by modern computer systems. However, the more domestic and social use, driven by TDICs - Digital Information and

² Devices, processes and supports made possible by new technologies have repercussions, as we well know, in our systems of life and thought, in our imaginative capacity and in our ways of perceiving the world. It is up to art to unleash all these consequences, in its great and small, positive and negative aspects, making explicit what in the hands of the production employees would only be hidden, unnoticed or masked (MACHADO, 2002, p. 155).

Communication Technologies, also implies density to achieve the meritorious relevance of the intelligent attribute.

Thinking about technology or connectivity to solve social, community or even individual problems is a healthy and undoubtedly intelligent perspective, given the pragmatic support of the tools, capable of processing, recording and carrying out a superhuman amount of actions. Using social networks and other media only as a social pastime, in a perspective of little or nothing creative leisure, is to meet the market demand for users who do not effectively create intelligence, but are merely manipulators of graphical interfaces, being trained for the consumption of low or no relevance information.

In this perspective, being a user of digital media does not indicate intelligence, per se. The intelligence of digital culture is in how these systems are used, and how it can impact a culture.

Education and technology: critical notes

Technology has long been recognized as knowledge and not technological equipment, devices, tools or instruments, as it may seem to the common use of the term. This awareness significantly changes how technology is approached and, above all, how it can be used for social support. Technically, technology is knowledge validated by modern science, backed by a scientific community, as stated by Vargas (1994). Technology is not, as many people think, an artifact or technological device, such as a computer or smartphone. This definition makes the transfer of technology intelligible, in the qualification of a team to understand and develop certain products, recognizing their process of making, in the scientific plan of the actions. Were technology a piece of equipment, not knowledge, the transfer would be the simple act of acquiring an asset, as occurs in a property transfer. Science is the lexical key to understanding technology.

In Education, on the other hand, we have witnessed and carried out a sudden change in its *modus operandi*: on the one hand, Distance Education changes the course of higher education in Brazil, with thousands of students seeing in the modality a viable alternative for their training, linked to a market exploitation that grows exponentially. On the other hand, the area resists the implementation of technologies in the teaching and learning process, with a discourse that differs from practice. In the midst of all this, an industry eager to sell technological devices and gain more and more students undermines the area, offering solutions to nonexistent problems that only frustrate the actors in the field, students and educators.

While the clash between discourse and practice is consolidated in education, the possibility of advancing and guiding urgent discussions for the rickety Brazilian education disappears. In hot lands, the learning rate is alarming and discussing the teaching and learning process seems to be obsolete, since the educational culture, based on a copyist model, does not find a better method for copying, nor does it have criticality, common sense and competence to seek solutions to their own problems. Here again, technology is urgent.

Before loosening the knot in this plot, it is more comfortable to blame or cling to such magical computer distribution solutions, to place an interactive whiteboard in the classroom or to place a camera to identify students arriving or leaving educational institutions, when, in fact, it would be necessary to unfold the concept of learning, in the understanding that the classroom is a concept and not a place. This thought implies, although there is no synonym, with Aristotle's peripatetic school. If in Greece the method included walking, the modern notion of the classroom implies understanding that everywhere is liable to be a learning space, since the real learning space is the brain, the thinking mind. More than bringing the student into the school environment, the option of taking the student to the world has been shown to be more effective, with better involvement of the learner in his own learning.

The most modern notions of education point to some key issues, which in themselves would change the perspective of learning. These discussions unfortunately go beyond the topics discussed by the area, at its congresses and the like. One does not learn to do, in the outdated conception that the school prepares for life, even if professional. School is life, and it is learned by doing, changing the surrounding reality. The internships are a small sample of how the insertion in the productive universe, throughout the training, results in quality improvement. While some institutions want to bring the student into their classrooms, others want to show the world to the students, seeking to solve real problems, as occurs in several foreign institutions that provoke their students in humanitarian and social actions.

And if the world is the amalgam to learn, the city becomes the best laboratory, increasingly imbued with realizing life. The city updates the laboratory, which used to be specialized rooms for schools and universities. In the 1990s, schools rushed to have their labs, only to find out later that they don't know what to do with them. Today, the city is conceived as a complex laboratory, capable of providing the structure and pedagogical resources for various activities, extending its spaces of

educational practices beyond the formal spaces, with a complementary relationship with the non-formal and informal ones, as physicists, in addition to digital spaces.

The teacher is not in control, he never was. Classroom presenteeism is a growing problem, culminating in school dropout. The lack of meaning not only of what is taught, but of the way it is taught, is worrying in traditional schools. The distance that the syllabus establishes with the student's world seems to be similar to the distance that the school establishes with the community, with society. Therefore, the review of this reality is urgent. An emergency in the best bottom-up style gives rise to new perspectives, with technology as the propulsion engine.

