Attention: Recalculating!

On technologies of seduction through mediated experiences

Graduation Thesis for the Media Design: Networked media department

Piet Zwart Institute

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General outline of thesis essay, as of March 15th 2011, 02:00

From the project proposal

What I would like to show through this subject is the idea that technology is strongly tied to myth and magical thinking, that with the rise of technology raise also the strategies of enhancing, immersing, control, through the process of naturalization and through the levels of abstraction (be it metaphoric language or abstraction through the applications of interfaces and code).

Starting with an example of how technological dependency conditions us to synchronize, update, follow, I will open the question of constant connectivity by referring to Rhinegold and Kluitenberg's notion of mindful disconectivity. Through the advance of possibilities for connecting, rise the protocols that govern connectivity (possibly bring in Galloway's account on control through protocol). Synchronicity is maintained intuitively, through the concept of the black box, naturalizing the technological surrounding. Making a parallel to the steam engine through differences in visibility. The functioning of a black box is meant to stay invisible, visibility unfolds only when performance is not satisfying. The question of opening the black box remains.

I will bring in the comparison between the technological fetish device and the aura of Benjamin's artistic object, putting accent on the reflection of Narcissus as a common principle.

Afterwards I will consider Popper's argumentation for indeterminism in science and its application to technology. Having the common ground of religion-science-technological dogma, I will introduce magical thinking through the practice of artificial magic in the Middle ages, serving to demystify natural magic. Then I

will proceed to the definitions of magical thinking, focused on Frazer's homeopathic and contagious magic and Malinovski's performative language. Performative language can afterwards continue into the interaction between languages on the formal level (Hayles, Cramer) and on a conceptual level through the myth of technology. Further I will examine how enchantment serves in favor of economy, which acts as a contemporary case of conspicuous consumption (to be read) of lifestyles for a new precarious working class. Commodity is sold as necessity, offering a diversity of consumption through customization. As a possible conclusion I will introduce the diversion inherent to code, that of being replicable, alterable, viral, as the multiplicity of directions (vapor software), contrary to clean, functional, direct conceptions of intuitive technological environments.

The figure of Frankenstein will, if fitting, drop in from time to time, through quotes, embodying the voice of the technological ontological other, a narrative that is left long behind in the 20th century of science fiction and cyber utopias.

Choose destination

-"Which way do we go"

-"Left"

_"Right"

-"No, you're going the wrong way"

-"So you want to go right"

-"No!"

(Monty Python's flying circus)

"It has to be held, it has to be touched for you to feel how magical it is"
(Steve Jobs, launch of Ipad2, 2011)

‘Technocrats are not technicians but managers, whether they belong
to the administration of the State or to big businesses which are
closely bound, by reason of their very importance, to the agencies
of political decision-making.’

(Touraine, *The Post-Industrial Society*, p 49-50, quoted in Barbrook, 2006, 74.)

Instead of “to have and not to hold” in the love affair with the technological machine, we are much less generous. This writing goes into the “to hold and not to have” of ubiquitous enhancing technology, through a personal application of media anarchaeology (formulated by Zielinski), and critique of a specific type of technological determinism that resides in the prosumption of information communication

technologies. Several levels of performative languages will play a part in the process of naturalization and seduction, inevitable in the encounter with technology, looking at how these mechanisms can be instrumentalized for a post Fordist reality.

The motivation for this journey is the questioning of how technology is naturalized and perceived, which one could find to be dated, and possibly so dated that it is not considered as a topic anymore in a discussion where pretext is the unquestionable possibility facilitated by *neutral* ICT. Our perception is mediated by, on one hand, the physical surroundings of ever growing devices, appliances, networks and signals, and on the other, by the sophistication of software. The relationship with our technological superstructure is one directional, excessive, progressive, and mesmerizing- a true femme fatale.

