

Art and media: relations between Arlindo Machado and Vilém Flusser Arte e mídia: relações

entre Arlindo Machado e Vilém Flusser

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Abstract: This article presents a brief investigation about the reverberations of the philosophy of the technical images developed by Vilém Flusser in the concepts about media art made by Arlindo Machado. The relationship between these authors is suggested by mapping the proximities and distances among their conceptual operators, ways of proceeding and contributions to the creative processes and the debate about these themes and their aesthetic and political repercussions. They are pertinent to the understanding of the problems that arise from the largescale production and circulation of technical images, as well as how artists can answer the questions raised by the dialectic between art and media.

Keywords: Arlindo Machado; Vilém Flusser; media art; technical image.

Resumo: Este artigo apresenta uma breve investigação acerca das reverberações da filosofia da imagem técnica de Vilém Flusser nas propostas sobre arte mídia realizadas por Arlindo Machado. A relação entre esses autores é sugerida pelo mapeamento das proximidades e distâncias entre seus operadores conceituais, modos de proceder e contribuições aos processos de criação e ao debate sobre esses temas e suas repercussões estéticas e políticas. Elas são pertinentes para a compreensão dos problemas que decorrem da produção e circulação, em larga escala, das imagens técnicas, assim como de que modo os artistas podem responder às questões suscitadas pela dialética entre arte e mídia.

Palavras-chave: Arlindo Machado; Vilém Flusser; arte mídia; imagem técnica.

Introduction

The theoretical references with which the Brazilian thinker of arts and communications Arlindo Machado (1949-2020) dialogues in his texts about technical images are multiple. However, there is one, in particular, that seems to support his propositions about the relations between art and media. The formulations of the Czech-Brazilian philosopher Vilém Flusser (1920-1991), especially in his book "Filosofia da caixa preta: ensaio para uma futura filosofia da fotografia" (1983), consist of essential sources, recognized by Machado himself in his essay "Arte e mídia" (2007). Since these devices have specific purposes, the most critical gesture becomes discovering and investigating ways in which it would still be possible to ensure some space of freedom for human action. Machado approaches Flusser's texts, mainly based on this hypothesis, and develops proposals associated with Flusserian ideas about the relationship between humans and devices. This affinity indicates a horizon of concerns shared by both authors, encompassing aesthetic and political aspects of producing and disseminating technical images and programs that originate them in social life and how artists can respond to new questions and situations posed by the tension between art and media. Therefore, this article aims to constitute a brief investigation about the reverberations of Flusser's philosophy of technical image in Machado's conceptions of media art, especially concerning the relationship between aesthetics and politics.

Art and media in Arlindo Machado

Arte e mídia is the title of an essay that makes up a small book written by Arlindo Machado, originally published in 2007. The size does not detract from its content; on the contrary. It consists of a clear and concise introduction of the main issues that permeate the dialectic between these domains. In light of Paul Ricoeur's (2019, p. 3) considerations, we understand dialectics as recognizing the initial disproportion between two terms (in this case, art and media) and the search for practical mediations, always fragile and provisional, between them. This book by Machado has three main parts that address this sequence: the approximations and distinctions between art and media, the politicization of the debate on art and technology, and the convergence and divergence of arts and media.

Machado assumes that "art has always been produced with the means of its time" (MACHADO, 2010, p. 9), so, predictably, artists will look for newly

invented instruments to extract the maximum of their possibilities to give form to the sensitivity of their time. "Media art" is, therefore, a likely path in current creative processes. According to the author, this term refers to "forms of artistic expression that appropriate technological resources from the media and the entertainment industry in general, or intervene in their dissemination channels, to propose qualitative alternatives" (MACHADO, 2010, p. 7). In short, the expression encompasses a particular aspect of the arts whose works are produced with technological resources.

