DATA, "UNDEAD": Exorcizing the cultural prosopoetics of the archive and other archival phantasms

## **Archivology of Media**

Ephemeral articulations like speech and sound, movement and the instant moment have, as it were, become immortally archivable by technical media of recording like photography, phonograph, and film. But just *as it were*; is the relationship established between the classical archive (as an institution of processing records for memory) and such media of recording a proper or a metaphorical one? Such machines are for engineers what rhetoric is for the humanities. What returns in a culture of non-discursive apparatuses is, on a discursive level, an epistemological aesthetics based on the figure of prosopopoietics, the desire to address the dead as something alive. Media-archaeology, though, teaches to unmask this archival phantasm.

The theoretical unease with the predominance of narrative as the dominant medium of processing our knowledge of the past by actually *undoing the archive* has lead to works like Michel Foucault's *Archéologie du Savoir* (1969) and Hayden White's *Metahistory* (1973). It took a new infrastructure of communication though, the impact of digital media, to put this critique of historical discourse into media-archaeological terms and practice. Francis Bacon once longed for exorcizing "all kinds of phantasma" (as declared in his *Novum Organon*). Media archivology - both subject and object of analysis, first uncovers (or in archival terms: de-classifies) the hidden rhetorical trope which still governs our cultural discourse on archives, that is: the archival phantasm of hallucinating speech and life in what is actually mute and mechanically dead; only after that exorcism, what is called archives, will actually become archives.

"Archives are less concerned with memory than with the necessity to discard, erase, eliminate." All kinds of data banks form relationships "not on the basis of causes and effects, but through networks" (Sven Spieker).

#### **Undead**

The "undead" undoes the binary logic of life and death (as illuminated by René Descartes in his non-metaphorical comparison of the human body with a clockwork). There is no linear narrative in archival spaces: no beginning, nor an end, as opposed to the historiographic, that is: symbolic timing of history. Storage time is empty time. Dynamic processes in their temporal real can not be narrated, but simply registered by technical media. What looks *live* to the beholder in visual media, might as well be recorded from tape (since the introduction of magnetic tv recording in 1958/59) - an uncanny, undeadly state

<sup>1</sup> Sven Spieker, proposal for a research project: "Archive fever": Storage, Memory, Media (draft 2000)

René Descartes, Über die Leidenschaften der Seele, in: Philosophische Werke, trans. and commented by Artur Buchenau, Leipzig (Meiner) 1911, chapter 6 "Über den Unterschied eines lebendigen und eines toten Körpers",

<sup>3 &</sup>quot;Das Konstrukt "geschichtlicher Zeit", eines geschichtlichen Kontinuums ist untrennbar verknüpft mit dem Medium des Buches <...> Demgegenüber ist Speicherzeit *leere oder tote Zeit*": Götz Großklaus, Medien-Zeit, Medien-Raum: zum Wandel der raumzeitlichen Wahrnhemung in der Moderne, Frankfurt/M. (Suhrkamp) 1995, 47

<sup>4</sup> Quoted after: Gabriele Seitz, Film als Rezeptionsform von Literatur, 2nd. ed. Munich (tuduv) 1981, 413

of the moving image. "We must be informed whether or not what we are seeing is "live". [...] we cannot distinguish through our senses alone between what we take to be simply "alive" and what as reproduction, separted from its origin, is structurally posthumous [...]."<sup>5</sup>

Already the emergence of the phonograph puzzled clear distinctions between absence of the past and sonic presence. "Speech", as it were, has become immortal", reads the comment of the *Scientific American* from 1877 on Thomas Alva Edison's recent invention. *Nota bene*: "as it were". Since such machines are for engineers, what figures of speech are for writers. What returns here, epistemologically, is the figur of prosopopy, the rhetoric of presenting the dead as alive - just like the first advertising images of the Edison phonograph presented the apparatus as growing out of an allegorical human figure. The 19th century is full with phantasies of making the dead sent decipherable messages to the living, such as the experiments with magnetic writing tables to see such messages appear.

