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# **Camera and Image : Mediator and Interface**

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## **Abstract**

How can art, specifically photography, illustrate the limitations of vision? What do those limits reveal about perception and knowing? To explore these questions two distinct mechanisms need to be discussed in relation to creative practice, Paul Virilio's augmenting lens that forever changes the photographer's perception and the image acting as an object for both Maurice Merleau-Ponty's embodied experience and Jean Baudrillard's simulacrum. The photographic image becomes an index by exposing the relationship between photographer and image. The camera is a tool, to Virilio a prosthetic eye, which immediately affects the photographer's perception of her environment. The phenomenal world is the one that is photographed, a subjective experience. The tension between surface and reality, image and object, removes the photographic experience from an experience of the real. The making of the image closely parallels the act of viewing the image. A dual experience emerges from the photograph, the creation of the image and the viewer's act of reading, inferring. An image, as an index, is open to multiple interpretations, placing equal weight on each participant, viewer, and creator, so that there is no hierarchy of interpretation, experience, or meaning. In this thesis these questions are explored in relation to a creative practice embedding theory with process and outcome.

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## **Introduction:** *embedding inquiry into the photographic relationship*

### **Finding the Real:** *the point of inquiry*

**In advance of formulating** my research question, I was photographing horizons [1]. However these were not horizons found at the point where land meets sky, a line that defines a larger than human scale. Instead I first saw them in my water bottle, specifically the edge where water meets air, an object on the human scale. I discovered this space purely by accident, while laying my head on my desk after a long afternoon of reading. My tired eyes in the dimming light shifted focus between background and foreground, as one might focus a manual lens, so to speak. What space was this I had just discovered and how did the mechanism of my vision lead to that space?

Underlying and driving all my research and practice this year was the urge for an ontological unpacking, a need to peel back layers of understanding and knowing, my eternal four-year-old self incessantly asking why and how. This observation marked my interest in the development of a reflective research method incorporating questions, practice and theory; I had found a liminal space which in turn initiated my point of this inquiry. Starting with these questions of how the camera mediates the photographer's space, my research quickly became a practice-led inquiry into the manifold relationships among photographer, camera, image, and viewer.

My need to 'know' and my deep satisfaction in understanding drives me to position myself in space and mediate that exploration with my camera. To understand how the nature of photographic subject and photographic object subtly shifts throughout the different stages of the photographic process some fundamental assumptions about what I call the photographic



1. M. Samsell. Untitled test (waterscape). 2008



1. M. Samsell. Untitled test (waterscape). 2008

relationship needs to be unpacked and the respective roles need be defined and examined. Investigating the location of the subject and object within the photographic relationship is at the core of the ontological unpacking. In this essay, each aspect of the photographic relationship will be broken into components and explored through a series of three projects. The method of inquiry is reflective, requiring consideration of work, history, and theory to answer the questions.

**There is a simple statement** that follows the relationships embedded in the photographic process; *the photographer uses a camera to take a photograph that is observed by the viewer.* I call this the *photographic relationship* and use it as a point of investigation leading to multiple questions. Rather than a singular research question to lead a studio practice, I use studio practice to test and explore the complexities of the various inter-relationships within the photographic process. That is, how does the camera affect the photographer's perception of and approach to their space? How does the viewer interact with the image?

A need to organize and clarify these photographic relationships led to my first project, an exploration of the spaces I inhabit through construction of pinhole cameras. Three series emerged from pinhole explorations, a series of images documenting my process of making the cameras, a series of photographs of the cameras, and lastly the resulting pinhole images. The handmade nature of the pinhole camera slows down the photographic process, requiring careful attention and calculation with each step. As the process is slowed down a narrative unfolds of before, during and after the exposure of the pinhole image. By examining this narrative the pinhole project acts as a cipher, helping to frame the photographic relationships between photographer-camera, photographer-image, and image-camera. Through this process of dissecting, an understanding emerged of how the camera mediated my space and I realized the complexity of these relationships.

## **Warp and Weft:** *toward a reflective methodology*

**As my inquiry progressed**, and the theory and relationships unravelled, several common threads became evident, strands of clarity in what threatened to become a confusing tangle. These threads are woven throughout my research practice and inquiry in a non-linear tapestry; the weft to my warp. As such, the organisation of this explication will follow the rhizomic, to borrow a term from Deleuze & Guattari (2004, pg. 12), progression of my studio practice, or warp, as my research wefts through three aspects of inquiry.

The three threads are theory, art practice of other artists, and language. Each thread is a different mode of inquiry underpinning and integrating my studio practice. Reflection on each thread in relation to my practice informs and constructs the body of work. In hopes to unify my creative process, the work will be described linearly as the various threads are woven into the practice.

For example, as I constructed the pinhole cameras the inherent mathematical language needed to create a photograph became evident. Every measurement was methodically taken then calculated as I navigated through my environment with my camera. The experience leading up to the image exposure could be described as Maurice Merleau-Ponty's embodied perception; by moving through space an object, in this case the camera, can be perceived. As I constructed the camera and it turned into a singular object and a subject of the making process, I realized the understanding of the subject and object is the core of the ontological unpacking of the photographic relationships. When the photographic relationship is broken down into pairs, i.e. photographer-camera or viewer-image, one becomes subject as the other acts as object. As one of the conclusions

from my first projects, this informed the hypothesis of my next project. The hypothesis that the camera is *object* and the photographer is *subject* contextualizes my earlier tests of found horizons and fully develops as my second project.

**Throughout this paper**, my practice will be described in relation to the threads embedded in it. The first thread is theoretical. The subject and object are rich topics that underlie theories of perception. In an attempt to unpack the subject-objects relationships, I use Paul Virilio's concept of the camera as prosthetic eye to investigate Merleau-Ponty's phenomenology and the performative photography of Green & Lowry and Margaret Iversen, and later define the terms haecceity, transparency, surreal, and mechanism.

In terms of the index and performativity as discussed by C.S. Peirce, Iversen and Green & Lowry, a photograph can embody a residue of the photographer's intent and actions. As an index the photograph reflects the photographer's experience, and reveals the mechanisms of the photograph. The more transparent these mechanisms, the more reflective the image becomes for the viewer; the viewer's analysis becomes performative. In all three projects, the image has a different performativity as the images index changes. The difference indices are highlighted in the titles of each series within my pinhole project, *Dark Rooms*, *Positives*, and *Records*.

