

## For a radical media archaeology: A conversation with Wolfgang Ernst

Elodie A. Roy

NECSUS 6 (1), Spring 2017: 3–14

URL: <https://necsus-ejms.org/for-a-radical-media-archaeology-a-conversation-with-wolfgang-ernst/>

**Keywords:** German media theory, interview, media archaeology, Wolfgang Ernst

In his numerous writings on archives, technologies, and time media archaeologist Wolfgang Ernst indefatigably interrogates the ways in which technical and digital media do not only exist in time but *produce* temporalities – and temporalities – of their own.[1] This interview sheds light on media archaeology as a discipline emerging within a relatively codified academic institutional framework (rather than in the more organic domain of the arts) and closely associated with Humboldt University’s Institute for Musicology and Media Studies, where Ernst is Professor of Media Theories.

Here archaeology is not to be taken as a loose metaphor or a thin pretext for playful mind games. The term is rather defiantly operative. The university’s own Media Archaeological Fundus (MAF) shelters an unruly constellation of technological curios from the late 19<sup>th</sup> century to the contemporary era. In this interview Ernst notably highlights the crucial centrality of the Media Archaeological Fundus in his knowledge-making practice. The Fundus objects are meant to be operated, disassembled, manipulated, and physically, actively deciphered in practice. They encourage humanities students to know from the inside in the hope of grasping – beneath the apparent rigidity of machines – the more subtle articulations of machinic discourses. This turn or return to the archive and deep media materialities, resoundingly pioneered by Friedrich Kittler, continues to function as a larger anti-humanist critique of the humanities.

These concrete media-archaeological encounters remind me of André Breton’s words as he described Nadja’s deconstructive impulses: her irre-

pressible and terrible desire to see what lay inside mechanical toys and dolls; her will to open and fully comprehend them, in an almost amorous way.[2] Nadja displays a mixture of keen interest, fascination, and sheer disregard for ‘envelopes’; she ignores the apparent material unity of closed entities. Where Nadja is guided by childish intuition media archaeologists profess a more distant, restrained and rigorous manner to attend to – and theorise – the discrete, hidden temporalities at work within objects. Instead of a sacralising gaze or melancholy awe they refine methodological tools to excavate (and reactivate) the enduring present of past media artefacts.

With growing institutional support and a committed core of theorists throughout the world media archaeology is slowly consolidating into an academic discipline; it is fortunate though that a lot of media archaeological thinking should remain so resolutely unresolved, open, and experimental. It is within the interstices which media archaeologists operate, in the gaps and cracks of systems and discourses. This dynamism and sense of suspension frayed with occasional contradictions is hopeful and valuable. It offers us the promise of a radical (re)interpretation of media beyond normative and flattening historical readings or reconstructions – it also opens up novel methodological and pedagogical routes.

**Roy:** Superficial accounts of media archaeology may tend to regard it as yet another manifestation of 21<sup>st</sup> century nostalgia for the past, its apparatuses, its technical objects, and aesthetics. However, the media-archaeological approach you rigorously develop goes in a completely opposite direction. It has deep and complex ramifications in and for the present. Could you define the terms of your own engagement and motivations with media archaeology? What is the media-archaeological vision you develop and defend?

**Ernst:** Media archaeology is less a vision than an analytical method. It asks how to do media research, although – privately – it might be driven by a lot of nostalgia or even melancholy for analogue media time. The idea of media archaeology is rigid. I call it ‘radical media archaeology’ to separate it from a broader idea of media archaeology as nostalgia for old or forgotten media. Radical media archaeology takes the word ‘archaeology’ in a more literal sense, as Foucault did in his *Archéologie du Savoir* (1969). He explained that the term ‘archeology’ was not referring to the academic culture of digging out old things but was used in line with Immanuel Kant’s sense – where archaeology would be to make explicit the deep principles of

knowledge. Media archaeologists take the Greek word *arché* not in a temporal sense (it is not about the first and earliest media) but in its other meaning of 'guiding principles'. What are the essential elements of a medium? What are the aspects of knowledge that ought to be expressed? Media archaeology embraces old media as well as the most contemporary computer. It therefore also relates to mathematics and logic. The computer is not a traditional media anymore – it is a conceptual, mathematical media. Suddenly media archaeology is about mathematics as well, which reverses the whole idea that it might be nostalgic.