What had been a rhetorical figure so far, became positive evidence in the electro-physiological experiments of Duchenne de Boulogne in his 1862 publikation *Mécanisme de la physiognomie humaine*, where he describes the phantasm of self-registering life, when the moment electric current, sent through human flesh, is being coupled with photographic registration.<sup>8</sup> Subject of Duchenne 's experiments has been a patient suffering from the Moebius desease, whose mimetic facial muscles (the *nervus facialis*) had been lame from the time of his birth. Such a face, devoid of expression and motion - as if he had put on "a lifeless mask of himself "<sup>9</sup> - is the reversal of archival prosopopy indeed, re-poled like the "+" and "-" in electric circuits itself. The *v*-or *compufrog* has transferred this scenario into the pure space of digital calculation.<sup>10</sup> The artificial life of electro-informaticized machines, in their contemporary generation, have become a function of their "deep learning", reacting by self-modifying algorithms on incoming "sensual" data.<sup>11</sup>

It is the option of feedback-operations, given with integrated circuits, which sets the classical storage medium archive - a "trivial machine" in the terms of Heinz von Foerster's cybernetics<sup>12</sup> In mathematical terms (Markov chains), the awareness of a past state of a machine influences the probability of its future actions.

### 5 Weber 1996: 121

- 6 See David Kaufmann, Der Phonograph und die Blinden, 1899
- One of these tables has been recently detected by a researcher of the journal *Natural History* in (of course) the archive of the Society for Psychic Research at Cambridge University, with still readable ghost-writing. See Richard Milner, Charles Darwin and Associates, Ghostbusters, in: Scientific American, Oktober 1996
- 8 See Hans-Christian von Herrmann / Bernhard Siegert, Beseelte Statuen zuckende Leichen. Medien der Verlebendigung vor und nach Guillaume Benjamin Duchenne, in: Kaleidoskopien. Jahrbuch des Instituts für Theaterwissenschaften der Universität Leipzig, Jg. 3: Körperinformationen, Institut für Buchkunst Leipzig 2000, 65-99 (92)
- 9 Jan Schweizer, Mienen in Fesseln, in: Die Zeit no. 2 from 4th January 2001, 25f
- 10 See Burkhard, Strassmann, Frösche mit der Maus retten, in: Die Zeit Nr. 1 v. 28. Dezember 2000: 58, referring to: www.george.lbl.gov/vfrog (Lawrence Berkeley National Laboratory, University of California), and the morphological program *Compufrog* (www.kmr.net/bluecross)
- Dirk Baecker, Was wollen die Roboter?, in: Carl Hegemann (ed.), Freude ohne Ende. Kapitalismus und Depression II. Berlin (Alexander) 2000, 134-152 (139)
- 12 See Heinz von Foerster, Prinzipien der Selbstorganisation im sozialen und betriebswirtschaftlichen Bereich, in: ders., Wissen und Gewissen. Versuch einer Brücke, Frankfurt/M. (Suhrkamp) 1993, 233-268

# The virtual reactivation of a lost sound storage medium: Hornbostel's *Phonogramm-Archiv*

Recently, the silence of data has been dissimulated by linguistic (ro) bots in cyberspace - algorithms making websites literally speak to the user. <sup>13</sup> Even if the dead can still not be interviewed interactively with a microphone, there is a memory of their recorded voice now. The notion of the archive is in transition - towards the audio-visual, resulting in unforseen options of retrieval under new media conditions - transcending the conventional notion of the archive itself.

In the same year as Sigmund Freud fixed his psycho-analytic interpretation of dreams (Traumdeutung, 1900), the psychologist of acoustic phenomena, Carl Stumpf, and in his sequence the music ethnologist Erich Moritz von Hornbostel, founded, at the Berlin university, a phonographic archive with world-wide recordings on wax-cylinder of the voices of people threatened to be extinguished.<sup>14</sup> At the end of the 20th century the archival character of von Hornbostel's phonogram archive has been reversed: The frozen voices on the analogue, vulnerable storage medium of Edison cylinders are currently being defrozen by digital means. 15 The Berlin Society for the Enhancement of Applied Informatics has developed a method to gain acoustic signals from negative traces of galvano-copies from Edison-cylinders by opto-endoscopic "reading" scanning visual information into sound. 16 Thus the making of stored acoustic frequencies actually speak does not ask for rhetoric operations, but on the contrary a hermeneutically distant gaze, an exteriority of interpretation which the aesthetics of the opto-technical scanner only can provide. <sup>17</sup> Technical media provide a different option of reading without (premature) understanding.

