ON VISUALIZED VISION IN THE EARLY PHOTOGRAPHIC WORK OF WARREN NEIDICH

Abstract
This article contains an analysis of Warren Neidich's early photographic work of 1997 until 2002. These works which are linked to the extensive theoretical production of the artists are contextualized with the concept of the dispositif and apparatus as developed by Jean-Louis Baudry, Michel Foucault and recently Maurizio Lazarrato. The article provides a close description of the parameters of four pivotal work groups of Neidich's early practice, *Brain Wash* (1997), *Double Vision* (1997-2000), *Short Reverse Shot* (2001) and *Law of Loci* (1998-1999). These works were realized with the aid of low-tech devices stemming from neuro-ophthalmology, marking the interface between current neuro-philosophical discourses such as the plasticity of the brain, the apparatti of visual, i.e. analog and digital culture, and the philosophy of memory. It is suggested that Neidich, even though he intervenes and contributes importantly to these intermingling discourses in a broad manner, is particularly interested in the degraded and infirm implementations of human vision in order to explore new sensations and habits of perception.

Key words
apparatus ■ cinematic gaze ■ perception ■ photography

Much of the discourse around Warren Neidich's early work of the 1990s, particularly *American History Reinvented*,[1] focusses on the technical aspects of media-philosophical understanding, and the measures through which an inquiry into the cultural milieu is enabled. Michel Foucault's (Foucault, 1980[1977]: 194-228),[2] and Jean-Louis Baudry's notion of the *dispositif* yield further insights into what this involved.

Neidich imported optical devices, mainly from neuro-ophthalmology, for the production of his artworks between 1997 and 2003. In this context, the term *apparatus*, in Jean-Louis Baudry's sense of the *appareil de base*[3] hints at the practical elements of the "machines of seeing" of our "scopic regimes" (Jay, 1988: 3-27) such as photo, film and video camera, projectors as well as the projection space of a cinema (or lecture hall), and finds analogues in both the idea of the *dispositif,* and Maurizio Lazzarato's media theoretical concept of Noo-politics. For Lazzarato power installs itself in the brains of the multitude from a distance, through the use of contemporary apparatta like the internet, and distributed software agents, which limit difference and create homogeny by administrating attention and memory (Lazzarato, 2006: 186).

Although the modern mechanisms of seeing are undeniably fascinating, in amateur photography or visits to the movie theatre, the history of vision is above all a history of consumerism and paternalism on the one hand, and of eagerness for knowledge in the scientific domain on the other. Within these complex interwoven territories, where vision (in the sense of perception) is subject to

the power of knowledge, one can make-out the history of an incredible power of infatuation, a danger that is embedded and reproduced more than ever in the digital image.

The idea of a 'seduced vision' has been inspiring. During the 19th century, scientific photography, from Auguste-Adolphe Bertsch's mites to Josef Maria Eder and Eduard Valenta's animal radiographs, brought to light images which had previously been invisible to the naked eye. Micro-photographic fascination went so far that, until the 1860s, scientists still believed it was possible to "see more" in a photographic detail when it was blown up. Thus blown-up grains in the film emulsion became taken for proof of the existence of sub-cellular particles and organelles; a symptomatic misinterpretation of the photographic ontology (Breidbach, 2002[1998]: 221-250) which calls to mind the intricate investigations on Secondo Pias' first photographic capturing of the Holy Shroud of Turin in 1898. Photography was interpreted as a medium to "search for something" (Geimer, 2002: 143-145) which the naked eye fluctuates, and is hardly recognizable, let alone visible.