**The second thread** concerns language, verbal, visual, and mathematical, to explore the concepts of subject and object and the photographic relationships. Language in a reflective practice operates as a model for examining modes of thought, reflected in the underlying terminology of subject and predicate, noun and verb, function and integer. Without launching into a full semiotic or etymologic discourse, clarification of terms, such as index and the conception of subject and object, and their

usage in the photographic relationship will be explored through language. This is most evident in my process of making pinhole cameras and images as I act out the photographic process using mathematics in relation to the action of verbal language.

Examining language in the photographic statement reveals underlying conceptual assumptions and symbolic relationships. *The photographer uses a camera to take a photograph*; the photograph is acted upon by the camera which is a tool of the photographer. While this might seem like an obvious statement, dissecting the sentence into the nouns and verbs, subject and predicate, highlights Virilio's (1994) supposition that the camera is a prosthesis and the photograph is a surface acted upon which reflects the relationship between photographer and camera. In the statement, this passive action of the image is the performative photography that Green & Lowry (2003) describe, which I will specifically address in a more detailed discussion of my pinhole project. Understanding of language use serves to inform decisions in my practice, most notably in my final work.

The verbal relates to the cognitive process; the mathematical describes the act of making; and visual language is the final outcome, an interface between the two components. Now that I write this it seems obvious, and as I was making my pinhole cameras it *felt* obvious, but it was not until my third and final project photographing walls that I knew how the connection between verbal, visual, and mathematical reveals the photographic relationship. Photographing and printing the final piece, an 8.48 meter long print of a wall photographed at a one to one ratio, required careful calculation of distances and lens focal length. As I first tested this on smaller subjects, such as the windowsill in my studio, I noticed that with certain lenses objects in the foreground of the image could be photographed at true-to-size, but in the same image the background will appear larger or smaller than true size.

While as a physicist I understand the principles behind this phenomenon, as a photographer I had become complacent in accepting the image I see through the lens as accurate. By using the camera as a tool for analysis instead of simply recording, the mechanism or language of viewing becomes transparent. Only once the camera assisted in analysis of my windowsill and proved to be inaccurate, did I experience the breakdown of mathematical language in relation to visual. This became evidence that the camera can indeed run the risk of becoming Virilio's prosthetic eye and altering perception.

**In the third and final thread** I will examine the works of artists with specific reference to practice and dialogue. Historical place and contemporary involvement are both underpinned by theory; as such, theory will be used to reflect on history and practice in relation to my questions into the camera's role in mediating the photographer's environment as reflected in the image. The photographs of Gunther Selichar turn the subject of the image onto the medium itself. Uta Barth's installed photographs reveal the viewer's position within her photographic relationships. In terms of performativity and haecceity in relation to my work, I will also turn to Sigmar Polke, Barbara Probst, Kazimir Malevich, and Laszlo Moholy-Nagy.

**Photographic Actions:** *images as embedded results*

**To explore** the nature of what a photograph is and how it actually operates, my practice has led to the limits of photography, finding where the camera can no longer record what is in front of the photographer, where the film and paper become obvious. In my final work, as the viewer moves towards the image, the resolution disintegrates into grain and then into pixels. Even in my efforts to maintain a calculated approach to the wall I photographed, my hand as photographer is made apparent and the relativity of perception becomes evident. Within my studio exploration I employ the camera as a tool for revealing both the

depths and the corresponding limits of photography's subjective space - from constructing pinhole cameras, and subsequently recording every step of that process from camera to image, to creating an alternative sense of space by turning edges into false horizons. In my practice which has become increasingly informed by theory, I use my cameras as tools in order to 'test' theories and push the limits of perception, to understand the operations of the camera, photographer, image and viewer.

A photograph is an object in its own right, a mirror, an interface, a surface that bridges the viewer to the photographer and her camera. In this photographic relationship the object photographed, the subject of the image, is secondary to all other participants; it is the photographer's methodology and choices which take precedence. If the image is the interface between viewer, photographer and all intermediary devices, then might not it be said that the camera acts as the interface between photographer and her environment. The act of looking through a lens immediately changes the photographer's perception of, and her role in, that environment. At least, or at last, this is the moment where I begin my inquiry.

These relationships will be revealed in each step of my photographic process, culminating in my final image which serves as the interface between my intentions and the viewer's preconceptions.

## **Photographer as Subject:** *the pinhole camera as tool for processual inquiry*

### **Constructing a Cipher:** *from object to camera*

**In direct correlation** with the image as index, I chose a method of visual experimentation that would embody my research area. To my mind, the use of pinhole photography perfectly paralleled the research area with the research method, becoming a cipher for the photographic relationship. It is important to note that my interest in the pinhole extends to its creation as an object; my choice in using pinhole cameras is not based on one of affect or imagery, but instead is a decision rooted in the conceptual outcome of the photographic process. Not only does the pinhole image record the space, but the actions of the photographer are recorded. By using such a hand-made method as the pinhole camera, my decisions as photographer are further emphasised allowing for the reflectivity needed to engage the question of photographic roles.

Early on I consciously chose to be pragmatic in my decisions and approach, almost a quasi-scientific experiment. Arbitrary decisions are subjective. A more clinical approach, a conscientiousness of decisions, opens the mechanism of the process to analysis. A thorough documentation of my entire photographic process resulted in three series emerging from my pinhole project – a series of images documenting my process in making the cameras (see Appendix IA), a set of images of the actual cameras (see Appendix IB), and the positive images resulting from the pinhole cameras (see Appendix IC).

My first decision was to choose ‘my’ spaces. I chose the spaces in which usually I reside: my workplace at City Gallery Wellington, my studio at Massey University, my home, and a friend’s home. Finally I chose a space randomly (by coin toss at intersections) with which I had no prior comfort level, ending up at the Basin Reserve. From within the space I chose the

objects to turn into my camera bodies. The objects were chosen based on the practicality of converting them to a light-tight container, their inherent usefulness to the space, their relative disposability and their ability to return to their original function once turned into cameras. The people who share those spaces with me (studio-mate, co-workers, friend, and partner) documented/photographed my process of making my pinhole cameras.

**The first space I explored** was the one with which I was the most comfortable. A nearly empty tea-box was an easy choice because of its shape and size as well as the familiarity and space in which it is situated in my flat. While making the camera I became more aware of little details about the tea-box [2]. Every morning when making my tea I have issues opening the box, little extraneous flaps along the top edge get stuck in the lid. As I struggle early in the morning to make tea I can only guess that these flaps exist to restrain the tea bags from leaping out of the box.