Thereby one can listen again to the recordings taken by the ethnologist M. Selenka who went to the tribe of the Wedda in India in 1907. She made the natives speak or sing into a phonograph which she instantaneoulsy played back to the speakers - to their joyfully recognition. With the media mystery of the recordability of the physically real of sound and images, humans are confronted with their multi-media mirror effect (in Lacan´s sense), sublating the clear-cut difference between presence and absence, present and past. Strange enough, we are able, today, to listen to this play-back in exactly the same quality as the Indian natives could in 1907, since an example of the

<sup>13</sup> See Katja Schmid, Die unermüdlichen Agenten, in: Die Zeit no. 13, 22 March 2001, 49; furthermore xxx Svenbro, Phrasiklea, xxx

<sup>14</sup> See W. E., Hornbostels Klangarchiv: Gedächtnis als Funktion von Dokumentationstechnik, in: Sebastian Klotz (ed.), "Vom tönenden Wirbel menschlichen Tuns": Erich M. von Hornbostel als Gestaltpsychologe, Archivar und Musikwissenschaftler, Berlin / Milow (Schibri) 1998, 116-131; see as well Artur Simon (ed.), Das Berliner Phonogramm-Archiv 1900-2000. Sammlungen der traditionellen Musik der Welt, Berlin (VWB) 2000

<sup>15</sup> On pre-phonographic metaphors of writing in medieval times see Horst Wenzel, Die "fließende" Rede und der "gefrorene" Text. Metaphern der Medialität, in: Gerhard Neumann (ed.), Poststruktuarlismus: Herausforderung an die Literaturwissenschaft, xxx

<sup>16</sup> See Gerd Stanke / Thomas Kessler, in: Simon (ed.) 2000: 209-215

<sup>17</sup> Siehe Jeffrey Sconce, The voice from the void. Wireless, modernity and the distant dead, in: International journal of Cultural studies Vol. 1, no. 2 (1998), 211-232

<sup>18</sup> Quoted after: Max Wertheimer, Musik der Wedda, in: Sammelbände der Internationalen Musikgesellschaft Jg. XI, Heft 2 = Januar-März 1910, 300-309 (300)

above mentioned opto-eletronic archaeology of sound can be appropriately experienced right in the World Wide Web.<sup>19</sup> Message or noise? Only the media-archaeological operation of opto-digitally reading the inscribed traces make the otherwise unaccessible sound recording audible again. Synesthetically, we can see a spectrographic image of sound memory - a straight look into the archive.<sup>20</sup> The opto-digital *close reading* of sound as image, though, dissolves any semantically meaningful unit into discrete blocks of signals. Instead of musicological hermeneutics, the media-archaeological gaze is required here.

At the end of Second World War, the reels of a secret medical film project from between 1941 and 1945 at the Berlin hospital Charité were thrown by the SS into lake Stössensee near Berlin when the Red Army approached the capital. It was a literally media-archaeological moment when divers detected these films in 1993 and rescued them; just three of several hundred film rolls could be deciphered at all, one of them showing on the basis of heavily damaged film material the shape of a naked man who performs several movements, apparently directed by orders from outside. "More cannot be seen, comments the media artist who has re-presented this material to the public<sup>21</sup> - a ghostly media-prosopopy.

Every film is, always already, itself an archive of time-as-movements, of life as process in time which cannot be reproduced, only measured in moving-image form. The pioneer of cinematographic *montage* in Russia, Wsewolod Illarionowitsch Pudowkin, produced a film together with the Leningrad researcher of behavioural patterns Pawlow in 1928 under the title of *Functions of the Brain* and comments on the articifiality of mechanic reproduction of life: Any movement shown by filmic projection is dead already, even if its original has once moved in front of the camera. Only the setting-in-relation of filmic moments by cutting them together into a visual synthesis provides them with "filmic life".

## Prosopopeia

Stephen Greenblatt once openly declared his *new historicist* impulse "to speak with the dead".<sup>23</sup> The media-archaeological kernel behind such hallucinations is the archaic Greek modification of the Phenicean commercial writing system into the phonetic alphabet by adding single letters for vowels in order to record the musicality of oral poetry - the textual *grammophone* not *avant*, but *avec la lettre*.<sup>24</sup> Written letters, though, inevitably belong to the realm of the symbolic which is the order of the archive, as different from physically indexial traces - the immediacy of the real like rays of light on photography or tracks of sound on recordings. Such technical memories are archives or libraries no more.