**Roy:** How has your early training as a classicist and archaeologist informed your current approach to media? How and why does one become a media archaeologist?

**Ernst:** I started as a classicist studying Roman, Latin, and Greek philology as well as classical archaeology and ancient history. I was fascinated by the deep material time of culture. What fascinated me was the resistance of materials: materiality against textual interpretation. Through my interest in theories of history and classical archaeology I found myself immersed in the emerging new discipline of media studies. I discovered that my old obsession with questions of culture and time could be re-addressed more precisely through doing technological media analysis. All the media we know are deeply related to time processes, be it micro time processes or phenomenological time processes. They irritate our human sense of time. Why should we insist on calling this 'media archaeology' and not simply 'media studies'? Maybe this has to do with the German academic context. A lot of what is generally called media studies or communication studies refer to mass media studies. The Frankfurt School, Adornean critiques of technology, are important. But media archaeology pays specific attention to the knowledge surplus which arises when one directly engages with technology without leaving this only to engineers. There are technical universities and polytechnics who train engineers and programmers. But they don't ask the kind of questions which we can – and do – ask in a humanities department. For example, what really makes the difference between the analogue and the digital? Not many people actually know what this difference is, and what difference this difference makes. To answer such questions you have to know how the analogue signal is defined in a traditional analogue television image.

**Roy:** Your writings are inhabited by what appears to be a deliberate asceticism and detachment, away from the sensual, celebratory, and almost

Epicurean conception of the material world. Your works appear to resist the romance of past media in order to focus on what is – more plainly and directly – here, in a quasi u-chronic way. And yet, at the same time and quite paradoxically, you also occasionally recognise and possibly encourage the antiquarian's fusional relationship with past materialities. Your writings seem to offer a persisting conversation with those of Walter Benjamin (and his sensual readings of the ruin, the trace, or the fragment). What are the reasons for this apparently unemotional bias? Could you elaborate upon the heuristic value of detachment and reserve for media archaeological inquiry?

**Ernst:** Most researchers are driven positively by passion because that is what keeps academic and intellectual research alive. But, contrary to artists who are allowed to say it, academics need to explain passion in an inter-subjective, more discursive way. My resistance, asceticism, and detachment come from trying to resist historical time – that is, the temptation of putting old technologies into a historical context. I want to make the medium speak in its radical presence. If I use an old radio it receives signals from a present broadcaster. It is not historical or musical. Rather, it is actual. When you do retro-computing, using the early Commodore 64 or home computers from the 1990s, the computer game comes to life again in a radically non-historicist relation to the medium. This is archaeological. Distance is necessary to resist historical imagination, to give the medium event a chance in itself. The antiquarian element is opposed to history. Antiquarians look at the present of the material object. Similarly, media analysis always happens in the present of the object. There is a passion which is the driving energy, but I try to suspend – at least momentarily – the overwhelming power of historical discourse. That links it a bit to Walter Benjamin, who writes about shortcuts with the past, about the tunnels, the passages between centuries. When I look at a medium from the past I consider the way in which it addresses the present and try to make it operate again. It is radically ahistorical. Benjamin described how the French revolutionary Robespierre identified with the proletarian revolutionaries in Ancient Rome; 1789 revolutionaries didn't see the two-thousand years of difference – they saw themselves as contemporaries of the Romans. I'm in this situation when I reuse the so-called old medium. Benjamin would call this 'messianic'. I'm less theological about it. I'm trying to find out how media happen in a non-historical time.