It was only as I carefully worked on the tea-box to make it black and light tight, did I realize that my early morning frustration was partly accurate. The flaps helped deter direct light from entering through the lid, and so I imagine that they also do in fact assist in keeping the tea in the box. As I was paying attention to the careful shape of the flaps, the idea of returning the camera to the function of a tea-box became enticing. This tea-box above all other tea-boxes had more meaning to me; I had considered all of its details and converted it to my needs. And so, at the end of photographing my home the tea-box returned to its mundane function a unique object.

The tea-box will return to its original function, but as an object it has been altered. The second series of photographs [3], the images of the cameras, elevates them to special status as an object. Similar tensions between object and function arose in my studio camera and my work camera. At the gallery I used a discarded coffee cup. Lying on its side pointed at the entrance, it



2. M. Samsell. *Partner* from the pinhole series *Records*. 2008



3. M. Samsell. *Bell* from the pinhole series *Dark Rooms*. 2008



4. M. Samsell. *Home* from the pinhole series *Positives*. 2008

looked like an afterthought a piece of trash. I had to keep on guard so that nobody returned it to the trash while it was functioning in its new role as camera. In my studio space my locker was turned into a camera. People actually sat on it and leaned bags against it while it was photographing, requiring me to usher them away when the exposure was over. What became most obvious from this part of the experiment is the overlooked objecthood of the camera.

**Based on the extended exposure times** required from most pinholes, making a pinhole image is a different experience than other photographic processes. The slow shutter speed required me to physically distance myself from the camera in order to disturb the image. Detachment from the camera allowed me to be more interactive with the space. The length of the exposures also prevented the images from recording any person temporarily moving across the 'frame'. This phenomenon, unique to long exposures, distanced me as the photographer from the act of recording to the point where I no longer felt attached to the outcome, the image. As I distanced myself from the camera I realized the making of the camera was more important to me than using it. The documentation of the making reflected more about my relationship to my space than the pinhole images.

The pinhole image as a record became secondary to the act of the moment. This was the moment, my moment, of performative photography, when the act of making and of becoming surpassed the need for a specified outcome. My apprehension about the outcome of the image was relieved as the photograph no longer became aestheticised and became primarily the outcome of an act. As a processual practice, the documentation of my process became more important than the camera or the image. Through this reflective moment the photographer becomes the subject.

The point of detachment from the outcome, the image, also involved a certain freedom from aesthetic decisions; similar to Darren Glass' pinhole cameras in which the camera is emphasised and the image provides the documentation of his camera at a particular moment (Gus Fisher Gallery, 2003). When first photographing the view from my tea-box, I began to notice little things in my living room that bothered me as aesthetic decisions in a photograph that I would otherwise ignore. The everyday objects in the periphery are not aestheticised, but offer a deeper context for the scene, the overlooked items that help define a person's environment. The sincerity of the image and the space is as important to my pinhole images as the lack of periphery and contextualizing information is to the horizons in my water bottle.

**The finding and making** of the camera became as important to the image as anything else. This process was recorded by an observer, a co-habitant in the space, my home, my studio, my work place. Just as the pinhole images reference my act of making in relation to the space and the camera, the images documenting my act of camera making inadvertently documented my relationship with the person photographing me. This quickly became an intense and personal process in which I learned more about my approach to my environment and interpersonal relations than I ever expected. My co-habitants also become less visible photographers and subjects, a reciprocal relationship with me documenting and being documented. Perhaps being documented didn't change my process, but it changed my own awareness of the process: *I am photographer. I am subject.*

**'Residue of an Experience':** *theory into process becomes performative*

**At this point**, as I test with multiple photographic media, it would be easy to slip into an inquiry into Rosalind Krauss' post-medium discussion, addressing the deeper question of where the photograph resides. The medium of photography expands

as technology develops, raising the question of what constitutes a photograph (Osborne, 2003, pg. 64-65). For the purpose of my research, photography, as well as all possible media, is a tool for my inquiry into the process and how that process affects meaning and interpretation. As such, technology will only be discussed later in association with Virilio's prosthetic eye. So the question is not what the photograph is, but what it does. How does the interpretation or meaning of the photograph shift as its referent changes?

The medium is the particular means to define parameters for inquiry; as a tool for inquiry, the medium records the investigation of itself, as in my pinhole images. In each pinhole series, the image indexes a different subject. The index of the pinhole images is unique as it obliquely refers to the whole process [4]. To more closely examine the indexicality of the pinhole as defined by C.S. Peirce (1931), I go beyond Roland Barthes (1981) to look at the performative ability of the photograph as discussed by Green & Lowry (2003) and Margaret Iversen (2007).

**Peirce defines the index** as one of three types of sign that 'signifies its object solely by virtue of being really connected with it' (1931, pg. 211). The index is not descriptive nor does it imply any meaning; the index is only a referee that points to a referent. In the case of a photograph, the image indexes the subject. The viewer applies their own meaning, makes their own references; an index has no prior meaning or connotation. The presumed subject of the photograph is the object in front of the camera that is photographed, but an image can refer to more than the visible content of the image.

Clearly taking from Peirce's definition of index, Barthes states the photograph acts as an index that refers to its subject (1981, pg. 45). The very term medium links to its referent, indicating that the photograph is just a material through which concepts and ideas (Barthes' studium) are transmitted. While Barthes does describe a function of the photograph, it is limited in its

potential. Through my inquiry and use of the camera as a tool, the image is data, the result of analysis. Once a photograph refers to itself it no longer becomes a medium, but an object in its own right to be reflected upon; the subject is shifted from that of the image to that of the photograph's/photographer's intent. The photograph no longer connotes the traditional subject, but instead is a sign/denotation of the image's own making.

Barthes' indexical image refers to an absence, a point in time that has already passed and cannot be recaptured. In their essay *From presence to the performative*, D. Green & J. Lowry posit indexicality of the photograph is more than a reference to a past event and is a performative act, referring to the event of the photograph itself, and the photographer's intent (2003, pg. 47-48). A photograph's indexical possibilities include reference to the physical procedure of recording an image on film, the subject's existence as an object, or the steps, the decision, the method, taken by the photographer to reach the moment of image making.