Set Point of Interest

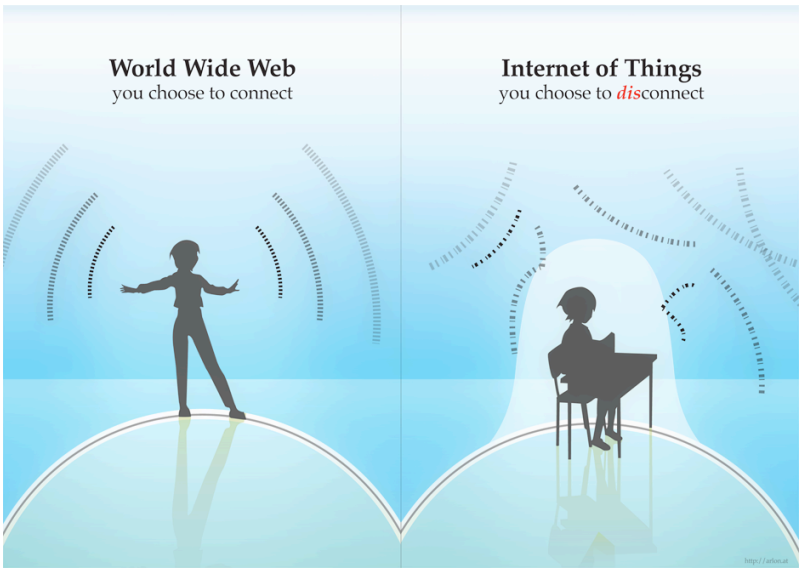
If a person, while traveling or being outside of any facilities notices their phone died, the first thing they will feel is disorientation and fear of losing *contact(s)* (physical inscriptions of phone numbers which make contact possible). The feeling may last for half a second, but it is a very physical and

actual state, before we realize we have a backup of our *data* or that we can fix our phone/*memory* in one way or another. We feel disoriented because no one can reach us and we cannot reach anyone, being aware that we have delegated a part of our mental activity-memory to the memory space of an ICT device. Not being connected basically implies not being part of the world, being disconnected, excluded, while delegating a mental process to a device means becoming physically dependent of that device as a prosthesis of ones nervous system. Further, locating oneself would start to depend on the possibility of being located. These media become the ones who help us define ourselves, by protocol, habituation and affirmation. The loss of contacts and connectivity testifies to the otherwise inherent feeling of possession of these abstract categories.

What does this connectivity mean? It is not a meditative realization of being connected to the spiritual world, to everyone and everything; it is a mediated conditioned state of being available, traceable and visible. The conditionality gives us security and reassurance in return, through a technological isopraxis.

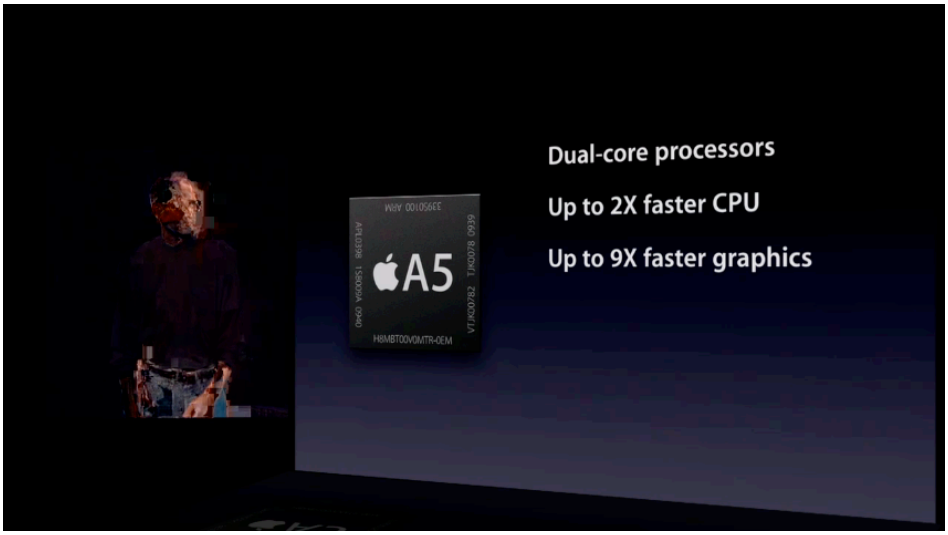
Howard Rheingold and Eric Kluitenberg talk about the networked narratives of connectivity as the antithesis of human freedom. They ask an important question:

