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From Kaleidoscomaniac to Cybernerd

Towards an Archeology of the Media

In his classic *exposé* of the "archaeology of the cinema" C.W. Ceram puts the prehistory of the motion pictures straight. He states promptly: "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[e], 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 of the English language edition (1965), collected by Olive Cook, 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 the one by one steps which led to the emergence of cinema in the end of the 19th century.³ The writer's primary focus is on the narrowly causal relationships which supposedly guided the development of the 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.

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

² *Ibid.*, 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*, translated and edited by Hermann Hecht, London: The Magic Lantern Society of Great Britain, 1986 [originally published in German 1926]. Another attempt in 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. A recent, remarkable account of the prehistory of the cinema is Laurent Mannoni: *Le grand art de la lumière et de l'ombre, archéologie du cinéma*, Paris: Nathan, 1994. Mannoni's book is based on extensive archival research which allows him to correct many traditional misconceptions, for example he discredits Athanasius Kircher as the "father" of the magic lantern.

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 the 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 such trace of the past, which 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 the 19th century culture - buildings, technologies, commodities, but also illustrations and literary texts - served as inscriptions, which 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, the German cultural historian Wolfgang Schivelbusch has shown us how such 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 artefacts 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 artefact, the emphasis is swifiting 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. The histories of media technologies, such as telephone, film, radio and television, have recently been researched by (re)placing them into their cultural and discursive contexts by Tom Gunning, Siegfried Zielinski, Carolyn Marvin, Avital Ronell, Susan J. Douglas, Lynn Spiegel, Cecelia Tichi, William Boddy and others.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

⁴ Marc Bloch: *The Historian's Craft*, translated by Peter Putnam, Manchester: Manchester University Press, 1954 [originally published in French, 1949.]

⁵ Susan Buck-Morss: *The Dialectics of Seeing. Walter Benjamin and the Arcades Project*, Cambridge, Massachusetts: The 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*, Vol. 32, N:o 2 (Summer 1991), p. 185.

⁷ See Tom Gunning: op cit.; 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: University 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 University Press, 1988; Susan J. Douglas: *Inventing American Broadcasting 1899-1922*, Baltimore and London: The Johns Hopkins University Press, 1987; Lynn Spiegel: *Make Room for TV. Television and the Family Ideal in Postwar America*, Chicago and London: The University 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", A paper presented at the Finnish Society for Cinema Studies Conference, Helsinki, January 1993 (unpublished).

the great chorus of voices in a society.⁸ Historians have begun to acknowledge that they cannot be free from the web of ideological discourses constantly surrounding and effecting them. 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 "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) new historical writing is emerging as a *conversational discipline*, as a way of negotiating with the past.⁹

In line with this development, I would like to make a few preliminary remarks about an approach I call "media archeology".¹⁰ While I share with the above mentioned historians an interest in synthetic multi-perspective cultural approach and historical discourse analysis, I see the aims of media archeology somewhat differently. I would like to propose it as a way of studying such recurring cyclical phenomena which (re)appear and disappear and reappear over and over again in media history and somehow seem to transcend specific historical contexts. In a way, the aim of media archeology is to explain the sense of *déjà vu* that Tom Gunning has registered when looking back from the present reactions into 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 19th century Kaleidoscopes, there is an engraving titled *La Kaleidoscomanie où les Amateurs de bijoux Anglais* ("The Kaleidoscomania, or the Lovers of English jewels", from the first part of the 19th 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 don't even notice other men are courting their companions behind their backs. When stereography became a fad in the 1850's, we soon encounter exactly the same motive 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

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¹⁰ Other media scholars have used this concept as well according to their own definitions. See for example Siegfried Zielinski: "Medienarchäologie. In der Suchbewegung nach den unterschiedlichen Ordnungen des Visionierens", *EIKON* (Vienna), Heft 9 (1994), 32-35.

¹¹ Tom Gunning, op.cit., p185.

¹² The Kaleidoscope was invented by the 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: W.C. Darrah, 1977.

eyepiece of the stereoscope covers the viewer's *both* eyes, as if drawing him into a three-dimensional field of vision.¹⁴

Recalling C.W. Ceram's convictions, outlined above, we could wonder, if these occurrences are just "*chance discoveries*", with no causal relationship and thus no historical interest? And is it just another chance discovery to note 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 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 *I Got You Babe* with (real-life) Cher.

Another example: following C.W. Ceram's argument (presented above), there is no historical connection between Étienne Gaspard Robertson's *Fantasmagorie* shows, began in Paris at the very end of the 18th century, and Lumière brothers' first *Cinématographe* presentations a century later. Even the use of the *laterna magica* principle for projecting the images on a screen doesn't warrant Ceram to posit a relationship.¹⁵ However, if we compare contemporary illustrations about *Fantasmagorie* audiences' panicky reactions to the ghosts attacking them from the screen, and reports about 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, the association that comes to mind might be the Michael Jackson starred stereoscopic movie spectacle *Captain EO*, the "onslaughting" aspect of which has been enhanced - in addition to the customary 3-D effects - by laserbeams, which are released as if from the screen world to the audience space.¹⁷ Even though the audiences may not have reacted very vividly on the spot, the publicity, the media as

¹⁴ See the anonymous stereograph dating from the 1860's, reproduced on a View Master reel (Reel X, image 5) annexed to the book Wim van Keulen: *3D magics. A Stereoscopic Guide to the 3D Past and its Magic Images 1838-1900*, AA Borger (The Netherlands): 3-D Book Productions, 1990. For another manifestation of the same motive, see the stereogram visible on the table in C.W.Ceram, op.cit., p. 112.