The outcome of my pinhole cameras acts as an index to the process of its own making, its existence. As an index, the photograph does much more than point to its past. The photograph acts as an interface to provide keys to the roles of subject and object by revealing the viewer's relationship to the image and the photographer's relationship with camera and space.

**Green & Lowry make careful note** of the full indexical nature of the photograph; 'it was C.S. Peirce...who demonstrated that the indexical sign was less to do with its causal origins and more to do with the way in which it is pointed to the event of its own inscription. Photographs, therefore, are not just indexical because light happened to be recorded in an instant on a piece of photosensitive film, but because, first and foremost, they were taken' (2003, pg. 48).

This implies the photographer's role in the taking of the image. The image then reflects the photographer's view and intent. The photographer becomes subject. As the image becomes evidence of the photographer, the photograph's relationship to the real is confirmed at the same time that it is subverted.

Expanding on the referential capabilities of the photograph, Green & Lowry note, 'Performativity begins to undermine conventional notion of meaning and reference' (2003, pg. 59). As a dual index, able to refer to both the object photographed and the event of recording, the photograph temporally refers to the past as well as the present. There is an experiential flow from the taking of the photograph to the viewing of the photograph. A photograph is not just a static record of the past but a document of unfolding time; it is not documenting a pre-existing object but can act as a continual record.

The image is the result of a gesture and at the same time can reflect to that causal gesture. The first instance, the gesture itself, refers to the photographer's intent, which as already discussed turns the photographer into subject. The second event, reflection upon the making of the image, is performed by the viewer. A photograph can point to a scene or object and at the same time point to the viewer's ability to read it. When the image is internalized by the viewer, the image becomes performative and the viewer becomes the second subject; a direct application of Merleau-Ponty's embodied perception to be discussed in more detail in a following chapter.

**The photographic strategy of** Barbara Probst blurs the line between subject and object and activates the performativity of the image. Using multiple cameras to capture multiple points of view in a single instant, a unique moment, she questions the veracity of the photograph, elucidates the photographer's hand, confronts the preconceptions that the viewer brings to the

image, and reveals the subjectivity of the index. Each image in her series is linked in time and space, but in such a way that breaks from traditional narrative; it is a pinpoint of time and an unfolding of space within that singular moment which captures the haecceity of the moment, more so than any singular image could ever achieve.

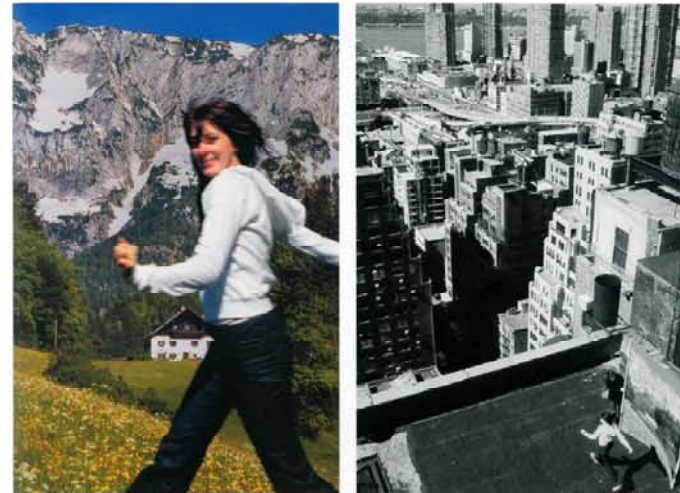
The process of capturing the image is part of the performance, but the performativity of the photographs is much more than the act of taking and making, it is also the act of looking. Both the act of making and the act of looking become transparent in Probst's images, asking the viewer to approach with an awareness of their own preconceptions. In *Exposure #16* [5], she provides simultaneous multiple views of a woman in a red dress. The first image, a close-up, elicits an intimate reading of the work. The distance from the subject of the second image at once puts the viewer in position of voyeur. By positioning the images side by side, the images distinguish viewer preferences or comfort levels. The viewer automatically makes comparisons and conclusions about their own response.

Probst's *Exposure #39* [6] challenges the viewer's assumptions of space and place. A girl is seen jumping through a field of vibrant flowers. It is only by comparison of the second image that the viewer realizes that the field is actually a screen on a rooftop. The girl's position in place is relative to the viewer. Probst immediately reveals her mechanism of viewing; the multiple exposures and multiple images in a single layout point the viewer directly to their act of viewing and perceiving.

**While the performativity** of Probst's images is activated by the multiple camera perspectives, my pinhole images are performative distinctly because they reveal so little. The performativity of my pinhole images lies in their implication of my experience. Throughout the photographic process, measuring and making were intertwined. Each of my actions was governed by physical limitations and mathematical requirements of making the camera and then taking the photograph. My perception of



5. Barbara Probst. *Exposure #16: N.Y.C., 249 W. 34th Street, 12.07.02, 6:29pm. 2002*



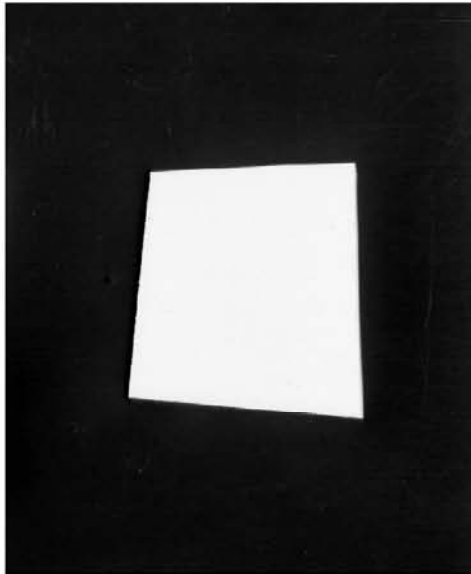
6. Barbara Probst. *Exposure #39: N.Y.C., 545 8th Avenue, 03.23.06, 1:17pm. 2006*

my environment became embodied as I measured and moved through the recording process. As a result of that process, the image reflects my experience.

A photographic moment occurs when there becomes a clear distinction between performance and performativity. My act of making the camera and the image could be seen as a performance, but the images behave performatively. The images are not aestheticised, nor are they mere documentation of the work, they are the work. What is in front of the camera and recorded in emulsion is a necessary by-product of the photographer's experience. Performativity is a transparency of intentions; the process is performance, intent enacted upon the emulsion. The photograph surpasses Barthes' index; the event is not being documented by the photograph, the event is the photograph.

