From Kaleidoscomaniac to Cybernerd: Notes Toward an Archaeology of the Media

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ABSTRACT

The author explains his proposed archaeology of the media. This practice draws on the work of scholars such as Walter Benjamin and Michel Foucault in its embrace of all forms of cultural artifacts as material for theory and its view of history in terms of discursive production. Where it differs from existing approaches is in its particular focus on historically recurring discursive patterns. The author offers examples of such patterns and proposes further examination of their implications as a means of countering ideas of technological and historical progress.

In his classic exposé of the "archaeology of the cinema," C.W. Ceram puts the prehistory of motion pictures straight. He states that

> knowledge of automatons, or of clockwork toys, played no part in the story of cinematography, nor is there any link between it and the production of animated 'scenes.' We can therefore omit plays, the baroque automatons, and the marionette theatre. Even the 'deviltries' of Porta, produced with the camera obscura, the phantasmagorias of Robertson, the 'dissolving views' of Child, are not to the point. All these discoveries did not lead to the first genuine moving picture sequence [1].

In another paragraph, Ceram elaborates on his position: "What matters in history is not whether certain chance discoveries take place, but whether they take effect" [2].

Curiously, the profuse illustrations collected by Olive Cook for the English language edition (1965) openly contradict these statements. Plenty of "chance discoveries" have been included, supported by meticulously prepared captions. No doubt, for many readers this polyphonic array of curious traces of the past remains the truly exciting aspect of the book, not Ceram's pedantic attempts to trace one by one the steps that led to the emergence of cinema at the end of the nineteenth century [3]. The writer's primary focus is on the narrowly causal relationships that supposedly guided the development of moving-image technology. Tracing the fates of the personalities who made this happen comes next; other factors matter little. The reasoning is matter-of-fact and positivistic. Ceram never ventures upon speculations rising above the materiality of his sources.

The illustrations in Ceram's book, as well as the historical collections on display at such wonderful places as the Frankfurt Film Museum, can, however, be persuaded to tell very different stories, full of intriguing possibilities. As French historian Marc Bloch taught, our conception of the past depends on the kind of questions we ask [4]. Any source—be it a detail of a picture or a part of a machine—can be useful if we approach it from a relevant perspective. There is no trace of the past that does not have its story to tell. Another historian with a comparable attitude towards historical sources was, of course, Walter Benjamin, who (according to Susan Buck-Morss) "took seriously the debris of mass culture as the source of philosophical truth" [5]. For Benjamin (particularly in his unfinished "Passagen-Werk") the various remains of nineteenth-century culture—buildings, technologies and commodities, but also illustrations and literary texts—served as inscriptions that could lead us to understand the ways in which a culture perceived itself and conceptualized the "deeper" ideological layers of its construction. As Tom Gunning puts it, "[i]f Benjamin's method is fully understood, technology can reveal the dream world of society as much as its pragmatic rationalization" [6].

Continuing the Benjaminian tradition, German cultural historian Wolfgang Schievelbusch has shown us how a broad concept of history can be used to shed light not only on the topic in question—the railway, artificial lighting, stimulants—but on the ways in which artifacts are embedded in the complex discursive fabrics and patterns reigning in a culture. From a predominantly chronological and positivistic ordering of things centered on the artifact, the emphasis is shifting into treating history as a multi-layered construct, a dynamic system of relationships. Such a shift can also be detected in the field of media studies. Tom Gunning, Siegfried Zielinski, Carolyn Marvin, Avital Ronell, Susan J. Douglas, Lynn Spiegel, Cecelia Tichi, William Boddy and others have recently researched the histories of media technologies such as telephone, film, radio and television by (re)placing them in their cultural and discursive contexts [7].

This new media history clearly distances itself from the "objectivist fallacy" of the positivist tradition, admitting that history is basically just another discourse, a voice in the great chorus of voices in a society. Historians have begun to acknowledge that they cannot be free of the web of ideological discourses constantly surrounding and affecting them [8]. In this sense, history belongs to the present as much as it belongs to the past. It cannot claim an objective status; it can only become conscious of its ambiguous role as a mediator and a "meaning processor" operating between the present and the past (and, arguably, the future). Instead of purporting to belong to the realm of infallible truth (with religion and the Constitution), historical writing is emerging as a conversational discipline, a way of negotiating with the past [9].

In line with this development, I would like make a few preliminary remarks about an approach I call "media archaeol-

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Manuscript originally presented at the Fifth International Symposium on Electronic Art (ISEA 94) in Helsinki, Finland, 20–25 August 1994.