<sup>19</sup> http://www.gfai.de/projekte/spubito/index.htm

<sup>20</sup> See the spectrogram of a reconstructed recording of Wedda chants in Ceylon 1907 on the SpuBiTo web page

<sup>21</sup> Christoph Keller, Lost / Unfound: Archives As Objects As Monuments, in: catalogue ars viva 00/01 - Kunst und Wissenschaft for the exhibition by prizewinning artists of Kulturkreis der deutschen Wirtschaft im Bundesverband der Deutschen Industrie e. V., Berlin (Staatliche Galerie Moritzburg / Halle, January - March 2000); transl. Jeanne Haunschild, Berlin 2000

<sup>22</sup> W. Wicker, 1964, as quoted in: Keller 2000

<sup>23</sup> Introduction to Stephen Greenblatt, Shakespearean Negotiations, xxx

<sup>24</sup> See Barry Powell, Homer and the Invention of the Greek Alphabet, xxx

A coupling between the rhetoric of prosopopy and technics already takes place in Sigmund Freud's comparison of psychical latency "with a photographic shot <...>, which might, after a given temporal delay, might be developed into a positive image"<sup>25</sup>

The American painter Elihu Vedder (1836-1923) once drew the subject of *Questioning the Sphinx* (1863).<sup>26</sup> The postmodern painter Marc Tansey has given Vedder's image a literally media-archaeological turn, by privoding the interrogator of the Sphinx with a microphone - with the option not only to listen to the dead, but as well to record this evidence. Electronic recording is the techno-fiction of reversing death; with the invention of the grammophone voice has lost its logocentristic priviledge of authorizing true presence. In Walter Rathenau's novel *Resurrection Co.* the administration of a cemetery in the city Necropolis, Dacota/USA, after some scandalous cases of mistaken people buried still alive established a company called "Dacota and Central Resurrection Telephone and Bell Co." with the aim of connecting the buried with the public telephone network - just in case.<sup>27</sup>

### The silence of the archive

Both readers and historians long for making a textual body resound againwhat has been theatrically been called *re-enactment* by Collingwood. Jules Michelet, historian of the French Revolution, hallucinated the murmurs of the dead in the archives, as if archival records had always been the logocentric variance of a phonogram (avant la lettre). Not yet being equipped with according technical media of recording and projecting, Michelet made use of the psychic medium of imagination: "Dans les galeries solitaires des Archives où j'errai vingt années, dans ce profond silence, des murmures cependant venaient à mon oreille."28 The present multi-mediatic interface aesthetics of computers makes use of this prosopoietic desire. The media-archaeological resistance to this techno-ideology of dialogue with data though rather looks at the signal-to-noise-ratio of electronic data transfer, from the point of view of communication theory which Foucault recognized in his 1966 essay "Méssage ou bruit?", reminding us that "Freud a fait des énoncés verbaux des malades, consideérés jusque là comme bruit, quelque chose qui devait être traité comme un message."29 Today, Foucault's own recorded voice can be listened at on a CD-ROM. But here, human ears only, not the technical apparatus, make sense out of noise. What was once called cultural tradition is technical transmission of signals today. Digital video streams are compressed in order to make them storable and transmittable at all. While in the transmission of archived text in the occidental tradition every letter counts - for a discipline

<sup>25</sup> Sigmund Freud, Der Mann Moses und die monotheistische Religion III, paragraph "Latenz und Tradition", in: same author, Studienausgabe, vol. IX, Frankfurt/M. (S. Fischer) 1989, 455-584 (571)

<sup>26</sup> See the exhibition catalogue: Ägyptomanie. Ägypten in der europäischen Kunst 1730-1930, Electa <year xxx>, entry no. 180, 262f

<sup>27</sup> As reported in Friedrich Kittler, Gramophon - Film - Typewriter, Berlin (Brinkmann & Bose) 1987, 23 28 Jules Michelet, Histoire de France, preface of 1869, 24, in: Oeuvres Complètes IV, edited by Paul Viallaneix, Paris (Flammarion) 1974

<sup>29</sup> Michel Foucault, Message ou bruit?, in: Concours médical, 88° année, 22 octobre 1966, pp. 6285f (Colloque sur la nature de la pensée médicale) = M. F., Dits et Écrits I, Paris (Gallimard) 1994, 557-560 (559)

called philology -, by compressing and decompressing digital images subtle amounts of data are being lost. This might be almost undetectable for the weak human eye or ear (MP3) - organs which have been deceived in its perception since the origin of time-based media like film and phonography -, but in the world of military target calculation one bit of difference might lead to lethal errors.