As a performative index the most successful images are the ones that failed photographically. The black negatives/white positives taken with the tennis ball camera at the Basin Reserve [7] are at once a calculation frustrated by the limits of the human hand, an accident, and an index to the entire process. The white positive is a blank slate for the viewer that reflects the intent of the image's own inscription, the materiality of both camera and photograph, and the limits of camera and photographer.

**Throughout his career** Sigmar Polke relished darkroom processes and making the invisible visible. Known to let his images sit in chemicals for days to let the process 'run its course' and other non-standard treatment of his prints, Polke manages to veil and reveal, obscuring the subject and unveil the material limits of the photograph and its making. In *Paris, 1971* [8] Polke's subject in the photograph becomes secondary, much like the subject of my pinhole images, transforming the photograph into an object that reveals the photographer's hand. The material, the medium, is subject.



7. M. Samsell. *Walk from the pinhole* series *Positives*. 2008



8. Sigmar Polke. *Paris*. 1971



9. Sigmar Polke. *Untitled (Blue, Violet, Green)*. 1992

Polke not only exhausts the constraints of his materials, he then explores the limits of the human vision machine. Perhaps the best illustration of haecceity and the performative aspect of the photograph is his series of radioactive materials. By placing radio active elements directly onto the photographic paper, *Untitled (Blue, Violet, Green)* [9] captures that which cannot be seen with the human eye, referring to the act of making an image, an ephemeral subject becomes concretized. Accordingly, without the act of photographing the radioactive subject remains unseen; the performativity of the image is what reveals the subject.

In each of my pinhole series the image acts as an index, highlighting the specific photographic relationships. The narrative of making my cameras points to my space and my co-habitants, exposing the performative element of the project. I become the direct subject while my personal relationships are implied. The photographs of the pinhole cameras confirm the camera as an object at the same time that it becomes subject, a point of reference instead of just a tool for referencing. Finally, the pinhole images themselves indicate the whole act of creating and measuring, a combination of mathematical and verbal language conveyed through the visual. Performativity and the embodied perception through my experience serve as my next point of inquiry.

## **The Photographer's Space: *the camera as mediator***

### **Time and Place: *defining the photographer's instant***

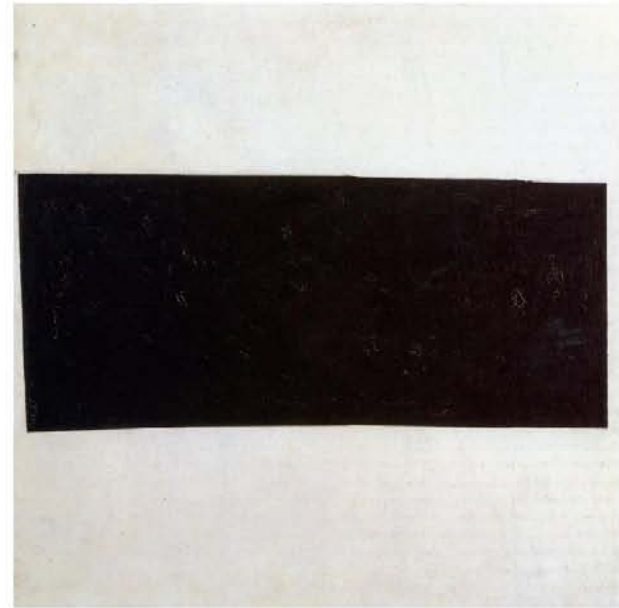
**In their monumental work *A Thousand Plateaus***, Deleuze and Guattari introduce the concept of *haecceity*, a concept derived from Latin *haecceitas* meaning 'this-ness', as tool for defining an individuation, putting form to the indeterminate, embodying a specific moment and place (2004, pg. 288). To understand the haecceity is to be able to define the subject. In terms of photography, the haecceity is what the image indexes. This term is clearer than the standard use of the photographic subject; as is noted in the performative photographs of Sigmar Polke and my own pinhole project the subject of the photograph is not always that which is in front of the camera. Haecceity can be used to refer to implied photographic subject. When Man Ray describes his rayograph as a 'residue of an experience' (as quoted in Iversen, 2007, pg. 93), he is attempting to put form to his photographic experience. His rayograph is a haecceity, visually describing a moment, an action, a decision, and an inquiry.

A haecceity is a mode of individuation and an embodied moment. 'On the plane of consistency, *a body is defined only by a longitude and a latitude*' (their emphasis, 2004, pg. 287). That is to say the haecceity is the quality of that body at a specific place and time, a transitive experience as in that of a sunset on a stormy spring evening. When explaining his decisive moment, Henri Cartier-Bresson could be considered to describe the performative in relation to haecceity, 'Subject does not consist of a collection of facts, for facts in themselves offer little interest. Through facts, however, we can reach an understanding of the laws that govern them, and be better able to select the essential ones which communicate reality' (Cartier-Bresson, 2006, pg. 15).

Cartier-Bresson's decisive moment is that essential fact, a unique time and place, caught on film. The photographer is a tool to find and record that moment among many, that haecceity. The accidental and alternative space I initially found in my water bottle, a moment and place privileged to the photographer, was my haecceity and became the point of inquiry in my next project.

**My water bottle became a horizon** because I applied my will and photographed in such a way that space is reorganized by the eye. El Lissitzky, in his essay *A. and Pangeometry* originally published in 1925, describes the 'irrational space' achieved in Suprematist painting. 'The space is arranged in the simplest directions- vertical, horizontal, or diagonal. It is a positional system. These distances cannot be measured by any finite measure... space may be formed not only forward from the plane but also backward in depth... [an] infinite extensibility into the background and foreground' (1995, pg. 71). Lissitzky is describing an ambiguous plane, a space that must be visually organized by the viewer.

Lissitzky's description pushes the limits of Deleuze and Guattari's coordinate space beyond a Euclidian or Cartesian space. We just perceive one space and one moment at a time, a haecceity. In relation to Lissitzky's Suprematist space, the perspective in Malevich's painting *Elongated Plane* [10] can shift over extended viewing, but perception of it is fixed at any given moment. To test this I began searching for other 'horizons' within my environment and printed them on small cards. When held in hand, the space implied in the image can be shifted by rotating the image. Every viewing of the image creates a new space.