Far from constituting a harmonious dialogue, however, this relationship between arts and media is characterized by a state of tension. Here, art sometimes operates as an immanent critique of the very technology it uses. Thus, by considering this dialectical process that places such terms in constant friction, Machado proposes to answer in which forms art and media can combine, contaminate, and distinguish.

The author's first dialectical possibility between art and media is the deviation of the industrial project from technology. Clearly, artists' interests differ from those that generally give rise to most of the technologies we use daily. Often, says the author, new technologies are developed to increase productivity, following a rational and instrumental logic linked to capitalist expansion. He notes that "algorithms and applications are industrially designed for a more routine and conservative production, which does not break boundaries or disturb established standards" (MACHADO, 2010, p. 13). Thus, his original industrial project qualitatively differs from the use that artists make of the tools at their disposal. In this perspective, art proposes new ways of being in the world and does this through the reinvention of the same means it uses. The examples of this operation are multiple. Among those mentioned by Machado are Nam June Paik, who, with the help of magnets, "deviates the flow of electrons inside the iconoscope television to erode the figurative logic of his images," Frederic Fontenoy and Andrew Davidhazy, who "modify the camera's shutter mechanism to obtain not the freezing of an instant, but a fulminating process of disintegration of figures resulting from the annotation of time on the photographic frame." In these and other cases, artists are, in the author's terms, "exceeding the limits of semiotic machines and radically reinventing their programs and their purposes" (MACHADO, 2010, p. 14).

During these creative processes, artists often deviate from the original purpose that acts as an immanent critique. It is in this sense that Machado conceives *art as a metalanguage of the media*. For him, it can be one of the most potent critical instruments for thinking about aspects of formation, maintenance, and perpetuation of contemporary societies, as well as offering alternatives that are qualitatively different from the current models of regulation and control. Some of them can be seen in examples of video art, among which Machado highlights Cross-cultural television (1987) by Antoni Muntadas and Hank Bull. It is a video that compiles similar electronic images collected from television programming from different countries. This composition criticizes how principles linked to neoliberalism equalize cultural differences by producing and disseminating audiovisual clichés. By making these clichés visible using these same images, Cross-cultural television provokes a kind of attack from within control institutions. For Machado, given this scenario, what the artist wants "is, in a sense, to 'deprogram' the technique, to distort its symbolic functions, forcing them to work outside their known parameters and to make explicit their mechanisms of control and seduction" (MACHADO, 2010, p. 22). The author also adds that "by operating within the institution of the media, art thematizes it, discusses its ways of functioning, transforms it into the object-language of its metalinguistic gaze" (MACHADO, 2010, p. 22-23).

However, it is not just art that can modify the media or shake, even temporarily, the institutions associated with it. The *media* can cause a *reordering of art*. As the author himself recognizes when referring to Walter Benjamin's classic essay on A *obra de arte na era de sua reprodutibilidade técnica* (1994), this finding is not exactly new. In any case, it remains relevant to this day. As art is, as Machado (2010, p. 23) says, a "process in permanent mutation," it is expected that it responds to the demands of its time. Thus, close to the Benjaminian essay, this author states that

what matters is to realize that the very existence of these products (which arise from the relationship between art and media), their proliferation, their implantation in social life, place traditional and previous concepts about the artistic phenomenon in crisis, demanding formulations more adequate to the new sensibility that now emerges. (MACHADO, 2010, p. 26, our translation)

It is in this way, therefore, that the media can lead to the reordering of art. The new means of image production provide creative tools for artists, who start to contribute to the media themselves and the current state of the arts. Some examples listed by Machado are Jean-Christophe Averty's "television of invention" and Ernie Kovacs' "deconstructive programs," in which this artist explored processes such as the dissociation between image and sound, the revelation of the backstage of television with its apparatus and technicians, and the demystification of illusionist techniques, making constant reference to television as a device.

The three dialectical possibilities between art and media briefly presented show that the relationship between these terms is tense and involves complex aesthetic and political dimensions. There is no single answer about the artistic forms arising from this approach so that each artist, through their creative process, will be able to experience the countless productive possibilities inscribed in the devices. Machado observes a similar logic concerning the arts and audiovisual media, which can converge or diverge.