**Roy:** In your collection *Digital Memory and the Archive* you give many sharp, strong, and insightful statements of what media archaeology does

and strives to achieve. One can extract such quasi-programmatic theses as: 'media archaeology concentrates on the nondiscursive elements in dealing with the past: not on speakers but rather on the agency of the machine';[3] 'media archaeology insists on the difference that the media make in cultural construction';[4] '[...] media archaeology deals with [the] crisis in the narrative memory of culture'.[5] What does one actually do, in practice, to implement a media-archaeological approach? What challenges does media archaeology pose for the scholar? How can one eventually let the machine speak and give it room?

**Ernst:** The main challenge for media archaeology is to teach traditional scholars how to read and speak about media. For instance, the media studies department here at Humboldt University is located within the Philosophical Faculty of Humanities. It's not located within the computing or engineering department. We tend to produce theories, philosophical reflections about media. That's fine. But I insist that students have to know what they are talking about the way that art historians need to know about the materialities at play. One has to know how a television image actually functions and can be transmitted. This is a total challenge for people who have been trained as humanists, but one can learn the basics. Only then can one begin to speak, to enter – to say it metaphorically – into a dialogue with the machine, to let the machine speak. In order to understand and interpret the machine, to make a hermeneutic effort, you have to learn its language. The dialogue with the machine is an asymmetrical dialogue, between different entities, which Latour would call non-human agencies. Technological media are one-hundred percent products of human culture, which means there is something about machines that one can understand. At the same time these machines do things that go beyond traditional textual culture and traditional human-subject oriented understanding. Humans have produced something which transcends them. That creates an interesting dialogue, but an electric medium cannot be understood in narrative terms. It operates sequentially, mathematically – it is counting and not telling. I'm trying to find out to what extent media evade historical time. For that one needs to describe them in a non-narrative way. If media archaeology is a way of enquiring I call it media 'archeography'. In the texts you refer to I theoretically claim what media archaeology does. But how would you put this into practice, how do you write media-archeo-graphically? That is an ongoing project.

**Roy:** So the idea is to focus on the non-narrative and trans-historical elements, to do away with classic teleological media history. Linguistically, however, this remains complex to achieve. Ideally I would like to imagine that there may be a way to maintain and translate, in language, the heterogeneous, fragmentary, and dynamic nature of media – a new kind of non-narrative, mobile writing may be able to mirror the discontinuities, ruptures, and absences. How does one write media archaeology without reverting back to writing stories or ‘filling the gaps’? I notice in your texts a taste for neologisms, playful language inventions and provocations, even word games.[6] Is this one way of escaping the traps of expected narratives? Could you say more about how much you reflect on writing as a medium? And is the textual medium the only or the most suited medium for the media-archaeological exposé? Have you experimented with other forms of writing (in the broader sense of *graphein*) outside the classical academic form?

**Ernst:** I do not only theoretically claim media archaeology but also performatively put it into practice. That’s the biggest challenge. The past is not automatically, equally, systematically history. The past is not history. We have learnt, from Hayden White’s *Metahistory* (1973) and others, that the past is a temporal existence. History is just one way of organising knowledge about the past. When it comes to media, both analogue and digital, there might be other ways of better describing the temporality of media, which is not automatically the historical one and not automatically the narrative one. Narrative fills gaps. In classical archaeology you learn how to leave the gaps open or even describe them. If you find a broken sculpture you exhibit it like this, with the missing parts. To acknowledge absence, silence, gaps, is an archaeological virtue, which is very important when it comes to understanding technologies. But how does one write it? My close colleague Zielinski has created the word ‘variantology’ for this playful description. We both insist that language should remain technologically exact. We are trying to experiment with what semiotician Charles S. Peirce calls diagrammatic reasoning. The diagram is a fascinating tool. It looks visual but it is not a representational image: it is a conceptual visualisation of cognitive thinking. You can show temporal relations with a diagram. So we are experimenting with ways to describe the big temporality of media, to produce a time diagram as an alternative tool to the traditional history of technology. It could be a visual diagram or an acoustic one, a sonification. If you express yourself acoustically you have the time aspect already built-in, and all electronic

media unfold in time. The diagrammatic way of argumentation would be the option I offer for a non-narrative writing of media in time.