10. Kazimir Malevich. *Verlängerte Ebene/Elongated Plane*. 1915

**Along the Edge:** *the image's position in relation to photographer and camera*

**Originally my second series** had the working title *False Horizons*. The images explore alternative spaces within the everyday. A horizon line automatically visually orients space, real or not. In the process of finding and taking these images I felt as if I was fabricating my own private world. The sense of my own space and my no-space creates a discord between reality and representation. The images reveal my navigation through a space intimately with my camera, careful attention is paid to often disregarded details. Each resulting photograph acts as a residue of that discovery and as objects invite the viewer to enter that no-space (see Appendix II).

There is correlation between photographer-camera-space that has become inherently evident through my practice. The use and exploration of subjectivity and objectivity in my practice automatically implies a phenomenological methodology., experience derived from the relationship between photographer and camera. It is the phenomenological world that I photograph, but I choose to represent it in such a way that this world is no longer recognisable unless the viewer takes into consideration the relationship between photographer and camera; and so the viewer can see a landscape or a water bottle, the outside world or the world created by the photographer and camera.

Looking through my camera lens, my peripheral world is excluded. My visual space becomes manipulated by shifting focal length or adjusting aperture and therefore depth of field. Snapping the shutter, captures my moment in that space, an haecceity of the photographer's roving eye. From one image to the next, I found each image created a distinctly different space [11-12].



11. M. Samsell. Untitled Horizon (studio wall). 2008



12. M. Samsell. Untitled Horizon (studio wall). 2008

These objects become horizons as the photographer manipulates the camera and the camera manipulates space. The periphery surrounding, and therefore contextualizing, the object is absent in the image, dislocating the object as the photographer fabricates space. The reflexivity of the image is evident as the grain becomes enlarged and streaks or scratches make the surface of the film and the surface of the object indiscernible. The transparency of the photographic moment causes the subject to subtly shift between the object and the photographer's intention to fabricate her own space. Like Probst's images the viewer brings their own meaning to the work, however the space I create is much more subtle and requires a more active inquiry from the viewer. Where she adds context to her images, I subtract contextualizing information.

**In Jean Baudrillard's *Simulations*** he discusses the four facets of an image (1983, pg. 11). In its first order the image refers to a basic reality, Barthes' photograph as index. The second phase masks a basic reality, obscuring some underlying truth. The third obscures an absence of a basic truth. The opacity of both the second and third orders has negative implications, obfuscating an aspect or absence that is more convenient if ignored. The final phase of the image is Baudrillard's simulacrum, a copy or akin to Plato's mimesis, an image that bears no relation to reality but is instead hyperreal.

For Baudrillard true reality is the hyperreal (1983, pg. 142-147), that which can make an equivalent duplicate, a simulation that is indecipherable from the original. The mechanism of revealing the reality and the simulation becomes a perpetual motion, feeding into itself. Just as Surrealism subverts and augments reality with the imaginary and 'privileged moments' of the banal, hyperrealism intensifies this contradiction of reality and simulation. My inquiry peels away these layers of the real to become transparent, taking the banal, the often overlooked, and causes pause, a moment to reflect on photographic relationships. The image becomes a transparent mechanism; its objecthood not only reflects its own inscription, but it questions its own truth.

Then the term 'false' applied to my horizons is a misnomer; 'false' is an insufficient qualification when the images work to reveal more than they obscure. My horizons exist in a specific time and place, a decisive moment, a haecceity. The moment was captured on film in such a way that reflects the limits of the camera; at the same time shows the possibility of photography as it reveals the limitations. That decisive moment is hyperreal, but refers to a moment that has gone and can never be experienced again.

**Augmented Eye:** *the camera as an embodied mechanism*

**As a tool** the camera augments ocular perception. Visual expectations become dependent on lenses and technology. The view is cropped and removed from the body. Focus is directed. At this moment there is a dislocation between subject and context. The periphery provides a means for drawing reference, without which the subject is dislocated from context.

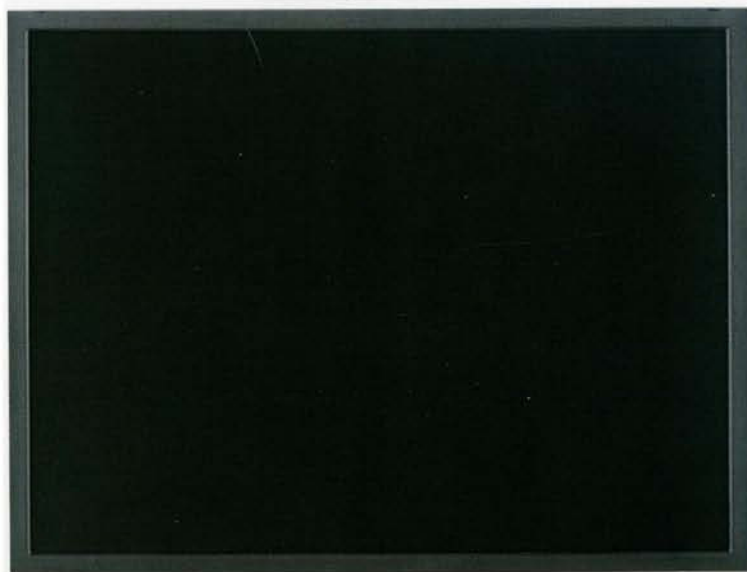
This instability of the subject is what disorients space in my horizon series. The photographic subject only becomes visible to the augmented eye. In *The Vision Machine*, Paul Virilio discusses the concept of the camera as prosthetic eye, operating as a mediary device that eventually transforms vision. As he puts it 'One can only see instantaneous sections seized by the Cyclops eye of the lens. Vision, once substantial, becomes accidental' (1994, pg. 13). The human eye becomes fixed and so loses its sensitivity; with vision reduced the eye becomes dependent on the lens. This new way of seeing becomes normalized; an objective vision is replaced by the tunnel vision of recording. The mechanics of the eye is not the only deciding factor in vision which is also determined by the brain. Our eye sees what our brain is trained to see, so previous experience determines future perception. Absence of periphery destabilizes the subject's context, ripping it from its original meaning, its intent.

**Gunther Selichar** approaches the field of media in a conceptual reflective research process; in three photographic series *Sources*, *Screens*, and *Exposures*, he documents the instruments of making *Sources* explores recording medium. *Screens* [13] looks at display medium, and *Exposures* [14] is a study of photographic light sources. The result of his research is the object of his research is the subject of his images; the subject is both the instrument and the phenomenon. Reversing the role of image carrier to image, especially in *Screens*, Selichar makes the often overlooked, presumed invisible, medium become visible, become the object of reflection.

