Gamification, apparatuses, language and the emergence of new codes

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In our time the presence of playful elements can be seen in all spheres of social, cultural and political relationships. While it is true that culture has its roots embedded in the act of playing, there is a contemporary factor that enhances the perception of the importance of the game for man and amplifies it eloquently. This factor lies in the growing influence of technical devices in mediation processes. These devices, dedicated to the game of symbolic exchanges, were called "apparatuses" by the philosopher Vilém Flusser, who pointed them out as those responsible for liberating man from work. The reign of these devices – among which we find computers, game consoles, tablets and smartphones – propelled man directly to the game. This change brings profound implications to the human condition, such as the production of new codes based on games that are more suitable and efficient than writing to the production of contemporary languages. These new hybrid and simultaneous codes are at the core of the apparatuses and they break the linearity of writing, provoking the emergence of new spatial and temporal relations binding the contemporary man to learn complex models of symbolic encoding and decoding. From this picture we intend to reflect on how the notion of gamification affects language production mediated by apparatuses. Is it possible, as indicated by Flusser, that the codes of these apparatuses are more efficient than linear writing to the current production of language?
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This text is an introductory essay that aims to map some of the statements made by Czech-Brazilian philosopher Vilém Flusser (1920-1991) throughout his career as a thinker of communication, design, and various media codes, especially those that are supported by what was conceptualized by him as "apparatuses": Technical systems dedicated to play that can be programmed for diverse functions and that arise from scientific texts that enabled the machines to be surpassed, giving rise to a new configuration in the panorama of Western civilization that the author calls post-history, marked, among other factors, by transcending of the linear thinking model found in writing, including the scientific one, in favour of a model consisting of

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synthetic images[2] produced by the jump between calculated points in a space of great abstraction, called zerodimensional[3].

This surpassing pragmatically reveals itself at the very core of the distinction between machines and apparatuses. While machines are indices of an era marked by industrial thought, as they operate by means of the linear chain of production of consumer goods on a large scale and work maximization, apparatuses follow a stochastic logic, where the linearity of machinic work, of writing and linear history makes room for the emergence of electronic apparatuses that are dedicated to symbolic production based not on work, in its sense of production of massive consumer goods, but instead on symbolic plays that are contained in the core of programming found within the apparatuses. In summary, the linearity of written text gives rise to what Flusser calls synthetic image: An image type calculated and projected inside the apparatus via algorithms and which is composed of nonlinear points (Flusser, 2002).

Flusser condenses his ideas about the outshining of the paradigm of writing by synthetic images – produced by updating the calculation of programmed possibilities through the act of playing with the apparatuses – in his book "Does writing have a future?" (2011a). The thinker carries out this exercise in at the theoretical level, anticipating some characteristics of the post-historical codes we see nowadays in video game devices. Thus I am investigating the feasibility of the scenario envisioned by Flusser regarding the production and dissemination of scientific, poetic and philosophical knowledge in a post-historical reality through hybrid codes found in video games and in the gamification strategies ever increasingly widespread in the

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2 These images are post-historical, produced by apparatuses. They are, therefore, the kind of images found in video games, for example. They use a new communication code – abstract and formed by points – that surpasses texts and history (Flusser, 2009).

3 Zerodimensionality is the last level of the abstraction scale that Flusser (2009) proposes to explain the history of culture. This scale geometrizes man's experience with culture and inserts it into worlds that extend from the four-dimensionality of space/time (concrete horizon) to the points of zerodimensionality (abstract horizon). This scale consists of five ontological levels, created from four negative movements heading towards abstraction: From the four-dimensionality of the concrete world to the three-dimensionality of bodies (tools and sculptures) through manipulation. From the three-dimensionality to the bidimensionality of surfaces (images) through observation. From bidimensionality to the unidimensionality of lines (text) through conceptualization, and, from there, to the zerodimensionality of points (synthetic images) through the calculation. For the author, to calculate is to design on this zerodimensional space and it is here that apparatuses and post-history meet.

contemporary society.

Flusser (2011a, 2011b) points to an issue that seems central to the stage of development attained by Western civilization. This issue concerns the competence of traditional methods of production, storage and access to knowledge produced by man faced with new codes that emerged over the past decades, jeopardizing the authority of the code of writing and linear mental methods that this code carries at its core against the advent of a world which, in the past century, atomized itself with a speed never experienced before in history, fragmenting into points that are no longer linked together in a linear fashion to produce meaning and which form small cores, joined by leaps that do not necessarily connect themselves to nearby or continuous points, resulting in often unusual connections.

This fragmentation is one of the indices that Flusser (1983) calls post-history, an era where civilization stopped being sedentary, and became nomadic again, a phenomenon caused by the abandonment of history in favour of immersion in a time where our firm territories – marked mainly by Enlightenment safety found in the verbal text – collapsed and gave way to a new cultural setting, marked by the ubiquity of computing apparatuses dedicated to the production of synthetic images. Physical sedentariness was overcome, among other factors, by the omnipresence of the media, especially those based on apparatuses, and by the differentiation between the public and private space that these provoke.

Thus, Flusser begins systematically questioning the validity of writing as a system for the seizure, criticizing and recording of a post-historical reality that shows itself as scattered and nonlinear, punctuated by the omnipresence of apparatuses that produce codes based on calculations and projections of points that are linked by probabilistic logic contained in its programmed core. It is a leap of linear certainty to the theory of probability and gaming. The author questions, based on this leap, why we keep using sequences of alphanumeric graphic signs as codes for massive transmission of information if we possess, at least since the advent of cinema and the montage theories of Sergei Eisenstein and Dziga Vertov, more efficient ways to produce, transport, receive and archive knowledge related to all areas of human

knowledge, including science, philosophy and poetry.