"If we gain health and wealth, amusement and empowerment, through our use of a tool or medium, how have we, by that use, acted to constrain or expand the range of potential choices?" (Rheingold, Kluitenberg, 2006)



an advertisement explaining the Internet of things

They argue that the right to disconnect should be a fundamental human right, showing a shift in a topic which was before mostly concerning access and differences between the ones who can "connect" and the ones who cannot. The question of access is qualitatively even becoming more important as more people immerse nearly every facet of their lives into seductive connectivity. But the question of what it would mean to mindfully disconnect is a controversial topic in that it flirts with something that could be identified as a Luddite protest and nothing more. It would first require more insight into the nature and meaning of connectivity, also determining what disconnecting would require. How would one selectively disconnect and remain autonomous? To connect presupposes synchronicity on many levels- if a person is using Firefox browser 2.5, and has an old version of any operating system, will not be *functional*. Even thinking of this scenario as an unlikely one shows the normative demand for upgrading.



The Ipad2 launch from a not current version of Quicktime

Calculating route

On one hand the possibility to disconnect is still an open question, because even by physically being present, without mindfully or mindlessly connecting-participating, one becomes inscribed, by nature of online ubiquity.

The wireless Cloud computing paradigm of higher access, more possibilities, faster connections, better features has a back end of irreversible inscription and a questionable amount of autonomy. The nature of the digital is that it is reproducible, copyable, alterable, and therefore hardly erasable. While people with their digital traces become inevitably more visible, the interfaces they use are becoming more invisible, and more hermetic. The potent metaphor of the black box is how user-friendly applications and devices are presented to potential

users, from the visual design, to how applications are developed, in order to shorten valuable time for both consuming and understanding the underlying principles. Black boxing is identified with closed source-proprietary software, which would literally mean obscuring the underlying code-therefore visually expressed as a black box. The more closed source, the less it is possible for anyone outside the proprietary circle to modify, the less autonomy the user has. One could, on the other hand, argue that it is not possible to keep sources open, because it would demand slower development, redefinition of copyright and higher literacy in programming languages. There is no need to engage in software that will upgrade in less than two weeks, and if the software doesn't upgrade, than it is not synchronous with the rest of the system, therefore it is not as useful as a synchronous one.

If black-boxing technology is what distinguishes our relation to contemporary technological devices from our relation to steam engines in terms of knowledge and visibility of their inner working process, what is the difference between the relation towards one and the other?

One great difference is that contemporary technological devices play a far more important role in ones day to day life, our perception and communication and activities are mediated, they are personalized through individual use, and through customization-the fitting of an interface to a specific set of functionalities.

There we come to the question why do we need to understand an interface that is, by its definition functional and designed in a way that we never need to engage with how it works. Precisely because of the

technological ubiquity in ones life, it is important to locate where the constraining and where the empowering elements of technology prosumption lie.

Destination set

‘If property was the criterion of membership of the former dominant
classes, the new dominant class [of technocrats] is defined by
knowledge and a certain level of education.’
(Touraine, *The Post-Industrial Society*, p 51, quoted in Barbrook, 2006, p. 74)

On a practical level, the absolute functionality of technology is an ideal type, it is a principle, rather than actuality.

This is felt only in the case where feedback from a particular application is not the desired one, desired meaning functioning on all levels. Invisible systems become visible only when they don’t function, because they are meant to be unnoticeable. The less that is understood about the nature of an environment, the greater the frustration towards unresponsive or malresponsive situations, the more control the facilitator of the environment has.

common Windows error message

The greater the gap between how a device is represented and how it functions, the greater the space of imagination, the acceptance of technology as a given. By how it is naturalized, the technological device can be seen as holding similar attributes as those of the aura of the artistic object, Walter Benjamin writes about. It is a mystified entity, which besides being functional, also has a demand for aesthetic appearance.