The fact that these misinterpretations were finally discussed indicates the extent to which vision and history are bound-up with each other. Jonathan Crary's *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (1990) is an important reference on this point. The book traces the evolutionary history of modern vision, by linking it to the use and forms of diverse optical devices invented and employed during the century of the Industrial Revolution. Crary claims that optical devices which appear primitive today were devices of wonder, fascination and fantasy then. In fact, simple devices such as the stereoscope, which today can be explored in many museums of film history, have retained their appeal.[4] Stereoscopes, stroboscopes and zoetropes (and the photographic camera) – all pre-cinematic devices were not only set up in amusement parks of the 19th and early 20th century (Maase, 1997), but were also used as scientific devices to probe visual capacities such as "time-sense" and "space-sense" perception. Most strikingly, Hugo Münsterberg, a German American pioneer in film theory and author of *The Photoplay: A Psychological Study* (1916), investigated at Harvard Psychological Laboratory how film montage – motion – is able to affect emotion and empathy (Bruno, 2009: 102-103), effectively, anticipating the "neuroaesthetic approach" (Bruno, 2009: 92), which has been further developed by Neidich, among others, and widely discussed in art criticism since the turn of the 21st century.[5]

How do optical devices influence one's brain structure, and alter its prevailing neuro-physiological states? This question (at least, from a scientific neuro-psychological point of view) is beyond the

scope of this essay. Nor does it explore the (artistically less interesting) phenomenon of evoking visual stimuli in order to surprise or manipulate the viewer. Rather, it traces Neidich's artistic interpretation of low-tech devices from neuro-ophthalmology, such as the prism bar and Lancaster glass, which became, in his hands, tools to explore the possibilities of what he recognises as *hybrid interfaces*. What Neidich calls *Hybrid Dialectics* are neither a diagnostic method used to determine abnormalities of the brain, nor are they merely meant to obtain particular artistic expressions, but aim at a middle ground, or to "produce new kinds of images in the hope of enlisting in the viewer new sensations and habits of perception."[6]

The concept of extended cognition plays a mediating role in this practice. Neidich believes there is a "plastic brain" (Clark, 2008: 68) which is subject to altering states inside the artificial milieu, where a series of designed and engineered apparata are embedded in analogue and digital culture, in order to make scopic regimes immediately usable. By connecting the history of vision to processes such as cinematic suture, Neidich's interest lies less in extending the perceptual cognitive apparatus, and more in discovering its degraded and infirm margins.[7] It is in the field of rupture and manipulation of the institutionality of visual culture that Neidich intervenes, pushing forward the discussion on the theory of the "distribution of the sensible" (Rancière, 2006)[8] and the "economy of attention" (Mandel and Van der Leun, 1996).[9]

The focus of this essay lies in the overlap between the exploration of tools (more specifically, optical devices) considered as metaphors for occidental cultural thinking, and their literal use in self-conscious representational strategies. The exploration of technical and optical devices in art is still often organized around the phenomenon of (mis)leading viewer's attention to the wrong site, especially when visual phenomena evoke first of all sensational pleasure. Warren Neidich's early photographic pieces, however, show an oscillation between the *techné* of the artistic process and the realm of the artistic invention.

One of Warren Neidich's earliest artworks is the video *Brain Wash* (1997). A man sits at a table and focuses on a rotating black and white striped drum. This is an "optokinetic drum"[10] which is used as a simple device for stimulation and assessment of optokinetic nystagmus, an involuntary eye movement. *Brain Wash* represents Neidich's first application of his *Hybrid Dialectics*. The strategy is closely aligned with Marcel Duchamp's objet trouvé, and the general practice of revealing the double-sided, hybrid character of a work of art as dependent on its authoritative

context. The camera/viewer observes the man staring at the drum, while a close-up of the eyes tracks the eye movement of the subject. This sequence, revealing the subtle vibration of the eyeballs is followed by a cut away shot of the eyes of the man at a distance which now move rhythmically to and fro, left and right. In the next scene the viewer visualizes a 180 degree pan of the horizon which is made to shake and tilt.