¹⁵ The film projector is basically a modified *laterna magica*, in which the transparent glass slides have been replaced by roll film. Making the film move in front of the lens required a machinery which 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, have been published in Ceram, op.cit., p.38. The reaction to the Lumière film may be a purely discursive creation. There are scattered remarks - writing about his first *Cinématographe* show (in the *Nijegorodskilistok* journal, July 4, 1896) the Russian writer Maxim Gorki mentions that "it had been said that it [the train] will rush straight into the obscurity where we are", but gets disappointed. The train rushing towards the audience was featured in early Lumière posters or sketches (see Emmanuelle Toulet: *Cinématographe, invention du siècle*, Paris: Gallimard, 1988, p.11, 14.) The motive 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 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. (Charles Musser: *The Emergence of Cinema. The American Screen to 1907*, part I of the *History of the American Cinema*, New York: Charles Scribner's Sons, 1990, p.24.

well as the contemporary oral traditions re-telling the theme park experience convince us they did.¹⁸

Again, we may ask if there is any sense in looking for connecting links between these occurrences, wide apart in time and space. I would like to claim that these parallels are not totally random, produced indigenously by conglomerations of specific circumstances. Instead, all these cases "contain" certain commonplace elements or cultural motives, which 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 *Europäische Literatur und lateinisches Mittelalter* (1948) to explain the internal life of literary traditions.¹⁹

The idea of *topoi* goes back to the rhetoric traditions of classical antiquity. According to Quintilianus (V,10,20), 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 as formulas, ranging from stylistic to allegorical, that make up the "building blocks" of cultural traditions; they are activated and de-activated in turn; new *topoi* are created along the way and old ones (at least seemingly) vanish. In a sense, topics provide "pre-fabricated" moulds 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 the 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 panic reactions to a media spectacle - we deal with *representations* instead of actual experiences; we don't know (and perhaps never will), 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 mould its development,

¹⁸ A promotional video (1993) of the Showscan Corporation, a company producing and marketing speciality cinemas, opens with a simulation theatre sequence where wind, smoke, water, fire, a fish and even a UFO are "thrown" from the screen to the audience space. The audience reactions show pleasure rather than terror.

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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." (*Ibid.*, p.105.)

rather than in the "things" and "artefacts" 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. Wellbery 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 foucaultian "discursive formations", ideological traditions of discourses reigning in the society, and 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 which 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 the 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 view unrealized "dream machines", or *discursive inventions* (inventions that exist only as discourses), can be just as revealing as realized artefacts. A case in point, the *telectroscope* was a discursive invention which was widely believed to exist in the late 19th century. It was an electro-optical device which enabled 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 features of his friend in Boston with as much ease as he could see

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

²³ Friedrich Kittler: *Discourse Networks 1800/1900*, Translated by Michael Metteer, with Chris Cullens, Stanford: Stanford University press, 1990.

²⁴ Preface to Kittler: *Discourse Networks 1800/1900*, op.cit., p. xii.

²⁵ Ibid., p. 136-137.

²⁶ Carolyn Marvin: *When Old Technologies were New*, op.cit., p.8.

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*; and even Edison was claimed to have invented it. Time and again it was announced that it will 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 in 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, and 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 an individual and active "tele-vision machine", meant for individual person-to-person communication. Jaron Lanier's utopian vision of virtual reality "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 which inspired it will finally be moulded into a form which is closer to the economically and ideologically constrained structures of broadcast television than to those of telecommunication.²⁹ The discursive formations which enveloped and molded the emergence of virtual reality technology around the turn of the 1980's and 1990's 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 archeological approach has two main goals: first, the study of the cyclically recurring elements and motives underlying and guiding the development of media culture. Second, 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, recurrence rather than unique innovation. In doing so it runs counter to the customary way of thinking about technoculture in terms of constant progress, proceeding from one technological breakthrough to another, and making earlier machines and applications obsolete along the way. The aim of the media archeological approach is not to negate the "reality" of the technological development, but rather to balance it by placing it within a wider and more multifaceted social and cultural frame of reference.

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

2)Ibid., p.16.

²⁷ *Electrical Review*, May 25, 1889, p.6, cit. Marvin, op.cit., p. 197.

²⁸ See John Perry Barlow: "Life in a Data-Cloud. Discussion with Jaron Lanier", *Mondo 2000*, n:o 2

²⁹ A model for this could be the *Sega Channel*, an interactive all-video game cable television channel, which is expected to start in the United States in 1995. Sega may adopt its already introduced head-mounted display for home use as an interface to be used for both individual and collective game playing through the *Sega Channel*.

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

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24)Preface to Kittler: *Discourse Networks 1800/1900*, op.cit., p. xii.

25)Ibid., p. 136-137.

26)Carolyn Marvin: *When Old Technologies were New*, op.cit., p.8.

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