

**Priscila Almeida Cunha Arantes**  
**Between Memory and the Abyss:**  
**Hypermemory Regimes, Datification and Art as Deprogramming**  
**in Digital Culture**

“The old world is dying. The new is slow to be born.  
In this chiaroscuro, monsters emerge.”

Antonio Gramsci, Quaderni del Carcere

## **Introduction**

Memory<sup>1</sup> has always played a fundamental role in the processes of constructing and organising knowledge, but it is in contemporary times that it has more forcefully assumed the status of a strategic field of symbolic dispute, crossed by logics of power, technological mediation, control and manipulation of information.

Since Ancient Greece, memory has been treated as something essential: the Muses, daughters of Mnemosyne (Memory) and Zeus, were deities who governed knowledge. Greek myth reminds us that forgetfulness - Lethe - was the opposite of truth: remembering meant keeping identity, the past and knowledge alive. However, over the course of history, memory has taken on different guises, sometimes worshipped as a virtue of intelligence and sometimes erased by regimes of institutional oblivion.

While in the past memory was linked to oral practices, rituals and later to institutions such as libraries and museums - disciplinary devices that defined what should be remembered and what could be forgotten - today it has become a precious commodity: the symbolic currency with which data capitalism trades values, desires, behaviours and subjectivities. In this sense, we are experiencing a profound transition in the way collective memory is produced, stored and manipulated.

With the explosion of digital platforms and the advance of data capitalism, the function of organising and transmitting cultural memory has been progressively appropriated by large transnational corporations that operate through algorithms, artificial intelligence and massive databases.

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<sup>1</sup> This is an English translation of the original Portuguese text that has also been published in this issue of *Flusser Studies*.

These structures - opaque, automated and with little democratic regulation - have become the new devices for selecting, archiving and circulating memory, establishing what we propose in this essay as the hyper-memory regime.

It is in this context that Vilém Flusser's thinking is particularly relevant and necessary for understanding contemporary regimes of production and control of collective memory. Reflecting on the transition from oral and written societies to those based on technical images, Flusser anticipated many of today's central issues, such as the automation of memory records and the control mechanisms operated through information. In *Ars Memoria*, an essay presented at *Ars Electronica* in 1988, he alerts us to the ideological processes that operate in so-called artificial memories, especially those produced by electronic devices and computer systems.

In *Vampyroteuthis Infernalis* (1987), the figure of the abyssal mollusc serves as a critical metaphor for the human and anthropocentric condition, immersed in dense, opaque and self-referential information ecosystems. Flusser's reading of culture thus proves to be extremely fertile for thinking about the ways in which data - converted into merchandise - is captured, organised and mobilised for the purposes of subjectivation, surveillance and profit. His critique of the logic of 'programmed societies' and his defence of art as a gesture of deprogramming the 'black box' offer powerful interpretative keys for confronting the impasses and paradoxes of today's hypermemory regimes.

In this sense, this essay has three interconnected parts. In the first, we discuss the datification of memory and everyday life, proposing a critical analysis of surveillance capitalism and data collection in the light of the concept of hyper-memory. In the second part, we explore the concept of cultural memory in Vilém Flusser, based on two fundamental texts: *Ars Memoria* and *Vampyroteuthis Infernalis*. Our aim is to deepen the reflection on how Flusser understands cultural memory in its intrinsic relationship with technical objects and technological mediation. Finally, in the third part, we use Flusser's thinking, especially from his book *Filosofia da Caixa Preta*, to rethink the culture of data memory and suggest how art - understood as a practice of deprogramming - can operate as a space of resistance in a time marked by new algorithmic totalitarianisms.

## **1 Datification of memory and the musealisation of everyday life in the 21st century: memory as a space of power and dispute**

Many authors have discussed the mutations and transformations in capitalism due to the advance of digital technologies, which not only change the way work is carried out, but also redefine rela-

tions of production and consumption. Although the relationship between capitalism and technology is an old one, the new Information and Communication Technologies (ICTs) play a crucial role in reconfiguring today's economic, social and cultural structures.