The deliberate shaking of the hand held camera in this sequence references the unstable framing techniques that characterizes Lars von Trier's aesthetics of *Dogma*. At the same time, linking the camera-as-apparatus to the general apparatus of seeing nods to Duchamp's *Handmade Stereopticon Slide* (c. 1918-1919) a work which fused geometry, projection and perception to paradigmatically show the horizon of the sea and an octahedron. According to Neidich himself , the sequence depicts the "erratic spaces of a world in transition."[11] At the conclusion of the 180 degree camera pan, there is a cut to the man again (revealing, apparently, that it was not he who was looking), followed by a close-up of the eyes again looking left and right, ending in a fade-out of the rotating optokinetic drum. The whole story is accompanied by a fast-paced sound track from the Japanese pop group *Pizzicato Five*.

Brain Wash can be seen as sort of a comedy, or caricature, in the sense of E. H. Gombrich's theory of identities that "do not depend on the imitation of individual features so much as on configurations of clues (…)" (Gombrich, 1986: 292). Formally, the narrative of the film is based on breaking-up filmic conventions, by juxtaposing sequences that give one the impression that they fit, when in fact they don't. Similarly, Neidich does not guide the perception of the viewer to clues simply to communicate content, but in the quite opposite direction. Showing the optokinetic nystagmus caricatured by eyes moving is nonsensical from a neuro-scientific point of view, as the one really has nothing to do with the other. This example exhibits how two divergent concepts collide. This is even more obvious in the tilting shore sequence; a sequence designed to depict the internalised vision of the protagonist. Again, it is neither nor. As the camera moves around and stops at the body of the man, the sequence cites a "double-vision" film convention, in which it is unclear who is who and who sees what. This is Neidich's manipulation of the cinematic gaze and – above all – his engagement in the philosophy of perception.

Brain Wash effectively introduces Warren Neidich's multimedia practice, which is underpinned by a deep knowledge of the physiognomy of the eye and the brain, the psychology of perception and

the history of art. He uses optical devices as a starting point to explore his core questions. In *Brain Wash,* and elsewhere, he uses low-tech devices and, as in this case, cinematic (that is perceptional) conventions, in order to visualize what effects and shapes the brain, and deceives the eye. The optokinetic drum at the beginning and the end of the video serves as a parenthesis. If Neidich had executed this image as a painting, it would have resembled something like Bridget Rileys' *Cataract 3* (1967) whose title, not uncoincidentally, is also a notion from ophthalmology. Both Riley's and Neidich's artistic expression is inspired by a negative connotation: the defect of vision.

Working with the negative[12] Neidich reformulates what is considered a damage to or a loss in vision. In another series of work, the photographs *Double Vision* (1997-2000), he transfers the idea into a paradoxical but positive result. Double vision, or diplopia, is a dysfunction of one or both eyes, or a misalignment of the eyes, which results in seeing double. Fascinatingly, the brain is able to correct and suppress the information of one eye because movement through space proves evolutionarily speaking difficult and even dangerous.

Double Vision, Louse Point (1997-1998) is a series of photographs that show scenes of bathing people at the beach of Louse Point on East Hampton, New York. The images are a reminder of the recreational gatherings of the well-known artists and writers Willem de Kooning, Jackson Pollock, Lee Krasner, Helen Frankenthaler, Clement Greenberg and others in the 1950s. Neidich's images obtain a touch of nostalgia by equilibrating the photographic colours, mainly by reducing magenta that gives the impression as if the photographs had been exposed to too much sun.[13] The images show an unusual element: translucent blue and red circles, reminding one of the strange phenomenona of orbs.[14] Unlike the opaque blobs on John Baldessari's faces, Neidich's spheres do not replace, mask or abstract, but float and shimmer translucently, like extraordinary atmospheric phenomena – blue tinted lunar eclipses, red fireballs, but also the diaphanous coloured glass of a Claude's glass. There is something mythical about them with their coronas, as they seem to move "spot lighting" the outer world like a light ray either ignoring people in the image or aiming directly at them. By being translucent, the coloured circular surface marks undoubtedly an area between the viewer and the scenery.