**Roy:** It is a given that the self can never be entirely suspended or suppressed. Isn't the paradox of media archaeology to be subjectively mediated? Furthermore, isn't the media of the past inescapably approached through the senses and, perhaps most uncomfortably, through senses which were partially formed or conditioned precisely by the 19<sup>th</sup> century media which media archaeologists mean to uncover anew? How can we strive to hear and see beyond or outside the self, outside bodily memory?

**Ernst:** The self is the big construction of 19<sup>th</sup> romanticism. With media archaeology and technical media one enters into a dialogue. One is suspended from one's self, taken away, and even manipulated. In traditional humanist critique and anthropocentric narcissism this was seen as a danger, but I find it liberating. The closer one deals with technological media the more one is coupled with technology in a way which suspends us for a moment from our subjectivity. The case of the computer translates this idea very well. When Alan Turing described his machine in 1956, the first design of the modern computer, he said that the computer first happens within the human brain. When we are adding and calculating simple numbers in our heads, or equipped with a piece of paper or a pen, we are in a non-subjective state. We are in a machine-like state at that moment. Part of our thinking is already algorithmic. When it comes to the senses my late colleague Friedrich Kittler, also Marshall McLuhan in *Understanding Media* (1964), would explain that traditional media both addressed human senses and could manipulate or model them. An ambivalent knowledge arose from such conclusions. It showed us that our senses were nothing but natural. The phonograph for instance showed us that our voices were constructed out of periodic sound waves which you could artificially create. And suddenly we can think of a human voice as a technical composition as well. The big challenge of digital culture is that it looks very multi-media and multi-sensorial, but the uncanny aspect is that the real power of the computer is completely non-sensual. It is not accessible to the senses. Mathematical operations are the most un-sensual ones. They are what 18<sup>th</sup> century aesthetics would call sublime. You feel it is there but you cannot imagine it in terms of senses. That is a big challenge for a lot of colleagues who write about the digital sublime, and that's a challenge for media analysis. How can you analyse media which are not sensuously present anymore?

**Roy:** Media archaeology acts beneath the immediate visibility of the machine. It is quite tempting to regard it as having, literally, sub-versive potentials. Is subversion a word you would use? How does the awareness of going against the disciplinary grain inform your work? Would you assume, or recognize, the position and responsibility of the media archaeologist as an ‘agent provocateur’?

**Ernst:** That would be the traditional joy of the intellectual to be an agent provocateur, but I insist that to be a media archaeologist one has to be exact. The more one knows about how media function the less one is free to play around or provoke. To many people it already looks provocative enough to say ‘don’t look at the medium on the level of the interface, of the computer monitor’. To most humans all media converge in the smartphone, which is only experienced as a flat surface. But what are the driving principles behind it? How can we manipulate it? Can we actually change or control it? It is extremely important not only to interact with the media. Can we get inside the data bank archive? What is happening with all the Google information? How and where is it stored? The task of the media archaeologist is to look behind the surface. I wouldn’t be happy with just being an agent provocateur. I want to develop positive alternatives. Since media studies is such a young discipline, contrary to communication studies, we can still co-define it.

**Roy:** To what extent is media archaeology an experimental and liminal discipline/perspective? Where does it sit within a university curriculum?

