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The Demand of Visibility within Knowledge Production

This is an attempt to analyze, in which way the criteria of the scientific visual abstract image have emerged into daily imaginary of mass media and how far this is influencing the construction of our view onto the world.

During the 20th century western societies, especially at the level of their constitution of social communities, shifted from mechanic towards a dominating scientific approach of interpretation. Simultaneously the development of the evolving role of communication media established a mainly visual-based set of codes, forcing radical transformations in the methods of establishing evidence. The further change towards a digital society brought the idea of manipulation into focus. The occurring shift from authentic artefacts as documents to compiled electronic codes as signs established through information educed a new sense of subtle insecurity concerning the visual. The systemic ontological insecurity lead to different kinds of societal responses – in creating an ambivalent reading, which allowed to recognize formerly unseen/invisible aspects. At the same instant it endangered the defining normative implying that there was no verifiable reflection of the logic underlying the existing social order. One set of responses to this condition of insecurity (in the media as well as in the relations to society that it represents) was to place even more belief and emphasis on the concrete rationalisation of scientific methodology as a means of concretely ascertaining ‘reality’ – proved through visuals. Thus the characteristics of scientific approach became attached even to the visualisation of everyday experience and environment, as shown in mass media. Yet the methods used for establishing evidence are themselves in a constant state of transformation, and so as well what is authentically certifiable as ‘solid’ truthful characteristics of visualisations.

The tenuity of all these constructions is especially evident in moments of crisis, like now in this period after Sept. 11/01, which thus allows to focus more clearly on major strategies of the constitution of social/cultural representation. These constructions work to decrease any form of ambivalence and emerging uncertainty by introducing a variety of different strategies of perception, which form a steady-state equilibrium of agreement that validates as if concrete fact.

In respect of this I refer to the example of Latour’s analysis of Pasteur’s scientific testing methods of ‘visualisation’, which he refuses to accept as a pure evidential proof. Instead he renders the evolving knowledge production into a social paranoid neurosis referring to a predetermined reading of a thereby established ‘truth’. Considering paranoia like in the analysis of Lacan as a ‘radical uncertainty that compels the subject to search for the “objectifying souvenirs” that will verify experience as real or delusional’, I outline a correspondence to the western predefined view onto the world. In regard of the established set-up the changing possibilities and increasing ambivalence of sight and vision are almost totally ignored or trapped into the idea of an intermingling concept of reality and virtuality. The steady re-establishment of predefined cultural frames of vision, which uses preferred reading methods for the consolidation of itself, ignores the more flexible possibilities of the full sight, which information/technologies are able to develop.

‘Seeing things’, so often had been connected to believing – as to convince ‘to see’, to fulfil the thought of a proof within visibility, which then in itself seems to be evidence enough. Thus keeping in mind that problems of scientific method/research were problems of history or better were historical phenomena, and are equally connected to the social, I refer to some quotation from an excerpt of N.Luhmann¹:

Advances in substantial theory may have side effects on the theories that are supposed to control the research. Until the eighteenth century these problems were assigned to religion – the social system that specialized in tackling paradoxes. We have retained this possibility, but the normalization of paradoxes in modern art and modern science seems to indicate our desire to eventually get along without religion. Apparently our society offers the choice either to trust religion or to work off our own paradoxes without becoming aware that this is religion.

¹ Essays on Self-reference, Luhmann, Niklas, p.16/17

Today in western societies the creation of knowledge/information is dominated by the logic belonging to a predominantly scientific view onto the world. In regards of the research of M.Foucault, which showed that relations of knowledge definitely are involved in relations of power, its all over impact on social constitution is evident. 'The carceral network constituted one of the armatures of this network of power-knowledge that has made the human sciences historically possible'.² Nevertheless information is regarded as a social good, ignoring the awareness that the utopian desire to be 'in the known' never can be fulfilled. In my analysis I will try to reveal a self-constituting and self-referential setting of scientific vision, which can be implied in a paranoid formation, as to be seen at the example of Latour's research. This construction in turn evolves structures defining the parameters of in/visibility within the social. J.D.Faubion even suggests a phenomenological proximity of the social and paranoid experience, which defines itself a social and not merely a psychological phenomenon. So the conclusion is that the two modalities of experience always implicate also the other like presence does absence or visibility/invisibility. This framework of a more or less paradoxical setup, allows the concept of the 'seen' to operate as if self-constituted, though its interpretation remains strictly based from within this system of scientific and technological developments, which are again evolving from a specific social context.

Assuming knowledge/information production today mainly as related to 'making things visible', it equally has to be associated to the instruments developed and used for that process – especially, (but not only) in the field of scientific imaginary. Image production educing from seeing, now interpreted as a form of confusion/fusion of eye and sensual devices, indicates a switch from vision to visualisation. This development evolves further uncertainties through the usage of remote seeing devices especially in connection with the digital transformation into a coded form, which has to be de and re/coded again to be 'readable'.