"The realm of aesthetic beauty can therefore be seen as a narcissistic projection of the self: as an imaginary, utopian space, autonomous and eternal, in which every "object" is symbolic, full of meaning, endowed with a spirit or soul that mirrors the self's own image...The aura is, after all, the projection of a kind of living presence or spirit onto the aesthetic object" (Rutsky,1999, 26).

The element that is especially interesting to compare is the reflection of the self (Narcissus) in media.

"The painting we look at reflects back to us that of which our eyes will never have their fill. What it contains that fulfills the original desire would be the very same stuff on which the desire continuously feeds."(Benjamin, 187, quoted in Rutsky,1999, 26)

The feedback loop of Narcissus gazing at the image of himself is a mesmerizing vicious circle of fascination and desire that starts with first seeing his reflection, subsequently wanting to grasp it the more he observes, and the more he observes, the more unattainable his image is. Likewise the desire for technological objects is a desire for unattainable selves that craves for more consumption with every new device that reflects our *needs*.
The absurdity of this comparison is that Benjamin was opposing painting exactly to the technological realm of the mechanical reproduction. The aura of the painting resides in its uniqueness, and we could argue that technological production is mass production, it serves a different purpose. But precisely because of this distinction it is possible to locate the personification of media, the aura mass produced to fit for every Narcissus perfectly, and the remaining unsatisfied desire. In Kantian terms of beauty as eternal, the technological device resides an eternal quest for perfection. This fabricated, contemporary aura, besides being functionally and aesthetically perfect and perfected by every new version, also carries moral and beneficial messages (the new Ipad2 series unprecedentedly is used in medical institutions and for working with autistic children)

Follow road ahead

New technology comes as deus ex machina
(Kluitenberg, 2006).

Historically, technology is connected to the rise of scientific, rational thought and progress, winning over the dogmatic religious understanding of the world. It is assimilated to change, in the constant process of perfection. It persuades through facts, arguments, rather than parables.
What connects religious, techno-scientific dogma, and magical thinking is preconceived causality, acceptance and applicability to any given reality. Karl Popper explains his critique of scientific determinism by arguing the logical flaws through which causality grows into determinism through the idea of universality, contrasting human will. He locates the origin of determinism in religion:

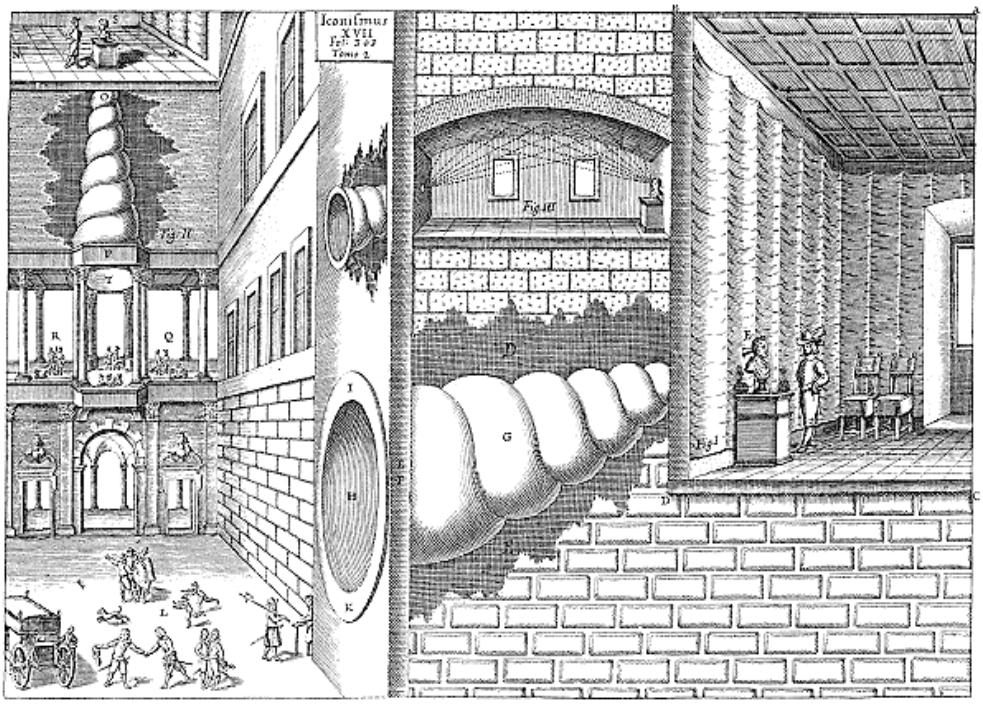
"Historically one can look upon the idea of scientific determinism as the result of replacing the idea of God by the idea of nature, and the idea of divine law by that of natural law. The law of nature is omnipotent as well as omniscient. " (Popper, 1982, p.6)