The phenomenon of double vision is not seen here as a misalignment but as a movement into visual depth towards the vanishing point; created by placing a Lancaster glass in front of the camera lens,[15] Neidich's apparatus refers to the single point perspective construction, as an expression of the schema linked to the social, psychological, cultural and the technical which

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Erwin Panofsky called the "symbolic form" (Panofsky, 1991).[16] Yet there is also the artist's other interest in visual perception in a more physiological way than Panofsky. Neidich's photographic work also marks a spot as an area of afterimage, spotlighting hidden areas of the science of neurology with a hint to "cognitive ergonomics" as he calls it (Neidich, 2003: 21). The phenomenon of afterimage here serves as a metaphor of what can be seen in this image production, an amalgam of remembrance, inner perception in the shape of visualized visual traces of the brain cortex, and most of all the result of an artistic process to break up the mimetic function of photographic representation.

Warren Neidich makes ample use of optical devices in his early art works. Another work, *Shot Reverse Shot* is a series of performances, documented by a video and a series of photographs. Once again, he is not reformulating the traditional filmic strategy of the shot reverse shot, but rather using the technique literally, in order to obtain both unknown visual experiences and also distinct viewing structures. The prism bar, which is held in front of the protagonist's eyes, fans out perception in both ways. The object is a neurological and ophthalmological device to measure an eye's deviation after a stroke or a trauma, for the purpose of a surgical reconstruction of the misalignment and attempted reconstitution of single vision. In *Shot Reverse Shot* it is used as a cadenced glass to look through a window - the traditional metaphor of vision since the picture pane depictions by Leon Battista Alberti in *De Pictura* (1435) and Albrecht Dürer in *Underweysung der Messung* (1538). Exploring the situation of the two protagonists – viewers, one of them filming the scene – who look through the prism bar standing in front of each other, and experiencing a refracted view, one is reminded of another concept of perception; Jacques Lacan's oft-cited three diagrams from *The Four Fundamental Concepts of Psychoanalysis* (1981). As Martin Jay points out, Lacan was inspired by the Surrealist magazine *Minotaure,* and his friend Roger Caillois, who in the 1935 essay 'Mimétisme et psychasthénie légendaire', published in the pages of the magazine introduced a dihedron to "clarify the relation between eye and gaze (…)" (Jay, 1993: 365).

Famously, Lacan developed the idea of the screen (*écran*) as the site of correlation between one's eye looking at an object and the gaze (marked as "light") looking back. Lacan uses the metaphor of the camera to come to the second diagram[17] and his understanding, that what "was looking at me at the level of the point of light, the point at which everything that looks at me is situated (...)" (Lacan, 1981: 95 and Jay, 1998: 365).[18] For Lacan, the screen is the place of the subject who is not only "caught, manipulated, captured, in the field of vision," (Lacan, 1981: 92 and Jay, 1998: 364)

but who also embodies the paradox of being in between light and opacity simultaneously. Through the screen concept, the single focus of the God's eye-view is clearly abandoned.

Neidich's work *Shot Reverse Shot* helps to contextualize these concepts, by understanding the prism bar as a place of interference. The viewing structure is antidromic, even equally administered between different protagonists who are all from mixed ethnic backgrounds. Each one embodies different historical conceptions using the simple analogue device of a prism bar or the digital video camera. One can argue that the gaze of the protagonists, documented on the one side, unmediated on the other, is a paradigm of an altering subjectivity in process, through the aid of a prosthesis, and therefore a clue to the neo-liberal global world order governed by the WWW.[19] The thesis syncs-up with Lacan's notion of the screen as a place of mediation. Kaja Silverman commenting on this relationship proposed that Lacan's screen is also subject to social and historical interpretations "by describing it as that culturally generated image or repertoire of images through which subjects are not constituted, but differentiated in relation to class, race, sexuality, age and nationality," (Silverman, 1989: 75-76); an observation which also possesses validity in Neidich's work.