In using the term 'machinic vision', J. Johnston describes it not that much as a simple seeing with or by means of machines - although it does presuppose this - as it is a decoded seeing, a becoming of perception in relation to machines that necessarily also involves a recoding.³ Establishing the visible on the basis of information technology enmeshes necessarily a predefined code – a pattern – which constitutes a relation to the used technology. But the dependence on a more or less universal code, does not give any stable context, therefore the reliance in the function of abstraction of the entailed processes has great impact on the perceived. 'Information is not unframed knowledge but knowledge framed provisionally in unstable data structures.'⁴

In this regard suggestive connections appear to the notion of a 'paranoid' construction of the world made visible. 'Then what ever can be more conspiratorial then a scientific device that deceives?' J.Hunt asks and mentions a perfect example illustrating this with B.Latour's analysis of Pasteur. It shows instantaneously the creation of facts through measurement and weighing through instruments. But how can one look at something which only gets created by the act of looking? This follows the logic of 'seeing things' as they are predefined through interpretation, implied in the associations of social reading and cultural devices. At this point the introduction of the paranoid-critical method can be used to open up productive channels between interpretation and theory, paranoia and identity, as J.Hunt explains. Though what can be seen is a 'question about who is allowed to look, to what purposes, and by what academic and state discourses it is legitimated. ... What the eye purportedly 'sees' is dictated to it by an entire set of beliefs and desires and by a set of coded languages and generic apparatuses.'⁵ Following the same route P.Phelan writes that "Visibility is a trap ...; it summons surveillance and the law; it provokes voyeurism, fetishism, the colonialist/imperial appetite for possession."⁶ Thus the inherent ambivalence of visibility gets partly revealed, as at the same time visibility/transparency usually is presumed to show the real intention of the seen object. It neglects the construction of the visible, like that actually only the known or the 'evident' can be seen.

² Discipline and Punish: The Birth of the Prison, Foucault, Michel, p.350

³ Machinic Vision, Johnston, John, p.29

⁴ The imperial archive, Richards, Thomas, 1993

⁵ The Visual Culture Reader, Rogoff, Irit, p.21, 22

⁶ perform or else, McKenzie, Jon, p.41

Returning after this short excursus it became clear that nowadays the construction and need of evidence is not only a necessity in the field of scientific vision evolving from the methods used, as equally through the produced amount of ongoing delegated and digitized visualization.

An examination of the establishment of evidence considering the mentioned example of Latour's analysis of Pasteur's constitution of evidential proof can be very helpful, even though it is settled in the 19th century. Latour enables us to see the irrationality of the hypothesis, when he refuses to accept scientific testing as an act of pure knowledge production. J. Hunt describes the interference of power and proof and the entanglement within the fabrication of concrete, visible evidence to establish the real on its own terms⁷. The creation of a proof is problematic in Latour's eyes as he enmeshes the slight, but unconscious perception of the whole subtle construction within its own webs. The constant endangering of dissolution through its own recognition brings with it the demand for readable confirmation. This fact evolves also on the level of a further alienation of vision due to enhancing devices in almost every field. The production of sight/vision as applied to machinic and technological devices alters profoundly the way how reality and thereby 'truth' are constructed.

It is quite clear that technological processes involved in transmission of data are not neutral. As they initiate new modes of consumption, they also influence experiences of embodiment and this reflection leads back to a change in the codes of representation used within the field. Here we are at the very core of the mutable signification of the represented information.

Scientific imaginary, which depicts our world-view up to a high degree, increasingly developed into abstract visualisation. The usage of underlying patterns and established methods to create visibility as evidence is quite common within the field of scientific research, as 'laboratories are excellent sites in which to understand the production of certainty'⁸. This means it is the nature of the scientific image that it only can be read in a chain or flow, and through a predefined code. Due to this fact there is no possibility of a clear interpretation, when it stands for itself. The scientific image has no outside referent and is no mere representation. Instead, similar to scientific texts, it speaks of a referent present in itself, carrying its own verification within. Following this logic it simultaneously establishes an inside structure as a self-centred construction of the interpretation of the perceived. As described above, visibility can be considered as a constitution within its own, but it is still regarded as transparency of sight and thus instantaneously gets connected to higher powers or at least objectivity. Technical sight today, which in many cases was first developed for the military purpose of the more powerful is again transporting this intention and thus equally becomes attached to the unstable creation of knowledge. Like the quote of I.Hacking⁹ suggests, that 'if content is what we can see, and form is what we cannot, but which determines the possibilities of what we can see, we have a new cause to worry about weapons research'. So yet the question who has access and who interprets the images is important. These complications are quite obvious when 'in the war of cameras, radar and sensors against S.Husseini only one side can see'¹⁰, the same occurred in the 'nintendo-images of Belgrade'¹¹, Kabul ... or to remember the images of the 'operational strokes'¹² of the gulf-wars: 'at certain moments even colour was abstracted from the scene, leaving the field entirely to line and light: first, the grid and coordinate numbers that turned the television screens of tens of millions into a bomb-sight; then, the blossoming brilliance that over-whelmed the video camera's sensors and wiped the screen clean - an ultimate self-censoring erasure, in which destruction veiled itself. The more *realistic* images - that is, the minimally less abstract images - came even later.'¹² Here the whole myth about technological sight as delivering scientific images, and thus objectivity, is implemented. On a different level, but with similar intentional purpose operate the hardly recognizable videos of bin Laden or the Djerba incident. Again, like in smart bomb transmissions the simple layering of numbers, letters and other signs allow or better suggest readability, which but is highly predefined. (Also the presentation of C.Powell at the UNO in February 03 to establish evidence for a war on Iraq has to be mentioned here.)