**Ernst:** Our department hosts the Media Archaeological Fundus – a collection of interesting epistemological media devices – as well as the Signal Laboratory, where we actively experiment with signals. We can now engage in new ways with the university phonetic archive, the *Lautarchiv*, which contains recordings of voices made across many centuries, on different kinds of recording media. This archive had to be transferred to digital files because the old magnetic tapes were rotting away. Can we now apply experimental algorithms to find out about things which have never been asked? It would take a lifetime for a human being to listen to all the records, but with a clever algorithm you can do it within a second, you can visualise it. Experimentation has a central place in media archaeology. We are trying to be experimental in an academic, knowledge-generating sense. But there are other experiments done by research artists who use aesthetics as ways of searching. We are co-operating with them and try to create frames to invite them, to express their implicit knowledge explicitly.

**Roy:** In which ways do media archaeology and contemporary art overlap and differ? It appears that media archaeologists and processual artists share concerns with the revitalisation and re-enactment – the ‘sounding’ – of the archive. To which extent does the comparison hold? Are they compatible or parallel endeavours?

**Ernst:** They are parallel. A lot of research artists are obsessed with technologies which they rediscover and re-enact in a non-academic, non-discursive way. They do operative installations, what we call here ‘media theater’. The academic media archaeology takes its roots in the same object, but instead of simply displaying the operative medium in a new operative way we verbally express why it is worth knowing what is going on. We are more explicit, and that’s the divide. At Humboldt University we occasionally work with research artists. Berlin has many exhibition spaces for media artists, also the Transmediale.[7] There is a special group of research artists like Jan-Peter Sonntag, who stimulated the idea of opening Friedrich Kittler’s analogue modular synthesiser which he constructed in the late 1970s. Sonntag made us open the object; it was a profoundly artistic, aesthetic, and at the same time knowledge-driven gesture. We found out a lot about Kittler, who was primarily known as a textual media theorist. The result was exhibited in a gallery in Stuttgart.

**Roy:** What is the impetus, the driving force behind the Media Archaeological Fundus at Humboldt University? In which circumstances was it established? Is it curated the way a gallery would be? Or is it more like a spontaneous, undisciplined laboratory?

**Ernst:** We have a horror cabinet of strange objects there, which is sometimes compared to the cabinet of curiosities of the baroque time. It is not departmentalised or correctly put into sections. It looks very spontaneous, yet it is not undisciplined, because it happens within the discipline of media archaeology. In Berlin there are many big technological museums with fascinating objects. But we need this Fundus to touch and operate the objects, to experience the resistance of the medium, everything you cannot do in a traditional museum. The assembled objects are valuable for answering our knowledge-driven questions. We can use the objects to know the difference between analogue and digital, for instance. In order to discuss one has to identify the interesting parts in technologies, for instance in a television set. We find out which parts are worth discussing in ontological, philosophical terms. McLuhan in *Understanding Media* called television a ‘cold medium’. At that time, when black-and-white television was made of 40 lines,

one had to invest a lot of imagination to fill the gaps in the image. Today's high-definition digital television would be a hot medium. But most people don't know what a non-pixel image looks like, so we operate the old television set from the 1950s again. It is tricky but we can. We finally see how the image flickers. It is much better if you experience the medium immediately. As we speak there is a little tape running in the recorder. What is the magnetic tape? What is the difference between magnetic tape and phonographic recording? Is it just a technical question? Is the electro-magnetic recording ontologically different from the physical engraving of the groove? Here, we like Samuel Beckett and *Krapp's Last Tape* (1959), where next to the actor there is a tape machine – the machine is the main actor. We have assembled an old tape recorder from 1959. To understand Beckett better one needs to experience what it means to spool, to rewind the tape in a linear way, and not non-linear as we do it today.

**Roy:** How does the Media Archaeological Fundus feed your own projects or trigger your own research?

**Ernst:** Although I defend the distant gaze my passion for media comes from key experiences that I had with media – not in the abstract but as concrete things. I have many audio and visual experiences with objects which are assembled in the Fundus. They give me a sense of wonder, of surprise, of resistance – of problems to be solved. My first impulse comes from the technological medium itself. It is the background, the energy, and the drive for my theoretical questions. I wonder if this is still transparent for those that read my texts. My questions are triggered by problems which arise from a concrete dealing with the object.