This article was published previously in Timothy Druckrey, ed., *Electronic Culture: Technology and Visual Representation* (New York: Aperture, 1997).

ogy" [10]. While I share with the abovementioned historians an interest in synthetic multi-perspective analysis of cultural approaches and historical discourse, I see the aims of media archaeology somewhat differently than they might. I would like to propose it as a way of studying recurring cyclical phenomena that (re)appear and disappear and reappear over and over again in media history, somehow seeming to transcend specific historical contexts. In a way, the aim of this media archaeology is to explain the sense of déjà vu that Tom Gunning has registered when looking back from present reactions to the ways in which people have experienced technology in earlier periods [11].

FANTASMAGORIE, *LA CIOTAT*, AND *CAPTAIN EO*

In the Frankfurt Film Museum, in a display case with different samples of nineteenth-century kaleidoscopes, there is an engraving titled *La Kaleidoscomanie ou les Amateurs de bijoux Anglais* ("Kaleidoscomania, or the Lovers of English Jewels"), presumably dating from the first part of the nineteenth century. We see several people (and, indeed, a monkey!) immersed in their kaleidoscopes [12]. There are two "kaleidoscomaniacs" so mesmerized by the visions they see inside the "picture tube" that they do not even notice that other men are courting their companions behind their backs. When stereography became a fad in the 1850s, the same motif soon began to appear in stereographic photographs depicting humorously the less salutary effects of the new fashion [13]. The effect is the same, the only difference being that for the "stereoscomaniac" the immersion is "total": the eyepiece of the stereoscope covers both of the viewer's eyes, as if drawing him or her into a three-dimensional field of vision [14].

Recalling the convictions of C.W. Ceram outlined above, we could wonder if these occurrences are just "chance discoveries" with no causal relationship and thus no historical interest. And is it only chance that leads us to the discovery that the current revival of immersive peepshow-like experience in the form of the virtual-reality craze has again brought forth the figure of the kaleidoscomaniac—this time in the disguise of the "cybernerd," whose passion for the other world makes him or her a fool in this one? The figure has already made its appearance in the cinema and in satirical cartoons, as well as on Music Television—just recall the animated figures Beavis and Butt-Head in their head-mounted displays performing the song "I Got You Babe" with (real-life) popular singer Cher.

Here is another example: according to C.W. Ceram, there is no historical connection between Étienne Gaspard Robertson's *Fantasmagorie* shows, begun in Paris at the very end of the eighteenth century, and the Lumière brothers' *Cinématographe* presentations a century later. Even the use of the *lanterna magica* principle for projecting the images on a screen does not, for Ceram, provide sufficient grounds to warrant positing a relationship [15]. However, if we compare contemporary illustrations of *Fantasmagorie* audiences' panicky reactions to ghosts attacking them from the screen with reports of early cinema audiences fleeing in terror when the train in the Lumière film *L'Arrivée d'un train à La Ciotat* (1895) seemed to rush straight onto them, we probably cannot avoid a sense of déjà vu [16]. For someone who has visited Disneyland, for example, an association that might come to mind is the stereoscopic movie spectacle *Captain EO,* featuring Michael Jackson. The "onslaughting" aspect of this film has been enhanced by laserbeams (in addition to the customary 3-D effects), which are released as if from the screen world to the audience space [17]. Even though the audience may not have reacted very vividly on the spot, the publicity, the media and the contemporary oral traditions retelling the theme park experience make sure they did [18].

Again, we may ask if there is any sense in looking for connecting links between these occurrences, which are wide apart in time and space. I would like to claim that these parallels are not totally random coincidences produced indigenously by conglomerations of specific circumstances. Instead, all these cases "contain" certain commonplace elements or cultural motives that have been encountered in earlier cultural processes. I would like to propose that such motives could usefully be treated as *topoi*, or "topics," applying to the field of media studies the ideas that Ernst Robert Curtius used in his massive study *Europische Literatur und lateinisches Mittelalter* (European Literature and the Latin Middle Ages) (1948) to explain the internal life of literary traditions [19].