Between the 1950s and 1980s, the author emphasizes the predominance of discourses supported by the *divergence* of means, with theoretical propositions investigating their specificities. The examples are numerous, as we will see below. About photography, Machado refers to Roland Barthes (2017), who wanted to define his "objective truth," which was, for him, the referent (the photographed thing, the "that has been"). Susan Sontag (2004) sought to circumscribe the statute of photography and its essence, the "trace of the real" left by light. André Bazin (2018) spoke of an "ontological objectivity," which dispenses with human mediation. About cinema, Machado notes that starting from Bazin, the composition of degrees of dramatic density, reached through the depth of field and the sequence shot, began to be approached. In the 1970s, there was special attention to the spectator's reception of films, involved by all aspects characterizing the understanding of cinema as a device. About the video, the author highlights Marshall McLuhan (1974), who noted the "mosaic" constitution of the electronic image and its critical dimension of counterinformation. Thus, until the end of the 1980s, these audiovisual media were kept separate, both in theory and practice.

More or less from the 1990s onwards, a trend towards *convergence*, which puts different technical means into dialogue, ended up proliferating. As this is neither a simple nor a linear process, it is possible to trace previous theoretical efforts that acted on this logic. Machado highlights the pioneering publication by Gene Youngblood (1970), who, similarly to what happened in the field of visual arts,² proposed the concept of an expanded cinema. This author notes that the

² Perhaps the best-known example is Rosalind Krauss' (1983) notion of *sculpture in the expanded field*, which, in Machado's terms, can be understood as "the sculpture that goes out into the streets, dialogues with the landscape and with others media, fulfilling a public mission" (MACHADO, 2007, p. 67). He also refers to proposals from Brazilian authors, such as *expanded photography* (Rubens Fernandes Jr.), "i.e., photography that hybridizes, imports techniques and tools from the fine arts, and other arts and currently migrates to digital"; and *expanded video* (Roberto Cruz), "i.e., the video that presents itself in a multiple, variable, unstable, complex form, occurring in an infinite variety of manifestations" (MACHADO, 2007, p. 68).

traditional concept of cinema was being called into question, with the appearance of manifestations such as the North American experimental branch, television, video, and the computer. For him, cinema as a form of expression based on the moving image was possible, preferably synchronized with a soundtrack. Another essential thinker of media convergence highlighted by Machado is Raymond Bellour (1990; 1999), whose theoretical and curatorial investigations emphasize the possible transitions between photography, cinema, video, and digital media. According to this author, "these passages allow us to understand better tensions and ambiguities operating today between movement and immobility [...], between the analog and the digital, the figurative and the abstract, the current and the virtual" (MACHADO, 2010, p. 69). Still, Machado points out that the convergence of media has even enabled a revitalization of older media, a trend observed by Jay David Bolter and Richard Grusin (2000), synthesized by the notion of "remediation."³ These cases are examples of authors who, instead of thinking about the means individually, began to focus on the usable exchanges between them, a change in the field of theory and practice.

Regardless of the emphasis given by each author, Machado observes a common tendency towards convergence, hybridization,⁴ and multiplicity, full of aesthetic and political ambivalences. He recognizes, in the light of Néstor Canclini (2003), that "hybridization, without a doubt, produces innovation and advancement in terms of complexity, but also relations of inequality and asymmetries between the cultural facts that it aggregates" (MACHADO, 2010, p. 77). Thus, politicizing the debate becomes necessary.