**Roy:** Would you briefly highlight the theme of your latest research? Would you say that there is in the contemporary 'digital' world an urgent media archaeological engagement which needs to be taken up?

**Ernst:** I will start with the last question. There is an interesting debate going on within the young German school of media studies. Internationally it is associated with names like Kittler and Zielinski, who insist on being close to technology and its materiality. The second or third generation of media scholars in Germany say, 'We now have to deal with cloud computers, with web culture. The point is not to know the technology in detail, but to address emerging phenomena.' Does one still need this exact knowledge of how an algorithm works if today the software is so complicated that even programmers don't have control of it anymore? It is important to remind people that there are still materialities. The materialist media archaeological

mission matters perhaps even more in a time when the computer as a converging medium seems so unimportant – and we're just talking about social networks. As for the direction of my own work, I'm now concentrating on the close line between sound and media, between sonic and high-technological expression. Both are time-critical and time-dependent, and not only time-based. A medium functions and processes signals or data. It is a time object. That repeatedly brings me to the question of time, temporalities, tempo-realities, new realities, time realities created by media processes. What happens to the notion of the present? We can immediately, suddenly exist online. Do we lose a sense of the past, of memory? The archive is immediately present. The time-critical aspect of technologies remains one of my major concerns. But what I'm enjoying now is 'de-archiving' – that is to say trying to get rid of more narrative, discursive academic knowledge to sharpen my techno-epistemological understanding. I'm trying to compress my personal archive in order to keep my head open and concentrate on what truly matters. It is all very dynamic.

*This interview was conducted in March 2016 at Humboldt University in Berlin and was first published in its full version in French in Cahier Louis Lumière as part of a special issue on audiovisual archeologies edited by Gérard Pelé and Giusy Pisano.[8] Thanks and grateful acknowledgments go to Wolfgang Ernst, Cahier Louis Lumière, and NECSUS.*

## Author

Elodie A. Roy is a sound and material culture theorist. Her research is principally concerned with the socio-technical history of phonography, the cultural formation and representation of the senses, and multisensory objects in memory and heritage practices. She is the author of *Media, Materiality and Memory: Grounding the Groove* (Ashgate, 2015) and the curator of a new doctoral training programme in material culture studies at the University of Glasgow. She is currently teaching in the History and Theory of Culture Department at Humboldt University.

## References

- Breton A. *Nadja*. Paris: Poche, 1964 (orig. in 1928).
- Ernst, W. *Digital memory and the archive*. Minneapolis: University of Minnesota Press, 2013.
- . *Sonic time machines*. Amsterdam: Amsterdam University Press, 2016.
- Huhtamo, E. and Parikka, J (eds). *Media archaeology: Approaches, applications and implications*. Berkeley-Los Angeles: University of California Press, 2011.
- Zielinski, S. *Deep time of the media: Toward an archaeology of hearing and seeing by technical means*. Cambridge-London: MIT Press, 2008.

## Notes

- [1] See *Digital Memory and the Archive* (Minnesota University Press, 2013), *Sonic Time Machines* (Amsterdam University Press, 2016), and *Media Archaeology: Approaches, Applications and Implications* (edited by E. Huhtamo and J. Parikka; University of California Press, 2011).
- [2] See Breton 1964 (orig. in 1928), p. 102.
- [3] Ernst 2013, p. 45.
- [4] Ibid., p. 53.
- [5] Ibid., p. 70.
- [6] This playfulness is also at work in the writings of German media theorist Siegfried Zielinski (see Zielinski 2008).
- [7] Berlin's annual festival for media and digital culture, founded in 1988.
- [8] <http://www.ens-louis-lumiere.fr/formation/recherche/cahier-louis-lumiere/cahier-10.html>