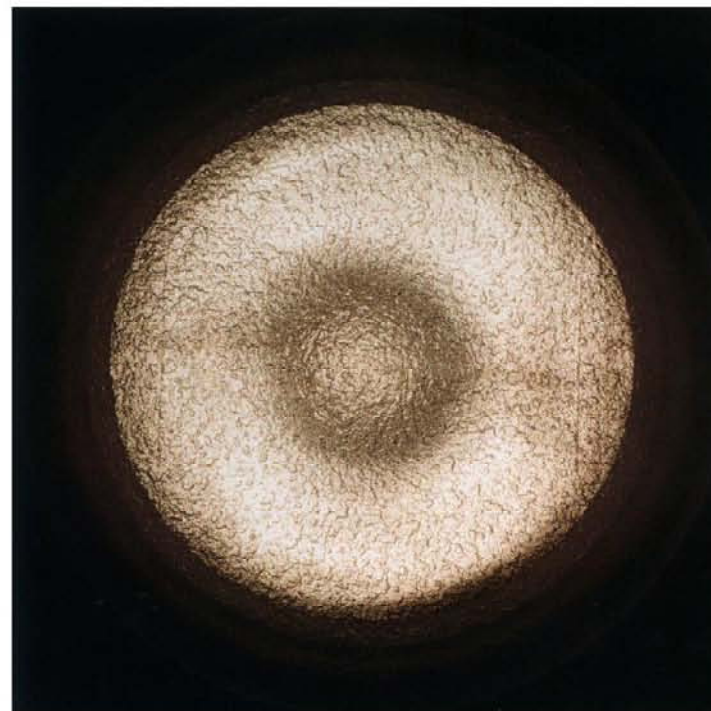
The crisp clear quality of the images unveils the moment where the medium breaks down, information ceases to register; revealing the limitations of the medium, the object, which is also the subject, becomes media-ized and mediated. By turning the camera into subject, Selichar's camera is the evident mediator between image and reality, just as my camera is the evident mediator of my horizons.

Iversen extends the performative, indexical photograph beyond pointing to its past and returns to the camera. She notes that the camera becomes a tool for discovery and analysis, as in Selichar's *Exposures* or my experience of extended time and measuring with my pinhole cameras. The images perform analysis instead of acting as a record, becoming more than a sign. An event is documented, but the images serve to analyze the event beyond merely recording.

**The camera becomes** the photographer's tool, and as an extension (read prosthesis) of their embodied self, a way of putting themselves into the world, or as Maurice Merleau-Ponty states as he introduces his *Phenomenology of Perception*, 'The real



13. Gunther Selichar. *Screen, cold #15*. 1997, 2003



14. Gunther Selichar. *Exposure h*, 2002-2003

has to be described, not constructed or formed' (1962, pg. xi). Describing the real is a performative act. When the photograph becomes description, and not just a record, it becomes performative; the descriptive moment is a haecceity unique to that time and place.

As prosthesis, the camera is directly controlled by the photographer just as it reconfigures vision. Obsessively carrying my camera with me to photograph a horizon whenever one was discovered, my vision became narrowed. I became less observant of my periphery, stumbling upon a rise in the sidewalk only to discover that it creates a horizon [15]. My alternative world filled with sublime horizons became so consuming, one morning I awoke to one in my bed and was momentarily disoriented [16]. While as images I do not think these are the most successful horizons from my series, their significance lies in my experience, the way that I embodied the camera to search for these alternative spaces.

It was through reading Merleau-Ponty's description of bodily experience in time and space that I was able to understand my experiences in this newly disoriented space, which eventually lead to my final work. He states,

'Perception is not a science of the world, it is not even an act, a deliberate taking up of a position; it is the background from which all acts stand out, and is presupposed by them. The world is not an object such that I have in my possession the law of its making; it is the natural setting of, and field for, all my thoughts and all my explicit perceptions...there is no inner man, man is in the world, and only in the world does he know himself' (1962, pg. xi-xii).

Here Merleau-Ponty uses perceptions as something internalized, not a sensory input devoid of interpretation. Reflection upon reaction reveals perception and therefore reveals self. Restoring the object to sensory/bodily perception; it becomes subjective



15. M. Samsell. Untitled Horizon (concrete). 2008



16. M. Samsell. Untitled Horison (bed). 2008

as in the example of perceiving a cube. Not all sides can be perceived at the same time even though their existence is known. The object is transitive depending on the subject, an extension of the body (1962, pg. 235-6).

The world is not an object, but it is through perception of objects within the world do we know it and define it. As a photographer I create my own world with alternative horizons.

For him, and I initially illustrate this with my pinhole project, self is subject; object is a temporary extension of the self; the photograph becomes a hybrid between object and index as the roles of subject and object become fluid and I become the first audience of my work. The making of my work closely parallels the phenomenon of viewing my work; just as I move through my environment with my camera, the viewer approaches the images. It is only through moving around the space and the image that it can be fully perceived and experienced. The need for movement through space in order to perceive it becomes exaggerated in my final work when I photograph an entire portion of a wall and make an 8.48 meter print.

**Jonathan Crary returns** the embodied experience to the photographic relationship when talking of the advent of the camera obscura. 'The observer is simultaneously the object of knowledge and the object of procedures of stimulation and normalization, which have the essential capacity *to produce experience for the subject*' (his emphasis, 1995, pg. 94). The 'stimulation and normalization' secures the dependence on Virilio's prosthetic eye. As technology advances, 'the camera obscura collapses as an analogy for vision and perception...too rigid, denotes difference between outside and inside, identification of perception and object. Modernity required a 'more mobile, usable, and productive observer' to use of the body and be available for vast proliferation of 'mobile and exchangeable signs and images' (1995, pg. 96). The need for a mobile eye solidifies the photographic roles of subject and object at the same time that its mechanism becomes opaque.

Crary discusses photography from an historical context. Virilio's prosthetic eye is the modern extension of Crary's mobile gaze. For Crary, the mechanism of photographic perception is opaque. My work creates a dialogue with transparency and initiates performativity. The process of making my pinhole cameras and then documenting through photographs amplified the link between the photographer and environment. The camera is object, the tool to be manipulated by photographer. The resulting image acts as index that refers to that relationship. The subjective space created by the camera is highlighted in the *Horizon* series.

