Sur/Inter/Face/Art

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For cultural theoretical and philosophical aesthetics of electronic and technical visual media it is important to deal with the aesthetic paradigms 'mirror' and 'surface' and to differentiate between them in the context of advanced interface technologies. The culture and media philosopher Vilém Flusser describes such a research program already in his book "Lob der Oberflächlichkeit. Für eine Phänomenologie der Medien" (1995): You are used to name the periods of culture history after the respective material of the tools – stone, bronze, iron or synthetics. What would it look like, if you used epistemological and aesthetic criteria? You would possibly speak of a 'Pre-Mirror Age', a 'Mirror Age', the 'Age of Photography'… In addition to photography, Flusser also analyses other visual and communication media like film, television, and video. In such media of pure transmission, an image is not storable or manipulable and therefore can be schematized to the mirror as a cultural paradigm. A mirror as a pure and plain surface transmits an image without manipulating it; the mirror that represents objects saves the identity of a constructed objectivity.

The best known mirror in which the subject finds itself and makes itself superficial, is naturally the water surface like we know it from its Greek tradition. After Battista Alberti or Leonardo da Vinci, Narcissus finds in his image on the water surface nothing less than a new form of art: painting. " Painting is nothing else than trying to embrace the water surface of the spring with the means of art", says Alberti in 1436. Until today, this mythic derivation is the source of the tradition that an artist uses to portray or stage-manage himself and his body. Theoretically, however, you still have to define the difference between mirror, surface and skin, and the proper motion of the artistic body resp. of the viewer, what Alberti describes as the "embracement". Since the Renaissance, in image theory the mirror is often considered to be the leading medium. Even the film as a medium -when it is non-experimental- is an imaginative mirror, without any physical presence of the body of the viewer. " The film is like the mirror … both of them project everything around them, but there is one thing, that the film never reflects: the proper body of the viewer." (C. Metz). As the mirror becomes more and

more the leading medium in photography, film, and television as media of transmission, interfaces and surfaces appear to be the cultural aesthetic paradigms of electronic and new media.

Electronic images are effects of a surface right from the start, even when they still follow the mirror paradigm in "photorealistic" computer graphics when trying to imitate nature. In computer graphics the surface still appears as material of an object and as reflection intensity of a pixel. A physical model of light reflection makes you seeing an object modelled in three dimensions. The following two algorithms of electronic image synthesis are well known and widely used: raytracing and radiosity. The radiosity procedure creates the image of a closed, thermodynamic room, energetically balanced and calm, like the interior of a ship. The reciprocal exchange of light energy between surfaces is performed through numeric approximation as light energy interaction in the electronic image. A numeric integration does not happen continuous, but discrete. That is why early radiosity pictures barely show round objects, but only an approximation of them: right-angled planes, chiseled objects with matt, inter-diffuse reflecting surfaces. The algorithm of image synthesis as a medium forms up the visible objects as messages. In contrast, the picture of a raytracing procedure is a window to an open, hyper-real room, the exterior of an aircraft or flying vehicle. The virtual bodies are mathematically defined or modelled. Point-to-Point interaction of light presupposes the first derivative of algebraic surfaces; because of that you mostly see abstract objects in raytracing. In radiosity, pieces of planes interact through numeric integration; in raytracing, points interact with each other as differentiation. Radiosity is an integral calculus between surfaces, whereas raytracing is a differential calculus between points. Therefore the latter one is balanced and matt, the other one hyper-real and shining.

The philosophical reflection of electronic images, however, the reflected reflection, as Flusser calls it, does not happen in the image itself, but in its programming. "So, the question is not, if images are surfaces of materials or contents of electro-magnetic fields, but to what extent they derive from substantial and formal thinking and vision." In the technical image the informatic program appears, and not the intensity of reflection or the substantiality of the object. The formal interface, the algorithmic interface of the electronic image, is the tool to produce often pre-structured software like Photoshop, Softimage, Maya, Flint, Flame or Inferno. These programs are interactive interfaces and keys for the machine as well as for the programming. So, the interface in planning virtual worlds or electronic images is to see what you think: the code as movement in the programming process is the condition for synthetic proper fusion of the field, whether it is the body of the user or the body of the viewer or the artist.

Surfaces and interfaces open up new possibilities for electronic aesthetics. With the help of a surface theory you can think of doing time-based manipulations in the memory, and you can "think" images beyond representation and mimesis. So, formal tensions between a three-dimensional computer generated world with virtual bodies and two-dimentional screens can be discussed. Even more important is the expansion of the electronic image around the body; its movement as interface should make possible a creative and subjective concept of the world. Software and algorithms that adapt themselves to the user, the viewer, or the artist in terms of individualization, record the proper fusions of the field. They act adaptively and dynamically and are compatible with the anarchaeological approach of art and media science. Gérard Simon described this kind of subjectivity in his analysis of being and appearance in the antique times. In anaercheologic theory of technical vision, the gaze plays an important role; after Siegfried Zielinski, this theory does not only refer to Deleuze and Guattari against Foucault, but also to "the attempt of the 1990ies to create something like a genealogy of the other gaze, a genealogy of visions that diverge from hegemonial conceptions of seeing, in the framework of an archeology of audiovisions". It was namely Gérard Simon who earlier focussed on total subjectivity in the techniques of seeing in his archeology and analysis of the gaze, not of knowledge: "Assume that the view itself got in contact with the object; so, you could not suppose that this view could give us universal perception of the seen, because it is "my" view, that differs from the view of other persons and even more from the view of animals. A complete realism, in that each seeing individual is the decisive factor, is theoretically absolutely justifiable." So, in his distinction and synergy of the ray of vision and the ray of light, Simon promises no pure passivity, but activity and 'co-creativity', a subjectivity in the sciences of vision one should dream of. Every single spectator may create his own world that differs from that of others. The algorithms of vision therefore "should and must" adapt the history, may be even the cultural history, of the viewer and adapt his imaginations individually and dynamically in the process of contemplation. In english, reflection not only denotes the physical process of reflection on a surface, but also the process of viewing itself. Therefore, the intention of questioning the gaze of the other, is to point out that the viewer as user is a producing subject. For art and media sciences, Sur/Inter/Face/Art means therefore to dynamize the movements of the body of the observer so that imaginative sketches and design processes are possible in fluid codes. The question of the experiment man-machine forces therefore to think about methods of an experimental interface culture as well as about possiblities for a computer science of imagination and the imaginary.