

Towards a Radical Media Archaeology An Interview with Wolfgang Ernst

Revista Luthor - Transcripción del original en inglés

How do you think your background in Classical Studies has impacted your analysis of media? Is there any link between this background and your current work?

My academic training was – as you point out – in Classical Studies, which had been driven by an early interest in "deep" cultural times (and their recurrence). Studying ancient (even distant) languages like old Greek or Latin, on the philological side, retrospectively (and structurally) goes along with learning another kind of "foreign" languages such as BASIC code for computing (which is close to Latin in terms of its reduced grammar), while the study of material culture (the core of Archaeology "proper", such as Greek and Roman antiquities) opened my eyes for what is called hardware of media, and the persistence of its techno-logics against "historical" change. Back then my special focus of attention, the empire of Carthage, made me aware of a regime which is less based on territory (unlike the Roman empire) but on the infrastructures of maritime trading: links between harbours, transfer and intermediary storage of mercantile goods - a "net".

With the more postmodern and deconstructive turns my academic studies took in the meantime, there is of course no causal, linear root of my current work in my previous background in Classical Studies, but it is tempting to recall this pre-history in terms of recursions. Some anecdotes, though, are precise in that sense. After some semesters of Classical Studies, my then professor in Classical Archeology, answering my impatient question if there is something like a theory of this discipline, once drew my attention to a recently published book by a French author named Foucault - his *Archaeology of*

Knowledge. What became Media Archaeology later, is still driven by a "classical" archaeological awareness of the materialities and codes which drive, as non-discursive agencies themselves, the discourses of culture, in Foucauldian terms.

You have defined your method as "Radical Media Archaeology". Writers such as Kittler, however, show a great deal of interest for areas like Psychoanalysis and the so-called French Theory. Are these lines of thought in any way relevant to your approach?

Even if Kittler rather stayed suspicious of the term "media archaeology", he clearly has been influenced by French Theory such as Lacan, giving the psychoanalytic notions of the real / the symbolic / the imaginary (Lacan) a technological meaning (gramophone / typewriter or computer / film). In a similar way, Kittler gave Foucault's discourse analysis a more materialist turn (as expressed by his book title *Aufschreibesysteme* in German, which became *Discourse Networks* in the English translation). While my advanced student days were heavily influenced by Derrida's deconstructive, and Lyotard's post-modern writings, it was actually my growing awareness of media technologies that taught me to look more precisely at the core technical operations that drive contemporary culture. Radio transmission via Hertzian waves may allow for a deconstructive listening in terms of content, but the technical conditions of the possibility for radio broadcasting to succeed at all do not allow for a playful deconstructive approach, but rather demand rigid technological reasoning. My current hypothesis that within media there is something like a rather autonomous "technológos" at work, which goes beyond a simply functional understanding of "technology". This surely realigns me with French thinking again (such as Simondon), and with Lacan's notion of the insistence of the symbolic order within the individual, and cultural unconscious. Is there something like technological unconscious in media culture? And with the emerging challenges of "Deep" Machine Learning, it is helpful to read both Turing and Lacan again, suggesting that such technical phenomena do not oppose the human to the machine any more, but let us discover the machine within the human itself (rather than "herself" or "himself").

While Kittler's method of media research rather performed what he occasionally called "Historical Media Archaeology", "Radical" Media Archaeology is less concerned about the historical circumstances, or "beginnings", of media

technologies, but rather with identifying both their material, and logical, core principles (*archai*, in old Greek). In that non-historicist sense, radical reminds of the mathematical square root (Latin *radix*). In order to understand the aesthetics of computing, it is vital to be relieved, for a moment (or *epoché*), from the burden of history. Technological articulation is not completely determined by its cultural circumstances.

What kind of relationship can be established between the internal temporal structure of a medium and the content it transmits? Are the new temporalities present in media technologies relevant at all for breaking down current historical or fictional narratives?

Since phonography and cinematography as storage media, and radio and television as signal transmission, new forms of experimental tempor(e)alities have emerged, while literary narratives had been restricted to merely symbolic time axis manipulation so far, and theatre has been restricted to action in the present. The transcendent signifier "time" thereby ex- or imploded into a plurality of times. With computational, algorithmically driven time compression and time stretching, time signals are rather expressed in terms of numerical frequencies. Thereby, the culturally familiar notion of "time" might itself become replaced by a cluster of alternative terms.

