

THE MEMORY AND THE CODE: THE PHANTASM OF DIGITAL CULTURE

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The aim of this paper is to analyze the physical concatenation of technological devices, specifically between memory capacities and qualities (a database, an archive) and the code that regulates its performance. The code is here pursued as an “element” as concrete as an object, and with a specific cultural history (a code as a program, and in a wider realm, an ethos as a code).

Intro [1]

If man was one time the one that imposed his rhythm to objects, objects are nowadays the ones that impose their discontinuous rhythms to human beings, their discontinuous form to be there or substitute one another without becoming old. The status of a whole civilization changes according to the presence and use of everyday objects.

The system of objects

_Jean Baudrillard

We live in an epoch where, once a new technological device is created, we forget the use we had imagined for its predecessors. It is as if our memory of things was conditioned upon their presence. The lapse between the apparition of a new gadget and the moment we understand its implications for our world flees faster every time. But this holds no surprise, the oblivion of those implications is a calculated effect in the consumerist structure, one that operates more as a systemic constant than as a secret interest, and that derives from the daily iterative accumulation of all sorts and the saturated flux of current information. In a very practical and convenient manner, the erasure of meaning of our surroundings is organized as a veiling of a semantic matrix. The brief space of this paper would not allow us to go deep into its consequences and structure, we will concentrate instead in analyzing one way on which oblivion makes the new appear as the never-seen, while many times it is in fact a space-and-cost economical reelaboration of the ever-known. True invention will then appear as a case of its own, a rare species that reelaborates time and space, but one with which we would not have the occasion to deal with here. Hopefully, by signaling out what has been a recurrent practice in contemporary theoretical argot and conceptual paraphernalia, we can at least contribute to a re-organization of perspectives that sheds light upon the common fetishistic approaches around present-day technologies.

a. Language

One of the explicit forms by which the “new” is wrapped in spectacularity and sensationalism is with the sophisticated devices of neologism creation. Language accompanies every technological creation with a territorializing strategy that has an effect on an epoch’s forms of expression. To address a specific issue in contemporary societies – based on an economy of the intangible – means to fulfill the destiny of a certain desire, and to orient specifically an act of consumption. To think about the technology of our

time, we need to think how it is being described, spoken about, how is it understood from, with, through the specific agents of its production and consumption, and how its capacities are evoked, its effects programmed, its thrusts referred. The technological production starts as a speech act in itself. A machine can be thought of as a statement that requests, demands, solicits or summons a user's mobilization, a specific use and deployment.

b. Memory

In any case, it would be an endless task to refer all the effects and affects that contemporary devices produce in our time. We could therefore concentrate on two structures whose incidence is ample and quite decisive at once. On the one side, we find memory, a capacity for retention, the stock of data over which technological devices are built upon. In our time, the notion that every technological device would be faster, fitter and more powerful the more data it can process has become a common association, may it be for a computer, a toaster or a car. But that is not all. The discourse on machinic memory has been overwritten on a distinct paradigm of human memory, the one set by John Locke – to be more precise – that has memory as the base for the identity of an individual. [2] This is nothing new – we presence again here descriptions on the new through what is already known. The problem is that the foundation of that analogy is utterly erroneous. With the latest findings we have come to know to a greater detail that human memory does not work as a mere receptacle of data (as the lockean ideal would put it), that it is equivocal – and that's where its creative capacity is rooted – and that more than speaking about memory like something man 'has', we should refer on how we operate as living conscious memories, dynamic and ever-receiving, that generate the materials needed for the projects that will end up building a common memory and a collective surrounding. In a few words, we can say that we are *perceptive memories*: we perceive from what we know, and this description is the one that fits best the *mnemonic experience*. [3]

The machinic memory behaves as a storehouse, but some relevant ongoing researches pretend to locate it and justify it as an enhanced human memory. The strongest trend in this direction has been that set by John McCarthy Gallagher, who came up with the expression "Artificial Intelligence" (AI) in 1956, from which the field of cognitive sciences has developed. Nowadays, there is a swarm of projects that ascribe themselves to the principles sketched by the AI trend. One of the most fecund and provocative is POETic, an ongoing research that implies the development of a digital electronic circuit capable of integrating three biological models of self-organization: Philogenesis (P), Onogenesis (O), and Epigenesis (E). This circuit would conform a tissue that would become the fundamental strata for the creation of new machines based on this system, artifacts "capable of evolution, growth, self-repair, and learning" [4] according to its own creators. In other words, there is in this project, as in many similar ones, a supplanting of terms that always bring a reference and an imagined convergence with the natural sciences – mainly biology – and set the technological possibilities for a self-asserted avant-guard. But, to what extent is this only an excess of a rhetorical language? What is the fair measure for comparison? Should we remorselessly transpose the terms from one science to another, as if, for example, a human virus (a given form of 'life'), were the same as the virtual virus that apocalyptically spreads over ever-growing networks of servers and computers? There is a danger in the comparison, one that transcends the semantic field, but this is not a concern for the technology developers, who keep their tasks on target, encouraged by full-fledged 'efficientist' conquests on every field. The danger instead sprawls on the way we need to understand human intelligence and memory, beyond a computational paradigm. Briefly speak-