In the search to investigate the political reverberations of these changes, Machado diagnoses, based on Laymert Garcia dos Santos (2011), the difficulty of formulating theoretical discourses that go beyond the limits of, on the one hand, an apologetic trend of technology and, on the other, a technophobic tendency that, as a rule, disregards even the existence of technological poetics. In his attempt to overcome this difficulty, he directly resorts to the contributions of

³ A notable case of this kind of complex relationship between art and media, which consists, at the same time, in a subversion of the original purpose of the machine, an immanent critique and a reordering of media and art, are machinimas, films conceived in games and interactive virtual environments. Interestingly, at the same time, many of them mimic the paradigm of classic cinema, providing an example of a "remediation" process, as pointed out by Bolter and Grusin (2000). On this subject, see Almeida (2014) and Moran and Patrocínio (2011). Machado himself showed interest in researching these films, as can be seen in Machado (2011a) and Machado (2011b).

⁴ About hybridization, we suggest also see Couchot (1993).

Vilém Flusser, with his philosophy of technical images, to think about Brazilian media art production.⁵

In this context, Machado highlights the role of Waldemar Cordeiro, who, in his assessment, contributed significantly to media art in Brazil, both for having organized one of the first international computer art conferences – Arteônica⁶ – and for having given a critical dimension to this art form by adding a social commentary to it, linked to the specific context of the Brazilian dictatorial regime. He sees in this artist the association between the processes of creation and the "best tradition of nonconformity in contemporary art." Since then, one notes that

> an immenserange of possibilities is open for the problematizing intervention of art: the critique of new forms of domination based on gender, class, race, or nationality (imperialist wars, genocides, terrorism, international migration, intolerance towards foreigners, etc.); the critique of universal surveillance, predatory globalization, the spectacularization of life, and environmental degradation. And also the new forms of direct social engagement based on telematic networks, tactical media, the use of multi-user distribution systems for the creation of truly collective collaborative works, the search for new body policies, the expression of differentiated cultural identities, etc. (MACHADO, 2010, p. 56-57, our translation)

These notes indicate potential fields of action for artists who wish to produce small revolutions or, in the terms recalled by Félix Guattari by Machado (2010, p. 57), "molecular revolutions," which are identified, at the same time, with digital creation and the new biological scenarios.

⁵ An author with whom Machado (1997, p. 4; p. 7) and Santos (2011) dialogue and who comes close, to a certain extent, to some Flusserian notions is Gilbert Simondon. In *Do modo de existência dos objetos técnicos*, originally published in 1958, he proposes to investigate the "sense" of technical objects, i.e., not their usefulness, but their "nature" or "essence." Machado, Flusser, and Simondon agree with the persistence of *indeterminacy* in machines, and that human action would be concentrated in intending to enlarge it. However, there are also differences. As we shall see, Flusser understands this "experimental" action as a form of resistance to the automaticity of the devices – hence the meaning of the pair *collaboration and combat*. On the other hand, Simondon presupposes human action as a fundamental part of *integrating* technical objects. As Machado recalls, for him, "the real improvement of machines [...] corresponds not to increased automatism, but, on the contrary, to the introduction of a certain margin of indeterminacy in their operation". (SIMONDON *apud* MACHADO, 1997, p. 7). Furthermore, we add that, for "the machine endowed with high technicality is an open machine, and *the set of open machines presupposes man as a permanent organizer*, as a living interpreter of the machines, one concerning the other" (SIMONDON, 2020, emphasis added). Further details of these and other ideas would require a separate analysis.

⁶ Available at: https://www.visgraf.impa.br/Gallery/waldemar/. Accessed on: 28 Feb. 2021.

Image and technique in Vilém Flusser

Vilém Flusser's theories about technical images are essential references for Arlindo Machado's thinking about the dialectic between art and media. He even dedicates part of his book to explaining the main concepts of the black box's philosophy to reach the conclusions previously presented (MACHADO, 2010). Machado (2010, p. 41) evaluates this author's contributions as "clear, precise, and radical," qualitatively different from the theories that existed until then. They were often limited to joining one side of the debate between pros and cons concerning the technology.