One of these transformations is the process of datification, i.e. the conversion of aspects of social life into quantifiable data that can be stored, processed and commercialised. Datafication is not limited to the automation of processes; it involves the personalisation of services, the shaping of behaviour and the algorithmic manipulation of experience, promoting what authors such as Byung-Chul Han (2012) call a compulsory transparency of life.

This change is reflected in the rise of digital platforms, which exploit users' unpaid labour, generating economic value from social interaction on networks. ICTs not only facilitate production, but also expand the forms of control over labour, affections and lifestyles. The Covid-19 pandemic has accelerated these transformations, showing how teleworking and digital platforms increase productivity while deepening the precariousness of working conditions. The growing importance of apps in everyday life reveals how everything can be transformed into data, including feelings, desire and memory.

In this context, so-called data capitalism is not just a new economic model, but a socio-technical infrastructure that redefines human relations, operating through the continuous extraction of data and the formatting of subjectivities. Thinkers such as Shoshana Zuboff and Cathy O'Neil offer central criticisms for an understanding this change.

Zuboff, in her book *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (2019) argues that today's capitalism extracts behavioural data from individuals to create predictive markets that shape future actions, undermining individual autonomy and democratic rights. In *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy* (2016) O'Neil develops this view by highlighting how algorithms can perpetuate social inequalities and discrimination, turning decisions into opaque processes that favour corporate interests over the common good.

Zuboff identifies four main uses of surveillance capitalism. *Data extraction*, which manifests itself in the appropriation of users' personal information, transformed into merchandise; *data analysis*, i.e. the processing of large volumes of information by computer systems, often referred to as machine learning, to predict user behaviour; *new contractual forms*, which manifest themselves in personalised and specific contracts through the monitoring of users; and the *continuous experiments by platforms* that adjust themselves to perfect their prediction and influence models.

This logic results in what Zuboff calls a *behavioural surplus*: an economic model in which the raw material of capitalism is no longer natural resources, but the behavioural data produced by our digital interactions. Unlike traditional market segmentation strategies, this approach not

only predicts, but moulds and influences users' actions.

Surveillance capitalism therefore differs from industrial capitalism, according to the author, by transforming everyday life itself into raw material for perfecting control over individuals: According to Zuboff (2019) industrial capitalism transforms the raw materials of nature into commodities; surveillance capitalism, in turn, claims the raw material of human nature for the creation of a new commodity.

Cathy O'Neil, in (2016) warns of how *Big Data* perpetuates social inequalities. Her studies show that algorithmic models used in various areas, such as education, criminal justice and finance, are not neutral. On the contrary, they reinforce dynamics of subordination and segregation already present in capitalism, making it difficult to challenge automated decisions.

O'Neil also highlights how machine learning models detect patterns and create predictions based on historical data, which often amplifies existing prejudices. She also criticises the internet business model based on personalised ads, which can manipulate users and undermine democracy.

In *Platform Capitalism*, Nick Srnicek (2016) adopts a complementary perspective, focussing on the monopoly of digital platforms. Unlike Zuboff, who emphasises surveillance as the main driver of contemporary capitalism, Srnicek argues that the main feature of capitalism is the digital platforms that extract data as new material for production and consumption. According to him, data is organised and collected for specific purposes, becoming one of the pillars of the digital economy whose infrastructure is digital platforms.

In this sense, digital platforms function as new 'museums' of collective memory, only automated, privatised and algorithmically mediated. Every digital gesture - likes, photos, routes, searches, preferences - makes up a gigantic algorithmic archive. This datified cultural memory not only preserves, but classifies, monitors, monetises and reinterprets memories, transforming what was once a "common good" into a cognitive commodity.

This process of the 'musealisation of everyday life' implies an important change, because until recently public memory was confined, if we can put it that way, to the domain of the state.