The use of technological devices must be in line with teaching and learning practices that privilege skills and competences, having the world as a perspective of performance, of exercises. Before discussing what technological device to use in the classroom, it will be necessary to discuss, with the necessary criticality, what type of school you want. Therefore, it is a matter of discussing educational technologies.

In addition to education, the understanding of technology must be intrinsically linked to culture. Social practices are inextricably linked to digital humanity, with the prerogative of affecting society through technological innovation.

Technology: contemporary emergence

The knowledge of contemporary culture undoubtedly defines a technological ballast, precisely because it constitutes the cornerstone for social practices. Contemporary society is a model created by science, today supported by technology - scientific knowledge. The world population lives and consumes from what science proposes, in the various fields, from economics, politics, logistics, medicine, engineering, education, sociology, in short, from all the segments on which scientific studies are concerned. From vaccines to medical treatments, from credit cards to banknote printing technology, from Internet communication to food production and distribution logistics, performance improvement standards are the keynote that will lead the world to a new revolution that worries many, but it serves as a motivation for a majority.

If there is, and there really is, a concern with the loss of jobs in various segments, it is known that many other jobs, in other areas, will arise. Job vacancies are extinguished, vacancies arise in the creative areas of information technology, entertainment and tourism. If the field improves its

productive performance with automation, that same field boosts the economy in other areas, generating new jobs and income.

If information technology makes social relations more dynamic, it must aim for the optimization, at various levels, of the public sector with this implementation. Initially, making it possible to open lawsuits over the Internet reduces the time spent by the citizen, who starts to go straight to the request, not requiring travel and queues for assistance. The printing of forms and expenses with sending and receiving processes are also eliminated, with significant savings in this medium. The process is faster, since it is automatic, with the possibility of monitoring, by the citizen and the managers, of the entire process, identifying bottlenecks that need to be eliminated. Transparency is another factor that legitimizes the use of socially oriented technologies. Once registered, data can be checked and tracked, significantly reducing the possibility of fraud, favoritism or negligence.

In one way and another, the inclusion of technologies in public services is not only a necessary advance, but also beneficial for the Brazilian context and which necessarily results in the improvement of services, streamlining of processes, social and reduction of the possibility of fraud and corruption, precisely because of the perspective of transparency and visibility of actions. Technology is a contemporary emergency, also in the fields of politics and social services.

Investment in technology can reduce costs and advance society. E-mails, for example, provided agility in contact and advanced a number of areas, accelerating social, cultural and scientific development, in addition to reducing expenses with paper, printing and sending messages and documents. On the opposite side, projects such as “One computer per student”, which distributed thousands of cheap computers to students worldwide, resulted in a very low improvement in teaching, due to a series of factors, starting with the lack of teacher training beyond the technical, but from an epistemic sense, punctuated in a critical and reflective pedagogical work.

The problem, in this case, was not seeing that the technology is not in the computer, but in its use. The distribution of computers does not solve problems, as putting interactive screens in schools does not solve anything either. The investment should be centered on a program that aculture teachers and students, adopting mechanisms that use interactive screens to improve the performance of the teaching and learning process. These are ongoing programs to improve the process, starting with the insertion of technology, and not simply making equipment available.

The insertion of a document processing system in a public agency, to mention another example, can streamline the processing of processes, reduce the consumption of paper and printing, eliminate the displacement of people who take and bring documents - less people, less cars, less fuel - in addition to assisting in reviewing the bureaucratic path of each process, reducing time and saving resources.

The good investment in technology depends, essentially, on knowing what problem it will solve, what the demand will meet. If the problem is not known, the problem will certainly be the acquired devices, becoming an expense in technology, instead of an investment and a solution, in this area.

Fluid (Flusser) and Resonant Thoughts (Eco)

In a technological world, represented by the current way of life, technology has entangled society daily by cybernetics, electronic computing, genetic engineering, molecular engineering, nanotechnology, biotechnology, information technology, industrial automation, medicinal technology, assistive technology, engineering production, and a multitude of other advanced technologies, which provoke reflection on the nature of this technology, its need and social function and, in addition, on the impacts that cause the generation of new forms of personal relationships and new institutional formats, whose presences in network translate, which for Flusser was about superficiality in the technical image, an always liquid and changeable presence, given the possibilities of navigation in the network system, in constant flux.

The phenomenon, the critical basis and technological innovations, in visions and versions, reveal contemporary society, wrapped in a new chapter, which absorbs and probes the social community in absolutely new configurations.