The difference is that in science the law of nature may be discovered by human reason, by rational

methods. Popper gives determinism the form of a linear film, which relies on conditions that the future is fixed. The causal explanation of an event implies that the causes are determined. One of the many logical problems that arise is if the future was determined and predictable, our actions of tomorrow would be known to us today. One of his examples against the universal principle is the realization that two clocks from the same assembly line, from the same factory are never completely the same, therefore technology can never be truly objective. The individuality of every element on the assembly line stands in favor of the similarity with Benjamin's idea of artistic aura.

Even though Popper wrote the *Open Universe- an argument for indeterminism* in the 1950's and scientific proofs are not perceived as unquestionable truth, the problem of causality is an active one, and can in a certain sense be seen in the acceptance of technology. Through the idea of continual progress, the constant development acts as if it was keeping pace with the growth of collective human knowledge, through updating and upgrading, while the process of upgrading is determining collective human adaptation towards these technological constraints.

"Any exploration of communications technology has to recognize the difficulty of isolating 'causes' and 'effects', or even in distinguishing causes from effects. As an explanation of change, technological determinism is 'monistic' or *mono-causal* (rather than 'multicausal'): it offers a single cause or 'independent variable'. It represents a simple 'billiard ball model' of change".(Chandler, 1995, p.4)



follow up- artificial magic in service of educating, demystifying and control

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Hayles, K (2005) My mother was a computer, Chicago, University of Chicago Press

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Rheingold, H. and Kluitenberg, E. (2006), Mindful Disconnection: Counterpowering the Panopticon from the Inside, OPEN no. 11: Hybrid Space.

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on “the (digital) culture industry”, autonomedia

Cramer, F (2005) Words made flesh, Code, Culture, Imagination, Rotterdam
Media Design Research, Piet Zwart Institute Institute for postgraduate studies and research, Willem de
Kooning Academy Hogeschool Rotterdam

Shouse, E (2005) Feeling, Emotion, Affect, MC Journal, Vol. 8, No. 6, http://journal.mediaculture.
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Annotated bibliography:

Rheingold, H. and Kluitenberg, E. (2006), Mindful Disconnection:
Counterpowering the Panopticon from the Inside, OPEN no. 11: Hybrid Space.

Eric Kluitenberg and Howard Rheingold in the essay Counterpowering the Panopticon from the inside, discuss the (im)possibility of disconnecting in a networked society. They argue that the constraining technological surrounding is the opposite of freedom and throughout the text try to locate a strategy of mindful disconnection. I find it useful and inspiring, as a setting out of constructive problematics concerning habituated acceptance of connectivity that came from a need to change the landscape of the digital divide, but has now become a ruling condition. I will leave aside their account on how connective technologies facilitate an unprecedented amount and variety of surveillance, because it is not of particular relevance to the lines of thought gathered in my subject.

Cramer, F (2005) Words made flesh, Code, Culture, Imagination, Rotterdam
Media Design Research, Piet Zwart Institute
Institute for postgraduate studies and research, Willem de
Kooning Academy Hogeschool Rotterdam

In his book, Cramer gives a precise explanation of forms of magic in order to further draw comparisons with computational imagination. By looking at formal characteristics of code as executable language Cramer locates its inherent similarity to magic, not observing magic as a pejorative term. He also observes this subject in relation to performative and poetic language, and brings in subjectivity and imagination as inseparable elements of code.

I have not yet read the entire book, though already from the introduction have relevant citations for my topic.