Tony Bennett (1995), in dialogue with Foucault, points out that "museums, galleries and, more intermittently, exhibitions, played a central role in the formation of the modern state, and are fundamental to its conception as, among other things, a set of educational and civilising agencies" (Bennet, 1995: 66) and, we might add, for the domestication of the sensible. But since the turn of the century, with the advent of the internet and the explosion of social media, this memorialising practice has also become a social practice.

In a way, from the perspective of digital and post-digital culture, memory practices leave the domain of the state, include civil society as a production force and are now managed by mega-

companies that dominate the internet. (Martins, Junior, 2016)

Within this context, human activities are increasingly carried out, recorded or mediated through computers or computer systems. This means that many of the actions, interactions and transactions that were once carried out in an analogue or face-to-face way are now digitised through electronic devices, software and computer networks. As much of human activity becomes "computed", any ordinary gesture is potentially statistical and musealisable.

The presence of a street camera is justified with arguments such as "crime prevention" and "security". *Online* socialising services such as Facebook, Tik Tok and Instagram encourage the "sharing" of personal information. These arguments mask the fact that, beyond the "function" for which they were designed, these systems feed large databases and datasets that guide commercial strategies and establish policies of domination, control and surveillance.

Considering that every computer tool, to a greater or lesser degree, establishes a link with some database, the connectivity between these tools makes up a new and invisible fabric of power and colonialism: data colonialism. In this sense, the profuse implementation of business technologies on the internet, particularly entertainment, web management and indexing in search engines, data management mechanisms and social media platforms, is also accompanied by risks to human rights linked to the reproduction of colonial practices of erasure, classification and domination (Silva 2021).

We are thus living in a new regime: that of hypermemory. The prefix *hyper*, from the Greek *hyper*, means, in this context, "beyond", "excess", "overabundance". It's not just a quantitative intensification, but a qualitative and structural mutation in the ways we deal with information, time and, above all, memory. When applied to memory, *hyper* implies a significant shift: memory is no longer just a human attribute or a culturally shared collective good and is now operated, stored and managed by interconnected technical- computational systems, automated and regulated by corporate interests.

The hypermemory regime therefore refers to a socio-technical system in which the production, recording and circulation of memory are deeply mediated by algorithms, platforms and digital devices that not only store data, but continually organise, interpret and reconfigure it based on predictive and marketing logics. In this regime, memory becomes a strategic raw material: it is quantified, monetised and instrumentalised as an economic asset and a mechanism of control and power: every gesture, interaction or digital memory is converted into data and fed back into a system that shapes behaviour, regulates affections and influences decisions.

## 2. Cultural memory and contemporary monsters: between *Ars Memoria* and *Vampyroteuthis Infernalis*

The notion of cultural memory is a fundamental theoretical field for understanding the ways in which societies organise, reconfigure and narrate their historical experiences. Authors such as Maurice Halbwachs (1992) and Aleida Assmann (2018), among others, have underpinned this field by distinguishing cultural memory from communicative memory and individual memory, pointing out that the latter is structured through symbols and practices that transcend individual biographical time and shape collective identities.

Vilém Flusser, although he does not directly use the expression "cultural memory" along the lines of the theorists of the history of memory, proposes in his essays a concept that converges with these formulations, but goes beyond them by emphasising the link between memory, technology and media culture.

In *Ars Memoria*, Flusser takes up the tradition of classical mnemotechnics, which dates back to Greco-Roman rhetoric, to critically analyse the ways in which the West has structured its memory culture throughout history. For him, cultural memory is inseparable from its mediating devices - be they mental, such as the *artificial loci* of rhetoric, or material, such as archives, libraries, museums and, more recently, digital databases. More than an inner content, memory is a technomediated cultural practice that organises the world.