Seeking to point out reasons for this situation, Flusser (2000) states that Western civilization adopted the habit of writing at the expense of the inscription of scenes on surfaces. I.e., the West failed to produce images – sets of connotative symbols, whose perception time is circular and vague – and started to produce texts that are intended to be denotative and are linear. Western civilization went from a circular way of being in the world to another linear one, since the image's time is not causal: One event does not necessarily explain the next event. The gaze that scrutinizes the image's surface wanders, returns to contemplate elements already seen, loses itself in this wandering over the surface and so what it was before it becomes after and the later becomes before (Flusser, 2000). The non-written phenomenon does not become significant because of a linear process, but by establishing relationships between distant points. Writing is a conventional symptom – that is, a symbolic habit which established itself in culture – in such an ancestral manner that the overwhelming majority of the information produced by contemporary communication codes – including those carried out with the aid of computing apparatuses, such as videogames – continues to be based on the linear method of writing.

Flusser (2010) states that the main reason for the non-acceptance of the replacement of the written code by other types of codes is the fact that the cultural models governing thought are inert. Given the ease of use of a code already culturally acquired there would be a rejection of the learning and use of new codes. This rejection would also be based on the inevitable sacredness of the written human legacy. Since culture is a process of cultivation, from something that grows to be harvested (Flusser, 1979), the cultural legacy created by writing since it was developed about 4,000 (thousand) years ago is undeniable. The emergence of new codes would not lead to the abandonment of such a legacy, even if the improbable claim that "only historians and other specialists will be obliged to learn reading and writing in the future" (Flusser, 2011, p. 3) is confirmed. Thus, I seek to investigate the validity of Flusser's following statement (2011, p. 3):

> Information is now more effectively transmitted by codes other than those of written

> signs. What was once written can now be conveyed more effectively on tapes, records, films, videotapes, videodisks, or computer disks, and a great deal that could not be written until now can be noted down in these new codes. Information coded by these means is easier to produce, to transmit, to receive, and to store than written texts.

The author, as a theoretician, made few inroads into effective language production with the codes he points out as being more suitable for post-history at the time of writing his text. It is curious to observe how nowadays most of the structures indicated above by Flusser as more efficient means of transport than the printed verbal code have become, over a short period, virtually inaccessible: computers no longer have floppy drives, industry no longer produces tape recorders, or record players capable of playing vinyl records or VCRs for access to videotapes. Even the CD-ROM has been ostracized. What remains of Flusser's list are films and here we have an indication that the author still had in mind mainly the means of storing and transmitting information and not the codes themselves, a situation that indicates the roots of his thought at a time where the presence of industry was even more evident than the immateriality of the code, of the calculated points in a space of abstraction that he indeed points out and conceptualizes. The tape, record, videotapes, CD-ROMs and diskettes have not stood the pragmatic test of time. Instead, many of the data stored on these media are less accessible nowadays than what is published in printed books, whose primary code is writing.

Another point to be expanded upon is the observation that most of the content that has been and continues to be produced with the aid of apparatuses continues to be based upon the written linear model of thought. The increasing presence of mobile computing apparatuses such as phones and tablets, also indicates the huge presence of writing in the exchange of messages based on text. Therefore, even although the messages in these computational methods are actually easier to be transported, received and filed, they remain predominantly written. A specific type of apparatus, however, escapes this rule from its inception: It is the videogame device, that from the beginning of its production on a larger scale, has provided with its playful features a grand hybridization of cultural codes through the use of images and synthetic sounds

as mediator mechanisms par excellence for the phenomena emerging from them, apart from always including the player's body as part of the construction of the proposed discourses. So video games show themselves as complex representatives of the calculation and projections play processed inside the apparatus and advocated by Flusser as a true post-historical code.

Additionally, the methods of production and access to video game language occur in a non-sequential manner and with an open hierarchy so that they have the potential to realize, if suitably programmed, Flusser's prediction that

> Future correspondence, science, politics, poetry, and philosophy will be pursued more effectively through the use of these codes than through the alphabet or Arabic numerals (2011, p. 3).

The biggest barrier to the effective use of apparatuses for language production in the sense that Flusser indicates is related to their programming. Programming is a kind of writing made up of an extremely specialized technical code, which requires, in most cases, a multidisciplinary team. Flusser points to this problem and states that a generation already habituated to the use of apparatuses as a sort of mother tongue will not find it difficult to master the technical codes required. For these, the technical encoding process will occur in an utterly playful manner, like the writing of a poem.

Although I have not used, specifically, the term gamification in this text, the approach used referred directly to the concept, and much of what Flusser wrote regarding the apparatuses and the games they provide is in the realm of what the term currently encompasses. For Flusser the concept of apparatus is closely related to the philosophical concept of play, as conceptualized previously by authors such as Schiller and Gadamer. As a conclusion to this brief presentation, the unstoppable diffusion of apparatuses in the cultural landscape points to these as being vehicles of emerging languages and the concept of gamification as the syntax of these languages that enable earlier improbable semantics. The man who carries apparatuses is, more than ever, player, and language, as has already been conceptualized by Wittgenstein, is where games take place.

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