With the direct deployment of the prism bar in the *Shot Reverse Shot* project, one can observe that, in its playful use, it instigates the dissolution of personal space and boundaries that determine personal interactions. Though vision is refracted, the more general process of seeing, not only more, but above all unconventionally, is very much related to Neidich's neuro-biopolitical interests. Whereas *Shot Reverse Shot* can be seen as part of Neidich's interactive projects, the last photographic series being discussed in this paper is dedicated to photography as a medium of guarding the past (actually the present in its moment of capturing) for the future. It is also part of Neidich's extensive explorations into the "History of Consciousness".

Law of Loci was undertaken by Neidich over the course of approximately fifteen months in 2002-2003 when the artist visited his ill father's home outside New York City regularly. The term describes the principle memorization technique of the ancient world, as described by Cicero in *De Oratore*. Cicero employed the method to memorize his speeches, walking mentally through the area of the Forum Romanum. Simonides of Ceos, the technique's legendary inventor, cited by Cicero, found that by using the spatial relationship of the imagination of a house, one is able to recall things better. In Neidich's own case, instead of walking mentally through the space of the house he grew up, he physically wandered through it, from room to room, and space to space,

revisiting memories from his childhood and adolescence. This physical aspect of the project was pivotal. By moving through his parents' house and its environments, the artist explored and questioned one of the core functions of photography: capturing traces of actuality. As Roland Barthes showed poignantly in *Camera Lucida* (1981) the photograph occupies the place of remembrance and mourning. It remains striking that capturing images of beloved persons and places, the present of that particular moment is inscribed into the surface of the filmic material the very moment it is taken and is turned into the past. Neidich's series of *Law of Loci* above all visualises this paradoxical nature of photography.

The photographs of *Law of Loci* were taken through a prism bar with positive-negative Polaroid film material. They depict a fragmentary vision of the house, views from its inside, like photographs hanging on a wall, curtains, and Neidich's father. They show the immediate environments; a lake, a shack, tables and chairs in a garden, and trees. The pictures are sometimes blurred, often tilted, and black and white. Employing Polaroid film material was to capture a snapshot instantly, finding a visual analogy of an experience that cannot be caught in a picture without undergoing essential transformations. As Thierry de Duve argues, the "snapshot is a theft; it steals life. Intended to signify natural movement, it only produces a petrified analogue of it. It shows an unperformed movement that refers to an impossible posture. The paradox is that in reality the movement has indeed been performed, while in the image the posture is frozen." (De Duve, 1978: 114). Neidich's method of producing these images was not only to move physically through space in order to find views which represented his remembrances of the house at that particular moment. He also had to move the prism bar in order to split up his own vision and receive an aesthetic expression, a situation which in some ways mimics early movement studies of the history of photography. Hence the effect of instant photography was not based on capturing the fluidity of life, but on seeing the effects of the prism movement in the moment when the images were taken.

Not only the image is frozen, but in Neidich's case even movement is brought to a standstill. By using this unorthodox photographic practice Neidich found a way to match the physical world with an analogue of his mental vision of the non-representable, arguing that memories are unable to be captured in a picture and can only be visualised by finding a metaphorical counterpart. Memory is considered non-representational, continual and performative, as Gerald Edelman and Giulio Tononi recently argued: "(…) memory in global mappings is not a store of fixed or coded attributes to be called up and assembled in a replicative fashion as in a computer. Instead, memory results from a

process of continual recategorization (…) There is no prior set of determinant codes governing the categories of memory, only the previous population structure of the network, the state of the value systems, and the physical acts carried out at a given moment." (Edelman and Tononi, 2000: 97-99). This idea of a performative mutating memory could be also seen in relation to Siegfried Kracauer's concept of the photographed object or person as a ghost. In the early essay "The Photograph" (1927) Kracauer describes how capturing a photograph of an actuality is gradually sliding into the far past and that there is always a drifting away of the past from the present. As Heide Schlüpmann points out, Kracauer's concept of photography in the interwar times was very much influenced by Marcel Proust's *A la recherche du temps perdu* where the French novelist delineates his encounter with a photograph of his grandmother (Schlüpmann, 1991: 115).[20] The image of the grandmother plays a similarly crucial role in Kracauer's essay because he recognises a sort of estrangement in it (Schlüpmann, 1991: 116)[21]. Put more directly, Kracauer sees a dichotomy between the photograph and the memory arguing that memory "encompasses neither the entire spatial appearance of a state of affairs nor its entire temporal course. Compared to photography, memory's records are full of gaps," therefore "memory images retain what is given only insofar as it has significance. Because what is significant is not reducible to either merely spatial or merely temporal terms, memory images are at odds with photographic representation." (Kracauer, 1995[1927]: 50).