As humans, we are beings of memory: unlike other living beings, we not only inherit genetic information, but we also acquire, store and transmit cultural information. This ability distinguishes us and underpins our "human dignity". Cultural memory, however, differs from genetic memory: it is not inscribed in our genetic code, but depends on technical means - from speech to the alphabet, from stone to paper, all the way to libraries and digital devices. Over time, these media have sought to make cultural memory more durable, in an attempt to turn history into a cumulative process. Flusser writes: "We are entities that not only acquire information, but also store it in order to pass it on. We transmit not only inherited information, but also acquired information. In this we are different from other living beings, in this lies our 'human dignity' (...) but this dignity is not as impressive as it seems at first glance. The places in which we store the information we have acquired are not very reliable for us to become historical beings in the exact meaning of the term (...) we should have more reliable and more durable cultural memories (...) but it seems that we are currently achieving this goal: in the form of artificial intelligences (a term that seems inappropriate). It seems that we are finally achieving such human dignity, that we are beginning to overcome our animalistic condition." (Flusser 1988)

According to Flusser, there has been a historical shift from *ars memoria* to an "art of programmed forgetting". The ancient art of memory operated by internal "storage", associated with fictional places that stimulated the imagination and the internalisation of knowledge. However, with the advent of writing, the press and technical media, this memory was externalised and knowledge began to accumulate on technical supports.

In contemporary times, with the introduction of electronic memories, Flusser identifies a new tension: despite appearing promising due to their ability to process and store large volumes of information, these technologies do not escape ideology - on the contrary, they make the conflicts surrounding the manipulation and control of memory even more evident. If, on the one hand, using computers forces us to distinguish between hardware and software - and thus de-reify memory - on the other, it reveals how much storage systems continue to be crossed by ideological discourses that shape what is remembered, how it is remembered and by whom. In this sense, Flusser points to an uncertain future in which the values and meanings attributed to memory will need to be radically rethought in the light of these technological transformations and their political and cultural impact: "Electronic memories somehow go back to very primitive storage strategies. As our ancestors did, we too aim to store information in 'brains', that is, in systems whose function is precisely to store acquired information. The difference is this: the new memories seen as brains can be manipulated from the outside" (Flusser 1988).

In this sense, Flusser proposes that cultural memory should not be understood as a simple archive of the past, but as an active system of symbolic coding, a field where values, meanings and modes of existence are disputed. For him, memory is an essential function of culture, because it is through memory that continuity, collective identity and the social imagination are built. However, this memory is always subject to mediation - and it is precisely the nature of this mediation that defines the possibilities of freedom or programmed automatisms within a given culture:

However, I believe that there is another aspect inherent in the invention of artificial electronic memories, an aspect that, as far as I know, has not been sufficiently considered until now. It is the aspect that means that using computers forces us to distinguish between hardware and software, and therefore forces us to de-reify the concept of memory, to rectify the ideologies that have hitherto covered up the storage process, "this aspect of electronic memories will have unforeseeable consequences for future life." (Flusser 1988).

Using computers reveals that memory is actually a technical and symbolic process, not just a material repository of information. This forces us to review the ideologies that treated memory as something natural and static. Therefore, to de-reify memory, for Flusser, is to realise its processual, technical, ideological and constructed nature - an understanding that becomes necessary in the context of digital technologies.

The topicality of Flusser's thinking is emphasised when, in *Vampyroteuthis Infernalis*, he stages a philosophical fable that debates the anthropocentric perspective of memory. The Vampyroteuthis is used as a liminal figure to think about a form of life other than human. In this exercise in speculative anthropology, Flusser draws an analogy between the mollusc and the human, exploring what is common and supposedly incommunicable between the two existences. The creature, which lives in the oceanic abyss, is described as the bearer of an incarnate and organic, non-symbolic, visceral memory, which expresses itself through bodily retortions, luminescent pulses and rhythms of life that defy temporal linearity and modern rationality.

The memory of the Vampyroteuthis is thus a memory of continuous tension, inscribed in the very flesh of the organism. It is not an archived memory, but a lived, performative memory, a kind of organic archive in permanent updating. While modern occidental humans organise their memory by logical categories and external structures (books, museums, databases), Vampyroteuthis represents a form of remembrance integrated into its vital flow.