## Very titanically: So what happens to the archive?

The recent (re)search for the wrack of the ocean liner *Titanic* has been a true act of submarine archaeology. While the gaze of the camera is able to look at this archaeologically (that is, purely evidentially in the sense of remotely sensing data), the human eye though immediately confounds evidence with magic when it comes to re-presentation of the absence of the past. "Out of the darkness, like a ghostly apparition, the bow of a ship appears <...> just as it landed eighty-four years ago." When the submarine exploration device Mir 1 set out for the search of the wrack in 1995 late-summer, limited visibility and strong currents were a constant threat to the expedition. Film director James Cameron recollects: "Initially, I had totally superimposed my vision on to the ship and made the mistake of not letting *Titanic* talk to me. I was like the astronauts who experienced the moon as a series of checklists and mission protocols" - which is truly media-archaeological perception. Cameron counterreacted: "So, at a certain point I abondoned "the plan" and allowed the emotional part of my mind to engage with the ship..."30 Hermeneutic empathy instead of data navigating distance - a world of difference between an archaeology of knowledge and historical imagination. What is sonar echoing in submarine archaeology is rhetorically renamed empathetic resonance by Stephen Greenblatt.<sup>31</sup> The submaritime ruinscape (relics from the ground of the sea) is transformed into narrative in Cameron's film *Titantic*.<sup>32</sup> The real archival item, though, is the non-figurative board-register, containing the record of all orders, like the black box in an airo-plane as the most non-narrative evidence of human and technical enunciations.

The prosopopoietic rhetoric of the archive is currently being replaced by operational archival interaction, as illustrated by *Pockets Full of Memories*, an online and museum installation by the media artist George Legrady in which the audience *creates* an archive by contributing a digitized image of an objekt in their possession at the time of the exhibition visit. Interaction is an aspect Bertolt Brecht pointed at already in the 20s for the emerging medium radio, insisting that it can technically - on the (feed-)back channel - be used in a bi-directional way as well by the receivers to communicate instead of being unilaterally being distributed as broadcast. <sup>33</sup> The unidirectional communication of books still dominated the user experience. With different *hierarchives*, a network is not a text any more, rather an archi(ve)-tecture. As long as the keyboard of computers is alphabet-based like a type-writer for printing just letters,

<sup>30</sup> Joel Avirom / Jason Snyder, James Cameron's Titanic, foreword by James Cameron, New York (Harper Perennial) o. J., xii

<sup>31</sup> See Stephen Greenblatt Resonance and Wonder, xxx

<sup>32</sup> USA, Twentieth Century Fox, 1997

<sup>33</sup> Bertolt Brecht, Der Rundfunkt als Kommunikationsapparat, in: Gesammelte Schriften, vol. 18, Frankfurt/M. 1967, 117-134

the paradigm of printing remains dominant; progressively though the mouseclick replaces the key-board for directing the monitor, and orientation shifts to visually perceived information landscapes; in multi-media space, however, the act of re-activating the archive can be dynamically coupled with feedback. This does not lead to a return of rhetorically prosopopoietic intercourse with the digital archive, but rather is this figuration in space being dynamically replaced by figures in time. The visionary of digital architectures, David Gelernter, points at the data flow called *lifestream* as a future alternative to the current desktopmetaphor of computer interfaces which still carry, with file-like icons, an anachronistic archivism dating from old-European times of secretaries and offices, instead of rethinking digital storage space in its own terms (in computing language, we still speak of stacks, files and registers).<sup>34</sup> If emphatic memory (data permanently stored on hard-disks) is being replaced by a future of the computer as a place of intermediary, passing storage, the digital medium becomes "a mere temporary holding tank for data, not as a permanent file cabinet". 35 Future, present and past then are but segments, functions of marking differences within the transitive data stream. This leads to a performative consequence as well. Is it possible to avoid simply writing about the archive, thus missing the archival mode of representation itself, by writing the archive transitively? The option thus is to represent the archive as loosely coupled medium, not as historiographically closed form<sup>36</sup>; this non-narrative mode means to count (with) what is given (alluding to a phrase by Gottfried Benn): data.

<sup>34</sup> A media archaeoly of the file has recently been written by Cornelia Vismann, Akten. Medientechnik und Recht, Frankfurt/M. (Fischer) 2000

<sup>35</sup> David Gelernter, Machine Beauty. Elegance and the Heart of Technology, New York (Basic Books) 1997, 106

<sup>36</sup> Compare Niklas Luhmann, xxx