Kracauer's understanding of photography is not primarily anchored in the ontological concept of the analogue print with a reference to positivist science, as exemplified by Roland Barthes' concept of the referent. He recognises different temporal states of a photograph and makes clear that even though temporality is written into the process of registering an image, the photographic image does not conserve the depicted but rather destroys it. This can be seen in his exploration of the photographs of different women such as his grandmother. Most importantly his research is based on a present evaluation of the photographic effect and in distance to the various pasts which are trapped in the photographs.

Neidich's *Law of Loci* is not just an example of photographic imagery unable to consistently preserve the past, and even less as a visualization of personal memories. His conceptual approach is based on pivotal theories of photography and the mnemosynic ideal of capturing the personal and the present which is in flux, and therefore in danger of being lost, becoming the past immediately. But the process of production is technical and a re-evaluation of photographically registered movement, based on the structure of the apparatus. Even though the images of *Law of Loci* recall Etienne-Jules Marey's geometric chronophotographs or Eliot Eliofson's photograph of

Marcel Duchamp decending a staircase,[22] Neidich's process is much less focussed on the exploration of the physical conditions of light exposure and film speed. It is not only linked to the inability of photography to capture memory in its entirety, as also Kracauer argues. The obviously registered movement is rather produced from a third place, with the help of an optical device with its direct reference to the science of perception, and the failure of human vision.

Though quintessentially analogue, the pictures of *Law of Loci* must be understood as unfathomably detached from its referential production. But if an understanding of these works demands a clarification of its production process, their true significance remains unclear – just as in the examples from the past when magnifying glasses made so far unknown worlds visible. Neidich's early photography works both ways; its conceptual nature making an understanding of the metaphorical meaning of the artist's use of optical devices visible. But despite the media-philosophical and the literal use of these objects, the photographic works still remain enigmatic, attached not to the visible world, but to the unreachable.

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Susanne Neubauer is an independent curator and art historian. She was curator at Kunstmuseum Luzern, Switzerland, from 2002-2009 and is currently a PhD candidate of the University of Zurich. She is the author of numerous articles on contemporary art and the art of the 1970s. Her main interest is in the history of the slide projection, documentation and publication of ephemeral art, curatorial strategies and the reception of Latin American art in Europe. Her recent essays are on Ree Morton, Lygia Clark and Paul Thek. [email: neubauer@access.uzh.ch]

[1] The work *American History Invented* from 1989 is a thoughtful use of different historical printing materials, camera lenses, and archival display methods. See (Dietz, 1989).

[2] "The apparatus is thus always linked to certain limits of knowledge that arise from it and, to an equal degree, condition it". See Michel Foucault's understanding of the apparatus which is of particular interest for Neidich. (Foucault, 1980 [1977]: 194-196).

[3] Baudry distinguishes between *l'appareil de base*, the technical devices of film production and projection, and the *dispositif,* which he considers the physical and psychological arrangement of the projection and the viewing subject. (Baudry, 1975: 58-59).

[4] The contrary case, I would suggest, is a walkable camera obscura where the projected image, depending on the weather outside, is usually not very well visible and therefore – visually – a disappointing matter.

[5] Neidich began lecturing on neuroaesthetics in 1995 at the School of Visual Arts, New York. See on his take on neuroaesthetics and the concept of neural plasticity: Journal of Neuro-Aesthetic Theory (www.artbrain.org; founded by Warren Neidich), (Neidich, 2009b: 114-119), (Livingstone, 2002), (Stafford and Terpak, 2001), (Linke, 2001), (Zeki, 1999), (Breidbach and Clausberg, 1999), (Clausberg, 1999).