There are several texts by Flusser that develop questions around technical images. However, what seems to us to have resonated more intensely in Machado is *Filosofia da caixa preta: ensaio para uma futura filosofia da fotografia* (1983), considered by him "one of the more acute formulations" about the problem of the statute of art in industrial or post-industrial societies (MACHADO, 1997, p. 2); a "visceral work" (2010, p. 83). In this book, whose ideas were later complemented in *O universo das imagens técnicas: elogio da superficialidade* (1985), Flusser is concerned with outlining these images and the aesthetic political implications that result from their large-scale production and dissemination in social life.

This author understands images as mediations between humans and the world that should "orient" us but often end up "alienating" us. Specifically, he understands that technical images are produced by devices, which consist of applying scientific concepts. The direct relationship with these concepts is the essential difference between them and traditional images, which are composed of events translated into scenes by hand gestures.

The images can be observed in his assessment either in a "snapshot" or a closer look (scanning). The distinction between these two ways of seeing is in the depth of meaning that will be assimilated. In the first case, the sense apprehended is only superficial. In contrast, the second presents a deepening found in the relationship between the intentionality of sender and receiver. Furthermore, each type of image implies a distinct form of understanding. In the author's words, the "deciphering" of traditional images demands the "decoding" by the receiver of the sender's thought manifested in a manual gesture. The understanding of the technical image, on the other hand, implies "deciphering" its symbology and the "device-operator" complex, which is concomitantly constituted by the thought of the sender and the program used to generate the image. The different modes of production of these images

reverberate in an essential aspect for their understanding: if in the traditional image we are aware that there is a constructed symbology, marked by the manual gesture, in the technical image, generated automatically, we have the impression that there is nothing hidden and that, therefore, everything is given. This impression that there is nothing more than what appears in the technical image occurs, according to Flusser, because the "device-operator" complex is too complicated to be understood. However, what is there to see in this complex beyond the symbolic aspect of the images? What constitutes the black box?

According to the author, the technical images do not show the world but concepts related to it. In part, these concepts are the technical-scientific support that underlies the very structure of the devices used in the manufacture of these images. Each image will be produced on a specific device as if it were previously registered in its virtualities. In this case, the symbolic aspects of technical images are the surfaces manifested in updating the virtualities of a given program, so its deciphering needs to encompass these aspects and the underlying concepts.

However, this decoding is not purely technical as if it was intended to know only the engineering of the devices. In the paradigmatic case analyzed by Flusser, any photograph results from the camera's program, which requires its operator to take as many pictures as possible. In his terms, "the photographer acts towards the exhaustion of the program and realization of the photographic universe" (FLUSSER, 2011, p. 36). This request implies "living, knowing, valuing, and acting based on photographs" (FLUSSER, 2011, p. 87). Thus, the "depletion" of the photographic device involves much more than pressing the button that records events so that its realization provokes profound changes in individual and collective habits.

Such existential, social, and cultural changes are not the result of an underlying intention that needs to be unveiled. In fact, for Flusser, even if the devices are originated through a human design, this is lost as they start functioning routinely. In his understanding, the devices "co-implicate," and their only objective is, in his words, that they "program society for a behavior conducive to the constant improvement of the devices" (FLUSSER, 2011, p. 57). For him, it is necessary to face the problem of automaticity so that the resumption of power over devices is possible. This is extremely important since the human is not "surrounded by instruments" like the pre-industrial artisan, nor "submissive to the machine" like the industrial proletarian, but "amalgamated with the device" (FLUSSER, 2011, p. 37).

In this context, the glimmer of freedom would reside in the "experimental" or "less likely" human performance in each program, i.e., in a performance that somehow manages to circumvent the established rules, "playing against" them (FLUSSER, 2011, p. 100). This way of proceeding changes its outline slightly if we compare Flusserian propositions in *Filosofia da caixa preta*, originally published in 1983, and *O universo das imagens técnicas*, 1985. In the first work, the philosopher insists on clarifying the black box, considered in its details indicated above. In the second, he praises the superficiality of the image-producing gesture. What may appear to be an inconsistency or contradiction at first glance, in an approach that hints at a stark contrast between unveiling and covering up, is actually and more precisely the nuanced development of his propositions. Let us see below.