The idea of *topoi* goes back to the rhetorical traditions of classical antiquity. According to Quintilianus, they were "storehouses of trains of thought" *(argumentorum sedes)*, systematically organized formulas serving a practical purpose—namely, the composition of orations. As the classical rhetoric gradually lost its original meaning and purpose, the formulas penetrated into literary genres. According to Curtius, "[t]hey become clichés, which can be used in any form of literature, they spread to all spheres of life with which literature deals and to which it gives form" [20]. Topics can be considered formulas, ranging from stylistic to allegorical, that make up the "building blocks" of cultural traditions; they are activated and deactivated in turn; new *topoi* are created along the way and old ones (at least seemingly) vanish. In a sense, topics provide "prefabricated" molds for experience. Even though they may emerge as if "unconsciously," they are, however, always cultural, and thus ideological, constructs. This is my main objection to Curtius, who sometimes resorted to Jungian archetypes to explain the appearance of certain *topoi* [21]. In the era of commercial and industrial media culture, it is increasingly important to note that *topoi* can be consciously activated and ideologically and commercially exploited.

DISCURSIVE INVENTIONS AS AN OBJECT OF STUDY

When we deal with *topoi* such as the one related to the stereotypical reactions of panic upon viewing a media spectacle, we deal with representations instead of actual experiences; we do not (and perhaps never will) know if any audience ever reacted to a *Fantasmagorie* or a *Cinématographe* presentation in the ways depicted in visual or literary discourses. Claiming that they did would be beside the point. The interesting thing is precisely the recurrence of the topoi within these discourses. It could be claimed that the reality of media history lies primarily in the discourses that guide and mold its development, rather than in the "things" and "artifacts" that, for writers like Ceram, form the core around which everything (r)evolves.

In this respect, I share Michel Foucault's determination "[t]o substitute for the enigmatic treasure of 'things' anterior to discourse, the regular formation of objects that emerge only in discourse" [22]. These "discursive objects" can, with good reason, claim a central place in the study of the history of media culture. Even though Foucault referred to media systems only

casually, a related strategy has been adopted by Friedrich Kittler in his *Discourse Networks 1800/1900,* in which he traces the gradual shift from one discursive system to another, drawing on a great variety of inscriptions [23]. As David E. Wellberg has noted,

> Kittler's discourse analysis follows the Foucauldian lead in that it seeks to delineate the apparatuses of power, storage, transmission, training, reproduction, and so forth to make up the conditions of factual discursive occurrences [24].

Instead of pursuing a systematic study of Foucauldian "discursive formations"—ideological traditions of discourses reigning in society that are based on the interplay of power and knowledge—the approach I am delineating is actually closer to the field characterized by Foucault somewhat contemptuously as the history of ideas,

> the history of those age-old themes that are never crystallized in a rigorous and individual system, but which have formed the spontaneous philosophy of those who did not philosophize. . . . The analysis of opinions rather than of knowledge, of errors rather than of truth, of types of mentality rather than of forms of thought [25].

Registering false starts, seemingly ephemeral phenomena and anecdotes about media can sometimes be more revealing than tracing the fates of machines that were patented, industrially fabricated and widely distributed in the society—let alone the lives of their creators—if our focus is on the meanings that emerge through the social practices related to the use of technology. I agree with cultural historian of technology Carolyn Marvin when she writes that

> [m]edia are not fixed objects: they have no natural edges. They are constructed complexes of habits, beliefs, and procedures embedded in elaborate cultural codes of communication. The history of media is never more or less than the history of their uses, which always lead us away from them to the social practices and conflicts they illuminate [26].

From such a point of view, unrealized "dream machines," or discursive inventions (inventions that exist only as discourses), can be just as revealing as realized artifacts. A case in point, the telectroscope was a discursive invention that was widely believed to exist in the late nineteenth century. It was an electro-optical device that was supposed to enable an individual to "increase the range of vision by hundreds of miles, so that, for instance, a man in New York could see the features of his friend in Boston with as much ease as he could see the performance on the stage" [27]. Articles about the device were published in respected popular scientific journals such as *La Nature* and *The Electrical Review;* there were even claims that Edison had invented it. Time and again it was announced that it would be presented to the general audience at the next world's fair. Yet the telectroscope never made an appearance except in these discourses, which were widely distributed throughout the industrialized Western world.

The telectroscope can be interpreted simply as a utopian projection of the hopes raised by electricity and, particularly, by the telephone, which were realized decades later in the form of television. It should not, however, be discarded so easily. Television found its dominant form in broadcasting, which was very different from the role offered for the telectroscope as a "tele-vision machine" meant for active person-to-person communication. Jaron Lanier's utopian vision of virtual reality (VR) "as the telephone, not as the television of the future" can thus be seen as another incarnation of a *topos* well known more than a hundred years earlier [28]. It remains to be seen if Lanier's discursive version of VR will ever be realized, or if the rudimentary technology that inspired it will finally be molded into a form closer to the economically and ideologically constrained structures of broadcast television than to those of telecommunication [29]. The discursive formations that enveloped and molded the emergence of VR technology around the turn of the 1980s and 1990s would provide an appropriate subject of study for the kind of an approach I have been trying to delineate.