The wider the gap between code and perception, the wilder the imagination. The more abstract a code, the more speculative the meaning that may be read into that code. Long before Steven Seagal, codes stirred up cultural imagination just because they were open to any reading. Western culture believed Egyptian hieroglyphs to hold divine powers until the Rosetta translation stone, found by Napoleon's army in the early 19th century, debunked them as ordinary writing. (p.8)
Ever since computer programmers referred to written algorithmic machine instructions as "code"and programming as "coding," "code" not only refers to cryptographic codes, but to what makes up software, either as a source code in a high-level programming language or as compiled binary code, but in either case as a sequence of executable instructions. (p.9)
Magic wasn't considered occult until religion and later science and technology rivalled and marginalized it. The technical principle of magic,controlling matter through manipulation of symbols, is the technical principle of computer software as well. It isn't surprising that magic lives on in software, at least nominally. (p.15)

Chandler, D (1995) Technological or Media Determinism
Aberystwyth University,

http://www.aber.ac.uk/media/Documents/tecdet/

Chandler's writing is a diverse outlook on the term technological determinism, historically semantically and logically, briefly describing important theories and views. He brings in the problem of reductionism and reification, stressing the ease and danger of generalizing when speaking about technology.

Popper, R, Karl (1982) The open Universe-an argument for indeterminism, London, Century Hutchinson

The segment on Karl Popper in the essay is what I noted as the annotated bibliography:
Karl Popper explains his critique of scientific determinism by arguing the logical flaws through which causality grows into determinism through the idea of universality, contrasting human will. The difference is that in science the law of nature may be discovered by human reason, by rational methods. Popper gives determinism the form of a linear film, which relies on conditions that the future is fixed. The causal explanation of an event implies that the causes are determined. One of the many logical problems that arise is if the future was determined and predictable, our actions of tomorrow would be known to us today.

One of his examples against the universal principle is the realization that two clocks from the same assembly line, from the same factory are never completely the same, therefore technology can never be truly objective.

Shouse, E (2005) Feeling, Emotion, Affect, MC Journal, Vol. 8, No. 6, http://journal.mediaculture.org.au/0512/03-shouse.php

In his text Eric Shouse writes about the distinction between affect, feeling and emotion, stating that affects are precognitive, feelings are personal and biographical, and emotions are social. He sees affects as abstract, which makes them “transmittable and provides a powerful social force”. The mechanism of affects is closely connected to naturalizing technology and behavior around it.

Cunningham, G (1999) Religion and magic: approaches and theories, Washington Square: New York

Cunningham provides a detailed history of approaches to magic and religion, from which the first chapter deals mostly with various theories on magic. Explanations of practices such as animism, totemism, fetishism and naturalism can be found here, as well as Frazer's division between homeopathic magic based upon the laws of similarity, and contagious magic, based upon the law of contact.

Rutsky, R, L (1999) High techne- art and technology from the machine aesthetic to the posthuman, Minneapolis, University of Minnesota Press

Rutsky approaches the world of high tech aesthetics through the prism of artistic practice, the ontological problem of the machine that comes to life, the difference between the modern and postmodern conception of technology, from the position of the year 1999.
She argues that the basis for the modern conception of technology is its instrumentality and that it hides the broader view of techne' from antiquity, which Heidegger refers to, questioning the universality of an instrumental conception of technology. High technology maintains a difference between those who have a high level of access to technology, and those who do not, bringing in class distinction. The democratizing discourse of how participation and universal access allowed by technology still differentiates classes. I will not be specifically interested in

continuing this argument looking at the technological "others", because it is a topic that rises other issues, although important. In matters of distinguishing social classes, as the author writes that high technology distinguishes high and low culture (p.3), possibly at this moment it is rather that higher knowledge of utilizing technology distinguishes social classes. The scientific technological conception of the world continuation of the Renaissance rise of rationalist conceptions defined by its distinction to mythical, magical thinking, perceiving the world enchanted by a spirit or essence beyond human control. Technology is enlightenment of a dark superstitious world, a disenchantment. Technology substitutes magic, it is based upon the death of magical thinking which the author connects to modernism being based upon the death of the artisic aura (Benjamin:"autonomous living spirit that animates the work of art") (p.10-11)