[6] Email to the author, April 19, 2010.

[7] On the "intoxicated sight" see (Neidich, 2003).

[8] Neidich has referred several times to the work of Jacques Rancière, claiming that particularly in the mutation of the so-called "distribution of the sensible" the power of art can be found. Rancière discusses modes of participation (the distribution as both inclusion and exclusion of a common social world) by the category of the sensible, that is to say by different anti-political aesthetic regimes which are opposed to a political order. Reformulated as "redistribution of the sensible" Neidich's own theoretical writing links the concepts of power of Michel Foucault and Gilles Deleuze to Maurizio Lazarrato's concept of "noo-power." On this discussion see (Neidich, 2009a).

[9] One of the concepts of economic information theory which stresses the importance of mental engagement in cyberspace . In the sense of Thomas Mandel and Gerard Van der Leun, "attention is the hard currency of cyberspace." (Mandel and Van der Leun, 1996).

[10] I do not agree in seeing a zoetrope in this device as many other writers have referred to when explaining *Brain Wash*, including the artist. A zoetrope is a precinematic device which is created by a round cylinder obtaining observation slits and a series of images such as a galloping horse which are attached in the inside. While looking at a turning zoetrope, one's eyes focus on the image(s) inside which causes the effect of the illusion of a moving image. There is no eye movement in itself which distinguishes the core function of a zoetrope from a optokinetic drum.

[11] "At the heart of this video is the notion of the cataclysmic shift of the viewer of the late 19th century as he or she transitioned into the early 20th century. A viewer in which cinema not photography would produce the conditions of perception and cognition." Email correspondence with the author, April 19, 2010.

[12] Stan Brakhage's experimental film *Prelude: Dog Star Man* (USA, 1961) where he scratches analogous film material or uses distorting lenses in order to receive unknown imagery to the eye is another example.

[13] Photographs change their colors due to chemical instability of the photographic paper. Magenta and yellow is reduced when photographs receive too much light, cyan and yellow are more instable in darkness.

[14] Some people believe that orbs are paranormal balls of light on photographs or video film.

[15] Neidich's sculptural and photographic works, also the *Hybrid Dialectic Device*, were shown in the exhibition "The Mutated Observer, part 1" at California Museum of Photography in 2001.

[16] Panofksy's monolithic text from 1927 is a genesis of the modern concepts of perspective as an outcome of the symbolization of the world. He refers to Ernst Cassirer's writings on the "philosophy of symbolic forms" (1923-29) and explores the psychophysiological conditions of the human perception of space as well as its mathematical and artistic implementations.

[17] On Lacan's use of the camera as metaphor or an "imaginary apparatus" see (Silverman 1989: 72).

[18] In this passage Lacan offers an anecdote of a floating sardine can in water. Lacan explained that the can "was looking at me, all the same. It was looking at me at the level of the point of light, the point of light, the point at which everything that looks at me is situated – and I am not speaking metaphorically." (Lacan, 1981: 95), cited after (Jay, 1998: 365).

[19] The exploration of this condition influenced Neidich's later work, *Earthling*. See (Neidich, 2008).

[20] "I was in the room, or rather I was not yet in the room since she was not aware of my presence… Of myself… there was present only the witness, the observer with a hat and traveling coat, the stranger who does not belong to the house, the photographer who has called to take a photograph of places which one will never see again. The process that mechanically occurred in my eyes when I caught sight of my grandmother was indeed a photograph." Marcel Proust, *In Search of Lost Time. Swann's Way*, quoted by (Schlüpmann, 1991, 115).

[21] Schlüpmann argues that this photograph in the 1920s was retrospectively already part of film, as its concept represented "the repression of death, the continuation of life". (Schlüpmann, 1991: 116).

[22] Reproduced in *Life Magazine*, Nr. 284, New York,