To sum up, it seems to me that the media-archaeological approach has two main goals: first is the study of the cyclically recurring elements and motives underlying and guiding the development of media culture. Second is the "excavation" of the ways in which these discursive traditions and formulations have been "imprinted" on specific media machines and systems in different historical contexts, contributing to their identity in terms of socially and ideologically specific webs of signification. This kind of approach emphasizes cyclical rather than chronological development and recurrence rather than unique innovation. In doing so, it runs counter to the customary way of thinking about technoculture in terms of a constant progress proceeding from one technological breakthrough to another and making earlier machines and applications obsolete along the way. The aim of the media archaeological approach is not to negate the "reality" of technological development, but rather to balance it by placing it within a wider and more multifaceted social and cultural frame of reference.

References and Notes

1. C.W. Ceram, *Archaeology of Cinema,* Richard Winston, trans. (London: Thames & Hudson, 1965) p. 17.

2. Ceram [1] p.16.

3. This purpose is served much better by Franz Paul Liesegang's equally classic chronology of the prehistory of the cinema, *Dates and Sources: A Contribution to the History of the Art of Projection and to Cinematography,* Hermann Hecht, trans. and ed. (London: The Magic Lantern Society of Great Britain, 1986; originally published in German in 1926). Another, more recent attempt at historical chronology has been made by Maurice Bessy in his *Le mystère de la chambre noire. Histoire de la projection animée* (Paris: Editions Pygmalion, 1990). Bessy's year-by-year account incorporates plenty of hard-to-find documents illuminating the "discursive" side of the prehistory of the cinema—the attitudes, fears and hopes of contemporaries.

4. Marc Bloch, *The Historian's Craft,* Peter Putnam, trans. (Manchester: Manchester Univ. Press, 1954; originally published in French, 1949).

5. Susan Buck-Morss, *The Dialectics of Seeing: Walter Benjamin and the Arcades Project* (Cambridge, MA: MIT Press, 1989) p. ix.

6. Tom Gunning, "Heard Over the Phone: The Lonely Villa and the de Lorde Tradition of the Terrors of Technology,"*Screen* **32**, No. 2, 185 (Summer 1991).

7. See Gunning [6]; Siegfried Zielinski, *Audiovisionen. Kino und Fernsehen als Zwischenspiel in der Geschichte, Reinbek bei* (Hamburg: Rowohlt, 1989); Avital Ronell, *The Telephone Book: Technology, Schizophrenia, Electric Speech* (Lincoln, NE: Univ. of Nebraska Press, 1989); Carolyn Marvin, *When Old Technologies Were New: Thinking About Electric Communication in the Late Nineteenth Century* (New York and Oxford: Oxford Univ. Press, 1988); Susan J. Douglas, *Inventing American Broadcasting 1899–1922* (Baltimore and London: The Johns Hopkins Univ. Press, 1987); Lynn Spiegel, *Make Room for TV: Television and the Family Ideal in Postwar America* (Chicago and London: The Univ. of Chicago Press, 1992); Cecelia Tichi, *Electronic Hearth: Creating an American Television Culture* (New York and Oxford: Oxford University Press, 1991); William Boddy, "Electronic Vision: Genealogies and Gendered Technologies," paper presented at the Finnish Society for Cinema Studies Conference, Helsinki, January 1993 (unpublished).

8. For a brilliant analysis of historical writing as a discursive practice, see Hayden White's *Metahistory: The Historical Imagination in Nineteenth Century Europe* (Baltimore, MD: The Johns Hopkins Univ. Press, 1973).

9. Benjamin's influence can also be detected behind this emphasis. According to Susan Buck-Morss's interpretation, in *Passagen-Werk* he aimed at writing a "'materialist philosophy of history' constructed with 'the utmost concreteness' out of the historical material itself. . . . As the 'ur-phenomena' of modernity, they were to provide the material necessary for an interpretation of

history's most recent configurations." Buck-Morss [5] p. 3.

10. Other media scholars have used this concept as well, according to their own definitions. See, for example, Siegfried Zielinski, "Medienarchaeologie. In der Suchbewugung nach den unterschiedlichen Ordnungen des Visionierens," *EIKON* No. 9 (Vienna, 1994) pp. 32–35.