ing, we could say that human intelligence and memory are not describable as a series of ordered operations, but should be seen instead as emerging realities that could be transformed and affected by emotions, perception, experience and free will.

Memory as a term has to be acknowledged as a multilayered and context-related concept, the name for a capacity that is just not the same throughout species, and even less from human kind to its instrumental developments. While machinic memory is cumulative, human memory is safeguarding. The first complies with homogenization of data and neutralization of possibilities; it is materially restrained, and much formal in its display. It exists already on a world, to hold some of its data. On the other hand, human memory has remembering as only one of its functions. But thoroughly taken, human memory implies already a temporality, and above all, a world that is being built around it. Machinic memory is always external (no matter if it is inside a chassis), it contains information that is being quantified, encrypted, and therefore subdued; the data it holds is being con-formed as it is used, made ready to employ by any other application. Hence, it follows a container-model, and therefore the terminology that is used to describe its modulations: *formatting, compression, recovering, input, forward, zipping*, etc. Human memory, on the other hand, goes beyond the model of the container and contained, beyond the idea of a self-definitive capacity. [5] In this sense, individuals should be thought of as intersecting fields for remembrances, images, affections. Human memory is chiasmic, it builds traits 'inside', but operates 'outside', in the sense that it constructs sociality. The data it holds is productive in more than an organic sense: it can be only activated by contact with an *Other*. Machinic memories, formatting what they contain, deal with residues, incorporeal fragments: in the end machines cannot be held responsible, accountable, for what they contain. They are not 'faster', but only perform every time more rapidly what a human mind, responsible for its surroundings, has set them to do, in a calculated fashion.

This impossibility of covering over one function, one set of tasks, with another has, as we know, also implications that make the machinic memory achieve a performance that is usually not even sought after by the most sound of human memories. A given input, a plain given, cannot exist for the human memory, where every bit of information is instantly referred, inserted into a constellation of worldly fragments that dynamically signify it. Data exists as such only for the machine, a mere cipher is for them only a cipher and nothing else, and as such, it is already an entry that can be manipulated by a program (software or code) that allows for its recovery, its putting it forth, by its own means and terms (as we will see on the next section). Thus, human memory has not been 'upgraded' by the machinic memory; more likely, it implies a change of degree that comes here into question: the order of the archive plays now a substantial role, and pushes to a second plane the traits of human memory that do not allow for an efficient use of abstract input, now considered as 'immaterial resources' from where a surplus value can be extracted.

But how is machinic memory treated, accumulated and disposed of these days? What implications are derived from its form and use on the current technological surroundings? What is its reach? To tackle some of these questions, it will be important to turn into what makes the data stored in a simple box available, interpreted, and even shaped into operative forms with observable consequences in our current world.

c. Code

Code is the other structure that plays an important role in our current assumptions of media and technology. It is not only its definition that counts, but also its operative description throughout history. A

perspective that would have code as a notion pertaining exclusively to our time would be naïve: code is a cultural object – the cultural object *par excellence* – for every historical epoch, including ours. Code is the element around which the machinic memory is ordered, it is the precursor of technological events, the source for collective forms of inclusion and exclusion, the excuse for other devices of social resonance. But even if its importance can be clearly outlined, [6] not enough analysis have been developed on its cultural impact. We have not been trained on the importance of building algorithms, source codes and programs that would make us process alternate possibilities for other ways of being, distinct abilities for different ways of approaching the technified reality (and therefore our world), or new capabilities for the conception and constitution of information flows and archives (and their consequent implication for identity processes, historiography, narrativity and historical memory).