By placing these two forms of memory in parallel, Flusser operates a deforming mirroring - a philosophical device that destabilises the boundaries between human and non-human, between rationality and desire, between archive and body: "Animals, as much as zombies, robots and extraterrestrials, require a speculative endeavour in order to be thought of in their inhumanity. What are their relations with "our world"? In this way, mirroring becomes a two-way street, in which similarities and differences are mutually confused and reconfigured: by meeting and reflecting each other, both worlds insinuate themselves, leading us to realise that there have never been two worlds, but only one" (Beccari 2019).

The figure of the mollusc thus becomes a speculative mirror of Western culture. The abyss in which Vampyroteuthis dwells is the symbolic counterpoint to the supposedly "enlightened" surface of modern rationality. Its viscosity, its twisting and its slow pace are metaphors for an existence that resists acceleration, transparency and normativity. As Marcos Namba Beccari (2019) points out, the Flusserian text functions as a deforming mirror that gives us a disconcerting image of ourselves, revealing the shadows of contemporary culture - growing authoritarianism, digital nihilism, the culture of resentment and symbolic violence spread by algorithms: "In the case of Brazil, especially where certain medieval dictates such as the Flat Earth, gender ideology and that vaccines cause autism have resurfaced, we see a fearless anti-intellectualism permeating the most diverse spheres and social strata.(...) This is the topicality of Vampyrotheuthis infernalis: the prevailing fascination with a form of life that is both primitive and current" (Beccari 2019).

In the current context, marked by the intensification of surveillance devices, information manipulation and subjective overexposure, the metaphor of the Vampyroteuthis takes on a new resonance. Flusser proposes that we think of memory not as accumulation, but as folding; not as

linearity, but as a spiral. The mollusk devours its own tail - just like contemporary culture, which consumes its past, its future and its own image in uninterrupted streams of data.

It is in this context that *Vampyroteuthis Infernalis* resonates as a metaphorical and radical manifesto. By imagining a being whose memory is not stored in external systems, but embodied in a body that pulses, bends and emits light, Flusser seems to propose, at the same time, a counter model to programmed normativity. The abyssal mollusc embodies the possibility of an undomesticated memory, not subordinated to instrumental rationality. Its submerged, opaque and silent existence is a veiled criticism of the Enlightenment ideal of clarity and transparency - ideals that, in data culture, can become devices for total exposure and absolute control. Vampyroteuthis is both a figure of resistance and an allegory of the abyss: not the abyss of oblivion, but the abyss of a different kind of memory, one that escapes the norms of technical market codification and algorithmic management.

### 3. The art of deprogramming the black box

Flusser builds a theory of memory that is simultaneously cultural, philosophical and critical of technique. He invites us to think of memory not as a simple accumulation of data, but as a field of invention, symbolic struggle and ethical mediation. Artificial memories, although inevitable, need to be constantly questioned as to their political and ethical implications. Remembering, in this context, is more than resisting: it is re-enchanting experience, deprogramming automatisms and reopening time to the imagination. Flusser's philosophy of memory, therefore, does not just diagnose the contemporary crisis of remembrance; it proposes a gesture of creation - a new *ars memoraria* capable of confronting the programmed amnesia of the present.

In this scenario in which artificial memories threaten to subject human experience to programmed automatisms, Vilém Flusser's philosophy proposes an ethical and aesthetic gesture of deprogramming. The so-called "black box" - a metaphor he uses in his essay *Filosofia da Caixa preta* to designate technical devices whose inner workings are inaccessible to most people - should not just be feared or glorified. The challenge lies in deprogramming it: opening up its circuits, dismantling its logic, reversing its codes: "The exercise employed by Flusser is precisely that of perceiving a new stage of culture contaminated by the explosion of techniques and media, casting a critical eye on devices seen as black boxes, devices whose programmed and programmable interior is completely opaque and uncertain. It is interesting to see how the photographic device, the black box, is taken as a metaphor for society. Just like the photographic apparatus, social reality is a large apparatus whose operation is pre-programmed: we are all just supporting players in this fully programmed apparatus" (Arantes 2014).