11. Gunning [6] p. 185.

12. The kaleidoscope was invented by British scientist Sir David Brewster in 1815 or 1816; his "Treatise on the Kaleidoscope" was published in 1819.

13. For a general history of stereography, see William C. Darrah, *The World of Stereographs* (Gettysburg, PA: W.C. Darrah, 1977).

14. See the anonymous stereograph dating from the 1860s reproduced on a View Master reel (Reel X, image 5) included as an annex to Wim van Keulen, *3D Imagics. A Stereoscopic Guide to the 3D Past and its Magic Images 1838-1900* (The Netherlands: AA Borger 3-D Book Productions, 1990). For another manifestation of the same motive, see the stereogram visible on the table in Ceram [1] p. 112.

15. The film projector is basically a modified *lanterna magica* in which the transparent glass slides have been replaced by slide film. Making the film move in front of the lens required a machinery that derived from clockwork mechanisms as well as from revolvers and machine guns.

16. Two illustrations showing audience reactions, said to date from 1797 and 1798, appear in Ceram [1] (p. 38). The reaction to the Lumière film may be a purely discursive creation. There are scattered remarks that attest to this possibility. In an article about his first viewing of a *Cinématographe* show (published in the journal *Nijegorodskilistok,* 4 July 1896), Russian writer Maxim Gorki mentioned that "it had been said that it [the train] will rush straight into the obscurity where we are," but he reported having been disappointed. The image of the train rushing towards the audience was featured in early Lumière posters and sketches. See Emmanuelle Toulet, *Cinématographe, invention du siècle* (Paris: Gallimard, 1988) pp. 11 and 14. The motif also appeared in early films about a fool who cannot tell the difference between reality and illusion in the cinema, such as *The Countryman and the Cinematograph* (R.W. Paul, 1901).

17. While paying attention to similarities, we should not try to explain away differences: *Fantasmagorie* was connected with the tradition of magic shows, with the fascination of the show being in the unexplained quality of the tricks. In the case of the Lumière screenings, the *Cinématographe* as a technical novelty was an important aspect of the appeal of the show. Thus, the projector was kept visible for the audience, whereas Robertson's magic lanterns were hidden from sight. Yet Charles Musser's observation that "Robertson's remarks [in his Mémoires] played on the simultaneous realization that the projected image was only an image and yet one that the spectator believed was real" may apply to Lumière's (early) audiences as well. See Charles Musser, *The Emergence of Cinema: The American Screen to 1907,* Part 1 of *The History of the American Cinema* (New York: Charles Scribner's Sons, 1990) p. 24.

18. A 1993 promotional video for the Showscan Corporation, a company producing and marketing specialty cinemas, opens with a simulated theater sequence in which wind, smoke, water, fire, a fish and even a UFO are "thrown" from the screen into the audience space. The audience reactions show pleasure rather than terror.

19. Ernst Robert Curtius, *European Literature and the Latin Middle Ages,* Willard R. Trask, trans. (London: Routledge and Kegan Paul, 1979; originally published in German, 1948).

20. Curtius [19] p. 70.

21. "[An allegorical figure in Balzac's *Jésus-Christ en Flandre* (1831)] is only comprehensible by the fact that it is rooted in the deeper strata of the soul. It belongs to the stock of archaic proto-images in the collective unconscious." Curtius [19] p. 105.

22. Michel Foucault, *The Archaeology of Knowledge,* A.M. Sheridan Smith, trans. (London: Tavistock, 1982) p. 47.

23. Friedrich Kittler, *Discourse Networks 1800/1900,* Michael Metteer with Chris Cullens, trans. (Stanford, CA: Stanford Univ. Press, 1990).

24. David E. Wellberg, preface to Kittler [23] p. xii.

25. Kittler [23] pp. 136–137.

26. Marvin [7] p. 8.

27. *Electrical Review* (25 May 1889) p. 6, cited in Marvin [7] p. 197.

28. See John Perry Barlow, "Life in a Data-Cloud: Discussion with Jaron Lanier," *Mondo 2000* No. 2, p. 29.

29. A model for this could be the Sega Channel, an interactive all-video-game cable television channel that was to be launched in the United States in 1995 but has not yet been realized (as of February 1997). Sega may adopt its already-introduced head-mounted display for home use as an interface for both individual and collective game playing via its channel.

Manuscript received 28 April 1995.