In O universo das imagens técnicas, Flusser assesses that technical images are attempts to regroup points to form surfaces, in response to the maximum stage of abstraction in the world we have arrived at (FLUSSER, 2008). As they are based on calculations and computation, technical images are not directly related to the world's appearances. Thus, criteria such as "truth" and "falsehood" designate unreachable limits, becoming inoperative. The degree of probability of execution in a system becomes the most relevant measure. Flusser develops this thought from thermodynamics, according to which the universe tends to more and more probable (uninformative) situations. In this context, technical image-producing devices were invented to "make visible virtualities" and "compute such virtualities into unlikely situations," the images (FLUSSER, 2008, p. 27). In this paradigm, images are understood as unlikely virtualities concerning the world's tendency to entropy (disinformation). This devices' function derives from humans being against this tendency, which, according to Flusser, is linked to mortality. Thus, he states that "the purpose of technical image-producing devices is to create, preserve, and transmit information," i.e., to carry out movements contrary to misinformation (FLUSSER, 2008, p. 28).

However, the devices are stuck in a dialectic in which they produce images that are unlikely from the universe's point of view and more likely from the device's point of view. That is why the challenge for producers is to make images that are unlikely from the devices' point of view, "fighting their automaticity" (FLUSSER, 2008, p. 30). In short, Flusser says that "the gesture that produces technical images reveals itself, then, as a gesture composed of two phases. In the first, devices are invented and programmed. In the second, they are inverted against their program" (FLUSSER, 2008, p. 30). That is why "in every technical image it is possible to discover such collaboration and struggle between the programmer and the freedom of information" (FLUSSER, 2008, p. 31). Based on what has been discussed so far, it is possible to understand two important actions in the relationship between humans and devices, conceived by Flusser. The first refers to the gesture that produces the images, which occurs in collaboration and combat relationship with the devices, aiming to create unlikely or experimental images. The second consists of critically deciphering images in a broader sense, i.e., probable and improbable images related to the program that originated them. This deciphering is of central importance in not letting images become inaccessible to our understanding, which would pave the way for idolatry.

Despite the need for critical deciphering of images, Flusser (2008, p. 48) suggests that technical images "require superficiality." For him, images can only be observed from a distance, so that it would be necessary to "eliminate the emptiness of the 'technical-scientific' discourse from concrete experience" (2008, p. 50). In other words, it would be necessary to "imagine" the images, i.e., make them concrete from the abstract, which implies translating the calculations and underlying technical processes of the programs into surfaces (images) that affect viewers. Flusser (2008, p. 50) states that "by pressing its keys, the imaginer aims at images never seen before, for example, aspects never revealed (in Mozart's opera) *Così fan tutte.*"

In addition to the functions of turning the abstract into something concrete and enabling unprecedented experiences, Flusser notes the importance of technical images serving as a "map," i.e., scenes that help us understand the world. Thus, he says that "what is (in them) is a project giving a meaning" (FLUSSER, 2008, p. 66). They have an existential character, as "they are attempts to bring together the specific elements in our surroundings and our consciousness to form surfaces" that should point out paths (FLUSSER, 2008, p. 24). These can be aimed at programming the receivers (thus alienating them) or deviating from the original programming of the devices (beginning to fulfill the function of guiding them).

To complement this idea, Flusser explains that the structure of the computer society is based on synchronized ("fascist") bundles. However, there are also "embryonic threads that run horizontally through the bundles." These threads running through the bundles are anti-fascist because they tend to link individuals dispersed in dialogue. This technical problem can serve as a paradigm for revolutionary engagement, "making threads inject 'values' into society" (FLUSSER, 2008, p. 87). Thus, it is useless to receive lots of information if they are redundant. The artist is no longer seen as a creator but as a player who plays with available information. This is precisely the definition of the term "dialogue" for Flusser: "exchange of available pieces of information" (2008, p. 122). This is how the artist "participates in the

dialogues to produce something unexpected deliberately." His definition of art refers more broadly to the engagement against the programs, "a doing limited by rules modified by the doing itself" (FLUSSER, 2008, p. 129).