In this context, art plays a fundamental role as a force of resistance and symbolic reinvention. For Flusser, art can function as a 'counter memory' - a practice that challenges automatisms, re-enchants the imaginary and makes visible what technical systems seek to erase. When artists intervene in information flows, subvert algorithms, tension archives or propose speculative fabrications, they are practising a renewed "ars memoria", which not only conserves, but reinvents memory as a field of creation and criticism:

If the photographer lives the totalitarianism of the devices, if his gestures are programmable, if all of us, without exception, are programmable, there is, however, an exception coming from those who try to 'trick' the devices by subverting their programme. They introduce unforeseen elements into the devices, thus re-establishing freedom in a context dominated by machines: "The so-called experimental photographers; they know what they are dealing with. They know that the problems to be solved are those of the image of the device, the programme and the information. They consciously try to force the apparatus to produce an informative image that is not in its programme. They know that their praxis is a strategy directed against the apparatus (...) that they are trying to respond through their praxis to the programme of freedom in a context dominated by apparatus (Flusser 1995)" (Arantes 2014).

Deprogramming the black box, therefore, means relearning mediation. It means activating a critical awareness of the devices that store, organise and reproduce collective memory. It's about breaking the invisibility of the code, re-appropriating the tools and re-enchanting the gestures of remembering, inventing other forms of relationship between technique, memory and freedom.

In a historical moment marked by hyper memory - this excess of digital records and storage - and by the growing datification of memory, which transforms memories into quantifiable and traceable data, Flusser's thinking is surprisingly current. His reflections anticipate the need for critique of technique that goes beyond denunciation and proposes active forms of symbolic reappropriation. By reminding us that memory is not just a question of keeping, but of imagining, challenging and narrating, Flusser offers conceptual tools to resist the algorithmic capture of the past and to ethically and poetically reinvent the future of our memories.

## References

- Arantes, Priscila (2014). Pós História, imagens técnicas e liberdade em tempos de barbárie. *Flusser Studies* 18.
- Arantes, Priscila (2009). Media, gestures and society: Dialogues between Vilém Flusser and Fred Forest. *Flusser Studies* 8.
- Assmann, Aleida (2018). Erinnerungsräume. Formen und Wandlungen des kulturellen Gedächtnisses, München: Beck
- Beccari, M. N. (2019). O abismo através do espelho: a atualidade de *Vampyrotheutis Infernalis* de Vilém

- Flusser. *Visualidades*, Goiânia: 14–28.
- Bennett, Tony (1995). *The Birth of the Museum: History, Theory, Politics*. London: Routledge.
- Flusser, Vilém (2000). *Towards a Philosophy of Photography*, London: Reaktion Books.
- Flusser, Vilém (1988). *Ars Memoria. Ars Electronica*, Linz.
- Flusser, Vilém; Bec, Louis (2012). *Vampyroteuthis Infernalis: A Treatise, with a Report by the Institut Scientifique de Recherche Paranaturaliste*, Minnesota: University of Minnesota Press.
- Halbwachs, Maurice (1992). *On Collective Memory*. Chicago: Chicago University Press.
- Han, Byung-Chul (2012). *Transparenzgesellschaft*. Berlin: Matthes & Seitz.
- Martins, Dalton Lopes et al. (2018). *Memória como prática na cultura digital*. In: *Pesquisa sobre o uso das tecnologias de informação e comunicação nos equipamentos culturais brasileiros: TIC Cultura*, São Paulo: 45–52.  
<https://pesquisa.tainacan.org/repositorio-de-pesquisa/memoria-como-pratica-na-cultura-digital/>
- O’Neil, Cathy (2016). *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy*, New York: Crown Books.
- Silva, Tarcízio (2021). *Colonialidade difusa no aprendizado de máquina: camadas de opacidade algorítmica na ImageNet*. In Cassino, João Francisco et. al. (eds.) *Colonialismo de dados: como opera a trincheira algorítmica na guerra neoliberal*. São Paulo: Autonomia Literária: 87–107.
- Srnicek, Nick (2016). *Platform Capitalism*, Cambridge and New York: Polity.
- Zuboff, Shoshana (2019). *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*, London: Profile book.