Kluitenberg, E (2006) ed. Book of imaginary media. Excavating the dream of the ultimate communication medium. Rotterdam: NAi Publishers

The book of imaginary media offers a broad specter of approaches to imaginary media, from Bruce Sterling's concept of dead media, to Zielinski's analysis of Kircher's innovations, appropriations, on the example of the acousticon-the predecessor of the Panopticon, and the figure of Kircher being the embodiment of power and imagination, between the Catholic church and the people. Errki Huhtamo wrote about "artificial magic", that took part in the Middle ages as the "use of human made contraptions to demonstrate various phenomena found in nature" (p.86)
This was parralely indoctrinating masses into observing the beauties of God's creations, serving to demystify natural magic, and as an empowering strategy by those who were free to experiment. This is from my point of view, an interesting connection between science, and the empowering experiment in the service of science. Kluitenberg's contribution deals with the concept of the myth of technology as a promising compensation machine, its strategies of depoliticizing and mystification.

Hayles, K (2005) My mother was a computer, Chicago, University of Chicago Press
Hayles, K (1999) Virtual bodies and flickering signifiers, in How we became posthuman:virtual bodies in
cybernetics, literature and informatics, Chicago, University of Chicago Press

Katherine Hayles writes on the relation between language, writing, code through the examples of computation and literature. The chapters Speech, Writing, Code, and Performative code and Figurative language, and in How we became posthuman:virtual bodies in cybernetics, literature and informatics, Virtual bodies and flickering signifiers deal with linguistic/conceptual structures surrounding the digital realm and text, presence, mediation and feedback.

“Changes in bodies as they are represented within literary texts have deep connections with changes in textual bodies as they are encoded within information media, and both stand in complex relation to changes in the construction of human bodies as they interface information technologies. The term I use to designate this network of relations is informatics. Following Donna Haraway, I take informatics to mean the technologies of information as well as biological, social, linguistic, and cultural changes that initiate, accompany, and complicate their development.” (Hayles, p.73, 1993)

“Information technologies do more than change modes of text production, storage and dissemination. They fundamentally alter the relation of signified to signifier. Carrying the instabilities implicit in Lacanian floating signifiers one step further, information technologies create what I call flickering signifier, characterized by their tendency toward unexpected metamorphoses, attenuations, and dispersions. “ (Hayles, p.76, 1993)

Guattari, F (1992) Chaosmosis, University of Indiana Press

Chapter Machinic heterogenesis is, in the context of my topic, an interesting discussion on linearity and alterity of the technical machine. Like Rutsky, he refers to techne, and Heidegger.

The machine depends on exterior elements to be able to exist as such. The machine implies complementarity. (p.37)
The phylogenetic evolution of machinism is expressed, at a primary level, by the fact that machines appear across generations, one suppressing the other as it becomes obsolete. Guattari argues not for historical causality, but for heterochronic datings in a rhizomatic history. (p. 40)
"The wear and tear, accident, death and resurrection of a machine in a new copy or model are part of its destiny and can become central to its essence in certain aesthetic machines.” (p. 41)
Smoothing of the materials that constitute the technical machine lead to a loss of singularity, differing it from living beings. (p. 45)
He talks about different meanings of alterity within the machine, claiming the ontological modalities of alterity to be infinite, arguing for machinic autopoiesis. (p. 43)

He refers to Heidegger's example of the airplane, being a "standing reserve" always waiting for a state of activating, as a universalistic view. (p. 47)
He defines and distinguishes different bases for linearity, from code to semiology, which block us from observing in assemblages. (p.48)
What he offers instead is a multivocal machinic assemblage of being, introducing residual objectivity, which takes into account the relativeness of the Universe outside our particularized earthly point of view.

Further to read:

-Paolo Virno, and Paul Virilio,
-consumer theories
-Baudrillard

-continue reading High techne, by R.L.Rutsky, Words made flesh by F Cramer, S Zielinski-Deep time of the media

-Frankenstein, Mary Shelley