Aesthetic and political proximity between Arlindo Machado and Vilém Flusser

After a brief exposition of Arlindo Machado's thought on the dialectic between art and media and a brief recollection of the main points of Vilém Flusser's philosophy of technical image, it becomes possible to dedicate ourselves to an exercise in comparative analysis and interpretation between both authors. It seems to us that there is an especially relevant aspect in their theories: the approximations and distinctions between art and media, the relationships between art and technology, and even the convergence and divergence between art and media, indicated in Machado's text, denote a particular affinity with the combat dynamics and artists' collaboration with the programs, which Flusser designs.

The relationship between the two authors becomes more evident when we consider their propositions in parallel. In a famous passage, Machado states that "what makes [...] a true creator, instead of simply submitting to the determinations of the technical apparatus, is to continually subvert the function of the machine or the program he uses, is to manage them in the opposite direction to its programmed productivity" (MACHADO, 2010, p. 14). Moreover, he adds that:

Perhaps it could even be said that one of the most important roles of art in a technocratic society is precisely the systematic refusal to submit to the logic of working instruments or to fulfill the industrial project of semiotic machines, reinventing, in return, their functions and purposes. (MACHADO, 2010, p. 14, our translation)

The subversion of the original purpose of semiotic machines suggested by Machado concerning the artistic processes comes close to Flusserian thought when this author advocates a conception of art as dialogue, i.e., a combination of information capable of producing unforeseen situations. Thus, the artist would enjoy the freedom possible in mechanized societies, given that it would reside in the "experimental" or "less likely" human performance in each program, i.e., in a performance that somehow manages to circumvent the established rules, to play deliberately against them (FLUSSER, 2011, p. 100). To a certain extent, he would be, like the philosophers, responsible for pointing out, for others, the paths to possible freedom in this context (FLUSSER, 2011). The diversion of programs, machines, or devices enables an immanent critique, observable in the practice of various artists. In the examples recalled by Machado, they criticize the television device from within itself, i.e., using and intervening in its productive resources and modes of transmission. A similar logic can be verified in Flusser's theoretical propositions when this author addresses the importance of the subversion of the original functionality of the devices. This action would enable the artist to be more than a mere "employee," this one absolutely limited to the actions inscribed in the program's virtualities. Still, when Flusser highlights the act of subverting the rules of the game or reinventing them through the act of playing, he refers to a playful act that would be the very condition of the possibility of an immanent criticism of any technical, political, or cultural program or device.

Another possibility of approximation between art and media addresses reorganizing the art field to accommodate the demands linked to the emergence of such machines and their use in the creation processes. These data are recognized by Machado and, equally, by Flusser, who is concerned with possibilities of intervention in systems, including artistic ones, as revealed in his texts from his work at the Bienal de São Paulo.⁷

Such operations are part of a dialectical process between these devices and humans. Thus, while Machado talks about approximations and distinctions between art and media or convergence and divergence of arts and media, Flusser addresses the dynamics of combat and collaboration between the artist or, more broadly, image producers and programs. In his proposal, art constituted as a technical image would necessarily result from this dialectic. The example of photography provides the paradigm. According to the author,

> if we compare the photographer's intentions and the device, we will find points of convergence and divergence. At the converging points, the device and photographer collaborate; in the divergent ones, they fight each other. All photography is the result of such collaboration and combat. Now, collaboration and combat are mixed up. A given photograph is only deciphered when we have analyzed how collaboration and combat are related in it. (FLUSSER, 2011, p. 57, our translation)

An analogous relationship can be seen in Machado's considerations. When the intentions of media and artists converge, they come closer. When they diverge, they drift apart. In all media art, it would then be possible to identify how this dialectic develops. With this in mind, the job of criticism would be precisely to clarify this

⁷ See Mendes' study (2008).

process; and that of the artist, to produce unexpected situations, deviating from the original industrial project.