The fact is that, despite apocalyptic and integrated, mass culture, with its cultural industry, had its moment in the collective construction of a world perspective, of a society. Seen from the later moment, and for some time now, the social modus operandi seems to repeat, with some changes, what was described by the philosopher Umberto Eco (1993), now in relation to the post-massive digital.

And it will be in spite of the new apocalyptic and integrated ones that the social plot will live its moment, indelibly marked by technology. In fact, it already lives it, with its (dis) integrating social networks, with (un) leveled social practices, with the prospect of doing better by orienting some, and

the fear of making themselves worse by frightening others. And technology continues, supporting the contemporary social model, created by Science, (dis) cherishing everyone. And perhaps this is because the continuous movement of culture and society is not defined by these two extremes, but their verve is precisely between them, caring less about their extremities than about their voluminous body that rules, frantically, the urgency of time.

Still, it is necessary to keep the emergency managed and generated by the apocalyptic and the integrated. The latter, seeking to support a better dimensioned model of society, with the help of technological devices and concepts that cleverly describe what emerges from this social construction; and the former, supervising the practices established from these apparatuses, such as police officers who assert the order and probe, wire by wire, the plot that is forming.

The social being is charged - in this historical construction of involvement with mass and post-massive media, of extremes and environment, of Umbertos and echoes - of the perception and humanity of the theoretical and practical tensions that makes it move forward, backward and, mainly, to see such movements, to infer and interfere in this symbiotic process.

Olira Saraiva Rodrigues

State University of Goiás

PhD in Art and Visual Culture / UFG

ORCID: <https://orcid.org/0000-0003-2371-3030>

E-mail: olirarodrigues@gmail.com

Cleomar de Sousa Rocha

Federal University of Goiás

PhD in Communication and Contemporary Culture / UFBA

ORCID: <https://orcid.org/0000-0003-0483-8380>

E-mail: cleomarrocha@gmail.com

Received on: May 30, 2020.

Approved on: September 3, 2020.

References:

ECO, Umberto. **Apocalípticos e integrados**. São Paulo: Perspectiva, 1993, 5a ed.

FLUSSER, Vilém. **Filosofia da caixa-preta** - Ensaios para uma futura filosofia da fotografia. Rio de Janeiro:

Relume Dumará, 2002.

FLUSSER, Vilém. **O universo das imagens técnicas**: elogio da superficialidade. São Paulo: Annablume, 2008.

MACHADO, Arlindo. Repensando Flusser e as imagens técnicas. In: LEÃO, Lucia (org.). **Interlab**: labirintos do pensamento contemporâneo. São Paulo: Iluminuras/Fapesp, 2002.

VARGAS, Milton (Org.). **História da Técnica e da tecnologia no Brasil**. São Paulo: UNESP: CEETEPS, 1994.

Abstract

The purpose of this article is to clarify issues that problematize the pre-established notion of human behavioral transformation, in the context of digital culture, with the understanding of integrated and apocalyptic positions of Umberto Eco (1993), in face of technological innovations. In addition to giving visibility to the opacity of some pre-determined myths of the dubious use of the term intelligent, as an attribute of perspicacity and intellection, in the face of Flusser's critical analysis (2008), under the way of understanding how systems programmed by technological devices are used and how, from there, culture is affected.

Keywords: Technological Innovation. Cultural Context. Contemporaneity.

Resumen

El propósito de este artículo es esclarecer cuestiones que problematizan la noción preestablecida de transformación del comportamiento humano, en el contexto de la cultura digital, con la comprensión de las posiciones integradas y apocalípticas de Umberto Eco (1993), frente a las innovaciones tecnológicas. Además de dar visibilidad a la opacidad de algunos mitos predeterminados del uso dudoso del término inteligente, como atributo de perspicacia e intelección, de cara al análisis crítico de Flusser (2008), bajo la forma de entender cómo se utilizan los sistemas programados por dispositivos tecnológicos. y cómo, a partir de ahí, se ve afectada la cultura.

Palabras clave: Innovación tecnológica. Contexto cultural. Tiempo contemporáneo.

Resumo

A proposta deste artigo é clarificar questões que problematizem a noção preestabelecida de transformação comportamental humana, diante do contexto da cultura digital, com a compreensão de posicionamentos integrados e apocalípticos de Umberto Eco (1993), frente às inovações tecnológicas. Além de dar visibilidade à opacidade de alguns mitos pré-determinados da utilização dubitável do termo inteligente, enquanto atributo de perspicácia e intelecção, diante da análise crítica de Flusser (2008), sob o modo de compreensão de como sistemas programados por aparelhos tecnológicos são utilizados e como, a partir disso, a cultura é afetada.

Palavras-chave: Inovação Tecnológica. Contexto Cultural. Contemporaneidade.