The more stable definition of code is the one that has it as a series of executable instructions. A primary approach would set it as a clear, distinct, constant, repeatable and productive object. But this does not take into account an old phantasm that inhabits its core, and which safeguards an old desire in Western history: to build something that has a life of its own, something that might spread without limits, without human control, transcending even the circumstances of its own creation. A historic research, which cannot be repeated in these pages, [7] would render the code as a logography that needs to be deciphered, an enigmatic cue that may be open only by those who have the key. Of course, this infuses the code with an auratic flair, which leaves it close at hand but inaccessible, far from evident. The code is a filter in front of which exclusions are being set. The code brings together communities, societies of interest and knowledge that gather exclusively, demandingly and disciplinarily around a cultural object, associating certain effects to it in a cultural ritual that performs those effects recursively – i. e. by ascribing them to the object in case.

But probably the trait that pertains more decisively to code is its repeatability. It is there that is operation is centered. This ability and demand to be repeated covers a pleasure principle that is unleashed in different epochs. Through this trait, a code can be assessed not as an object – and thus as a fetish – but more precisely as an *energeia*, [8] that ancient Greek term that tried to convey one stage of motion – something actual in the midst of becoming something else. And as an *energeia*, the code configures the everyday through, as, around, a set of cultural configurations. Its function is to disseminate and be disseminated; it is a spacing (as gaining a place) of meaning, or rather, a way for the hyposthesis of meaning. The code is an object-flux dispersing on, by, itself; it is the scattering of a contained force, a form of production that brings together efficiency and a promise, which rebounds in a production of symbolic forms.

By thinking on the ways language, memory and code are interrelated, we can anticipate the means by which algorithms and codes shape our relationship to information, and establish an array of operations from its flux. Nonetheless, the wide range of possibilities by which code transforms the data it uses as its basis – the entries archived – is yet to be assessed. When this data is held to represent crucial statistics or financial assets, strong walls of protection have been constructed to defend their form, to keep them intact. That yields some evidence upon the status assigned to that data. In the financial stage of capitalism, numbers and ciphers have become the new fetishistic category, and the algorithms used in banking operations and investment formats behave as the engines that speed up these numbers, making them advance, increase, take a share from another archive's data that then recedes, loses, decreases its face-'value'. The cluster of equations made possible by such codes is turned thus into a zero-sum operation.

When data is held to be historical information or identity records, new historiographies and identity-creation concepts need to be developed, parameters that include the variable of technological configurations as a field of meaning. A wiki, for instance, can be thought of as a site where information can be conveniently shaped to fit a 'truth' by general opinion. A given fact gains such a status either when not many users are directly interested, or when other sources of information – conventional books most of the time – remain unquestioned. But wikis are leading the terrain in different forms of collective knowledge creation. The open code upon which they rely implies a certain epistemology, one that will leave its mark on our historical moment. Not surprisingly, the operation of a wiki remains an interesting topic in this sense, for if the manipulation of code can sensibly affect strategic data on a functional level (for example, on the determination of what constitutes a fact), we could raise questions on a historiographical, a technical, an esthetical, but most importantly, an ethico-political plane. In any case, the forms by which data is being transformed on its processing by code and algorithms are just about to start getting more importance. In the interrelations of the functions of machinic memory and the code that process it to make it available, we are witnesses to a very special moment, an epochal crossing of the technological and the conception of culture from which we can derive a more thorough understanding on the concrete possibilities for new forms of critical thinking, definitory behaviors and the collective creation of practical knowledge stemming out directly from our everyday interchanges with the world.

References and Notes:

1. *This papers works out the basic arguments of a more extended one: "La Memoria y el Código: Acceso y Producción de Sentido en la Era Digital" by Javier Toscano (CMM, México, 2009).*
2. *John Locke, An Essay Concerning Human Understanding (New York: Prometheus Books, 1995), 246-247.*
3. *The idea is not new. It is at the base of Henri Bergson's Matière et Mémoire (Paris: PUF, 1939), but also by more recent psychologists as Neisser, Norman, et. al., who explain perception as a process of analysis and synthesis, admitting therefore that memory has schemes of assimilation that allow for the analysis of stimuli, and some kind of mechanism that eschews hypothesis or anticipates what will be perceived. Cf. Neisser, Cognitive Psychology (Mexico: Trillas, 1995).*
4. *The POETic Tissue Project, <http://www.poetictissue.org> (accessed March 1, 2011).*
5. *Edward Casey, Remembering, A Phenomenological Study (Bloomington: Indiana University Press, 2000), 243, 251.*
6. *For example: Mathew Fuller, Behind the Blip: Software as Culture (New York: Autonomedia, 2003).*
7. *Bibliography cited on note 1.*
8. *The classic discussion in Aristotle, Metaphysics, trans. W.D. Ross (Oxford: Clarendon Press, 1953), 9.8.1040b-1052a, ff.*