Furthermore, it is worth noting that both authors note the tendency to hybridize areas of knowledge and artistic performance. In this scenario, both Machado and Flusser defend an engaged action, in which the artist consciously intervenes in the systems he uses in his creative processes. It is about politicizing the debate. The "small revolutions" mentioned by the first author could be understood as more or less correlated with the possible revolutions envisioned by the second one. For Flusser,

the new revolutionaries are photographers, filmmakers, video people, software people and technicians, programmers, critics, theorists, and others collaborating with image producers. All these people try to inject values, "politicize" images to create a decent society of men. (FLUSSER, 2008, p. 91, our translation)

Such politicization would not be possible in any way, but only when artists and other producers of technical images manage to produce effective dialogues, i.e., transversal exchanges of information, aiming at the least probable. In a warning tone, Flusser says that the possible revolutionaries

> they will seek to awaken the sleeping consciousness. However, they will not be able to do so with screams or blaring alarms. These alarms would be immediately and automatically retrieved by the images and transcoded into sleeping programs. These people will have to weave the transversal threads, the "anti-fascist" threads, to open the field for dialogues that disturb the mind-numbing discourses and transform the social structure of synchronized bundles into a network. (FLUSSER, 2008, p. 89, our translation)

Machado also recognizes the connections of the media with certain concepts rooted in them. He exposes that techniques, artifices, and devices are not just neutral tools or any mediations, but that, on the contrary, they are loaded with history and derive from particular productive conditions. So he suggests that

> like any art strongly determined by technical mediation, media art places the artist before the permanent challenge of opening up to the present ways of producing. At the same time, it also opposes technological determinism, rejecting the industrial project already embedded in the machines and appliances, thus preventing his work from simply resulting in an endorsement of the productivity goals of the technological society. (MACHADO, 2010, p. 16, our translation)

These two considerations indicate a horizon of concerns shared between Machado and Flusser, which encompasses the aesthetic and political dimensions of producing and disseminating technical images and programs that originate them in social life. Also, it comprises how artists can respond to new questions and situations posed by the tension between art and media. Both authors present formulations that escape the simplifications from a polarized debate concerning the media and the arts (for example, between technophiles or technophobes) by highlighting the dialectic between these and other similar terms. Thus, their reflections remain current and relevant to understand the problems arising from the large-scale production and circulation of technical images and the conception of solutions, even if temporary.

Finally, but not least, it is necessary to recognize that, if Machado owes Flusser essential foundations of his thinking on media art, he also expands this author's investigations by entering the universe of arts, especially in Brazil, and offering readers analyses of cases that corroborate his propositions. Flusser follows a different line, and, at least in the two books discussed here, he concentrates on elaborating exclusively theoretical proposals about an art engaged against the determinism of devices. In this way, it is possible to consider that Machado collaborates with Flusser and, in a sense, fights him, as he develops paths not glimpsed by this author.⁸ This does not mean that one reading does not need the other, but the opposite. It is precisely the relationship between their texts that enables us to observe the proximity and distances of their conceptual operators, ways of proceeding, and contributions to the processes of creation and the debate on technical images, media art, and its aesthetic and political reverberations in Brazil and the world.

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⁸ Another valid undertaking would be to investigate whether there are reverberations of Machado's texts in Flusser's theories. In *Comunicologia: reflexões sobre o futuro* (2008), a posthumous book that brings together the content presented by the philosopher in his lectures given at the University of Ruhr-Bochum, in 1991, there is a list of bibliographical references, which corresponds to Flusser's "travel library," which includes Machado's A *ilusão especular: introdução à fotografia* (1984) (FLUSSER, 2014, p. 379).

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