My previous training and enthusiasm as a "postmodern" certainly made me aware of alternative narratives, or even: alternatives to the narrative form itself, liberating the thinking of "time" from being tightly coupled, even dominated, by its narrative representation and order. But as long as such a rethinking remains within the inherited vocabulary of philosophy of time, it is trapped in a hermeneutic circle. In order to emancipate temporality from its traditional narrative form (both academic historiography, and historical fiction), a close reading of internal, micro-temporal action in (and between) technological media trains one to learn a different language, with a creative vocabulary which is provided by engineers and computer scientists already (from the electro-acoustic "delay line" for signal delay, up to terms like "real-time" and "emulation" in computing).

Has your work as a media archaeologist make you more aware of writing as a technology? How does this affect your writing style?

Writing, as it is known within the Humanities, is rather what has recently

been termed a "cultural technique". Cultural techniques are trans-subjective cultural operations which still depend on bodily action. Writing escalates from a technique to a technology once it is driven by non-human agencies.

In terms of writing, media archaeological research has driven me to what can be termed *archaeography*, which is not simply writing "about" technologies (in the intransitive mode), but *writing technologies* (the transitive mode). The design of an electronic circuitry is such a form of writing which is immediate to letting technologists express itself. The nineteenth century has been obsessed by machines which allow for nature to express, or "write", itself - such as Talbot's photography (*The Pencil of Nature*, 1844), of the kymograph as mechanism for registering time-varying signals (resulting, among others, in Léon-Scott's "Phonautograph"). Nowadays, creating a source code is not simply programming a computer, but computation; in Turing's 1936 definition, writing an algorithm is performing the machine already.

What exactly is to understand how media work? Do the effects on the subject and on society play any role in this understanding?

The publication which has triggered Media Studies in difference to familiar Communication Studies, *Understanding Media* (1964), has taught us that critical media analysis should not be restricted to its communicative content (such as the "social media" discourse), but should be extended to "listening" to the co-articulative message which derives from the medium as technical form. According to McLuhan, the medium message of electricity, e. g., is its "acoustic space", the synchronization of an audience by electronic "live" transmission of electro-magnetic waves - including its political effects, such as the fall of the Berlin Wall on November 9, 1989, resulting from a live TV broadcast of a press conference in East Berlin. In German, *verstehen* (for "understanding") has an acoustic association indeed. The sonification of signal and data processing in media is a way of better understanding indeed, since the ears are more sensitive for time-critical events than the otherwise dominant visual perception.

While media phenomenology and media sociology cares for the subjective affects and political effects of human media consumption, media archaeology tries to understand media *from within* their technologies. Since generations, it is media themselves (measuring devices) which understand other media bet-

ter than humans, in their slow perception, can ever do. With "Deep" Machine Learning, nowadays, resulting from big data processing in the layers of adversarial neural nets, computational machines "understand" media better than humans, in the sense of techno-hermeneutics.

What are you researching nowadays? What kind of projects are functioning right now in the Media Archaeological Fundus?

My concern, nowadays, is what I consider the core drama of technical media: the frictions which occur when the symbolic order (the code, logical reasoning, computation) encounters the "materReal" (real matter, hardware, computing) in order to become operative. For tracing technólogos which becomes articulation only in the combination of logics and materiality, "Radical" Media Archaeology is the proper method of (almost forensic) investigation.

The Media Archaeological Fundus has been extended by a studio with electro-acoustic and digital synthesizers, meant as an operative links between the two disciplines at our Institute of Musicology and Media Studies. The primary aim is not to let students compose their own electronic music, but to let them learn to listen to the implicit sonicity of electro-techniques, and to the data cycles ("algorhythm", in Shintaro Miyazaki's sense) which is the "music" within computational devices.

Its sister institution, the Signal Laboratory, goes on with developing the art of repairing obsolete technologies, such as retro-computing. Re-enacting a computational device (as is has been successfully achieved with the last effort of an independent computer architecture in Europe, the "Transputer" from the late 1980s) is a perfect mode of media micro-analysis.

Our Media Theatre is still the space where such technological devices become the main actors on stage for epistemological dramatization - in their coupling to humans, or even excluding humans at all.