⁷ in Paranoia within reason, Hunt, Jamer, p.26

⁸ Pandora's Hope. Latour, Bruno, p.30

⁹ in: Paranoia within reason, Fortun, Michel, p.98

¹⁰ Schnittstelle, Spangenberg, Peter M., p.207

¹¹ Imagineering, Terkessidis, Mark, p.120

¹² In/different spaces, Burgin, Victor, p.231

This abstraction corresponds perfectly to the increasing difficulty evolving from the paradox status of scientific images. In fact they can not be read without scientific interpretation, standing alone for themselves they have no referent, no meaning - they are no 'pure representations'.¹³ Similar comments about the undetermination of satellite transmissions are given by L.Parks, when she explains her expression of codes of orbital sight and the usually involved habits of power. 'To have another meaning than that of their own omniscience satellite-images have to be taken into discursive exchange. .. Instead of concentrating on a seemingly satellite-panoptism, one could ask, how the sight of satellites has been used to produce codes of an orbital visuality.'¹⁴ Already these few examples show, that the defining criteria of the visual abstract image are going to be transformed onto almost any material of visualization, especially in the area of mass media. It even becomes more evident if we take a look at the devices employed and the methods applied. Leading to an evident connection of the dictate of dominant cultural forms of the west, which still define diverse cultural representation and identity from this predefined/coded material or better extremely centred point of view. Due to this fact is also the inherent restriction of possibilities of 'visible' self-definitions for other forms/cultures.

This text uses two different strings to lay open the constitution of reality through the transformation of information into knowledge. One is referring to scientific vision and how scientific knowledge is going to be made evident, which means how it becomes established through self-defined proofs. Considering it as a known fact of western societies to define themselves as societies based on a scientific world view, the structure of perception naturally depends on the outlines of these concepts of 'world making'. The actual example of Sept. 11/01 and war on Iraq with its sudden and self-established evidence, which lead to an immediate closure for multitude and different simultaneous approaches, made this quite obvious. Every aspect of ambivalence and insecurity had to be excluded – the most recent claim of these aspects came with the pixelated sight of embedded journalists, even though operating on a different level, which should evoke further analysis.

Parallels spawn along the second line, which is based on the assumption of slightly paranoid social phenomena, developing from this self-centred construction. This condition of consciousness forces the REAL to re-emerge as trauma and an endless repetition without resolution, though the paranoid state evolves as the exacerbation of rational calculation by a troubled psychological economy. This scenario makes it impossible to reveal the self-constitutional implications, without jeopardizing a possible collapse of the whole system.

Obvious connections and similarities between the construction of reality through the devices of scientific research and the evolving social and cultural implications can be regarded as both depending on these self-referential strategies and thus as slightly paranoid. To break the closed circle demands for the endurance of an other point of view, for an awareness of a visibility, which can not be perceived from the acknowledged point of view.

Clues, such as those evolving from experiences like the uncertainty principle, that the observer influences the observed, and the paranoid-critical method for a self-evident production of the real, show possibilities how to operate and question from within the system. The allowance of various contradictory propositions helps to create a wider and unfolding space, which will equally require new definitions of the seen.

Technical developments, like those elaborating with non-linearity and inter connectivity (as the www), allow to some extent different operations within more flexible systems of signs. This could lead to an acceptance of diversity without defining a standardized method/interpretation of the 'reading' in advance. It is the argument for a support of the request of various simultaneous approaches within visualisation. In short the technological and social changes in image/knowledge production need an appropriate flexible adaptation of the evolving visualisations, as increasingly they lose their equivalent in vision, i.e. the seen.

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¹³ Iconoclasm, Latour, Bruno, p.26, 67

¹⁴ Imagineering, Parks, Lisa, p.64, 66, Interview with T.Holert