### **Inside and Outside:** *the subjective machine*

**One afternoon** in my workspace I set a water bottle on the table, pulled out my workbook and began reading over some older notes. Note this is a different water bottle, seeing as my first one became a battered talisman of the horizon project. A typical beginning to a research day, this moment gained significance when I noticed an optical effect of the water bottle. The water bottle acted as a lens, refracting the light from the window and transmitting an image onto the table [17]. From where I stood I could see the windows directly or I could see the water bottle's image. In that instance, there is no camera, no outside or in. I can see the windows directly or shift my eyes to see the image. I am in a liminal space as I see both reality and image depending on my intent; the image and my environment become embodied as I experience it. The absence of the camera body enables the breakdown of distinction between object and simulation; the space I am in becomes liminal as I gain the freedom to move between window and image and reality shifts as my focus moves in and out.

Both limit and liminal derive from the Latin *limen*, boundary or threshold. To reside at the boundary is to see the possibilities in both directions, as if looking out to an expansive horizon. When preparing my pinhole cameras I became absorbed with the dark space and only entered the external world once I began photographing. In this sense, my camera becomes liminal, the mediator at the boundary of outside and inside.

**In Uta Barth's series** *nowhere near* [18] windows serve as metaphors for the lens and the membrane between public and private, inner and outer worlds that separate viewer and photographer. As a collective, the images are meant to give a sense of the border where the viewer is made to realize they stand on one side of the equation as the 'other'. This is similar to the ambiguous space created by my water bottle as it acted as lens to create an image of the window.

To an extent Barth and I have a similar method of activating the viewer's experience of the work. In discussing the viewer Barth addresses obfuscation of the subject, 'A certain kind of confusion or questioning is the starting place of confronting much of the work... Everything is pointing to one's own activity of looking, to an awareness and sort of hyper-consciousness of visual perception' (Lee, 2004, pg. 124.) In Barth's work entitled *Ground* [19] the physicality of the viewer is considered and implicated in the images themselves. Barth is 'interested in eliciting a perceptual experience... and allowing that experience to be very different for different people' (Lee, 2004, pg. 26).

When approaching my final work there are different moments of focus. From farther away it appears to be a representation of the wall, but when reaching a few inches from the surface, the image breaks down into pixels. The surface of focus and information is the same, but perception is relative to position. The photograph is the wall at the same time it is an image, both



17. M. Samsell. Untitled test (water lens).  
2008



18. Uta Barth. *nowhere near (nw 12)*. 1999



19. Uta Barth. *Ground #9*. 1992-1993

an index and an object asking the viewer to engage in performative query. Similarities to Barth's photographs can be found in my work, most notable the active role in perception required of the viewer.

The first distinction between my work and Barth's is my active experience as the photographer that is translated throughout the process of creating the image. For me, the transparency of my image and its readability by the viewer is only activated because of my role as photographer, from physically building my pinhole cameras to moving through my space with my prosthetic eye. Secondly, Barth's subjects are focused from the point of view of the viewer, so that the focus is sometimes soft and have the sense of creating a space different from that of the photographer's. My images seek to position the viewer in the space of the photograph, the photographer's space, because ultimately we all co-exist in the same space.

**The process of acquiring** a recorded image, a photograph, changes the photographer's experience by placing them in a role as archivist. As an archivist, decisions are made, as to what to record and how to categorize it, which reflect the photographer's individual interpretation of her environment. The photographer's space has two sides that are necessarily intertwined; there is the physical environment, outer world, in which the photographer resides, and a more conceptual space created by the physicality of the camera, an artefact of the relationship between photographer and camera.

Subverting the conventions of the object reveals the common assumptions made about the object's function. The subversion of an image's indexicality is at the core of performative photography. As the photographer's actions unfold and the intent is revealed through the images, the image ceases being an object and becomes an index, as in Barbara Probst's multiple exposures of the same scene at the same moment. The object stands before the viewer to be judged, awaiting the preconceptions of the viewer to give the object meaning.

The 'subjective machine' is ambiguous because it could be the camera or the human eye, either the viewer's or the photographer's as discussed previously in the section *Augmented Eye*. The term 'machine' can refer to any of the multifaceted roles in the photographic relationship, each one analogous to a space, inside or outside. For example, my relationship with my pinhole cameras resides in the dark internal space of the camera before it is extended into the outer space of my environment. Deleuze & Guattari believe the machine is a social construct; with photographic relationships in mind, the whole relationship is the machine that shapes perception and the photographer is part of the assemblage.

As an index the performative image acts as a referee between the photographer and camera. The subject of the photograph is secondary, only acting as a tool within the image to reference the photographer's decisions, their actions and intent. It is this transparency of the photographic process that reveals its limitations as an index of reality. So when acting as both object and index, the photograph can simultaneously reveal the subjective reality of the photographer and the viewer.

In terms of rooms that provide the space of the mechanism, in the photographic process the image moves from the darkroom to the white room. The dark room of the camera, the dark room where the image is developed and processed, even digital imaging is best done in a dark room. The final image is viewed in the white room of the gallery, viewing area. Just as the photograph is the surface of the camera-photographer relationship, the white gallery wall is the surface from which the viewer perceives a supposed blank slate. This transition is paralleled in my projects as I move from the pinhole cameras to my final work photographing the white wall. As Brian O'Doherty describes the modern gallery space, 'The work is isolated from everything that would detract from its own evaluation of itself' (1999, pg. 14). The white space of the gallery is meant to decontextualize the work to allow the viewer a more objective viewing. In the absence of any other context, the gallery and what a gallery represents, becomes the context; in my final work, the wall is the context and it is the print requiring isolation.

**Crary remarks** on the assumed objectivity of the image, 'But here it is a question of an observer who takes shape in other, grayer practices and discourse, and whose immense legacy will be all the industries of the image and the spectacle in the 20<sup>th</sup> century. The body which had been a neutral or invisible term in vision now was the thickness from which knowledge of vision was derived' (1995, pg. 96). The observer, photographer, became an assumed invisible/neutral (read objective) observer. Perceptibly mobile, i.e. detached from the room of the camera obscura, and therefore read as an objective body. However, as Merleau-Ponty and Virilio show, this is not the case. Then Crary concludes, it is only through a transparent mechanism that this relationship can be revealed and re-evaluated. This is the transparency as revealed in making my pinhole cameras, followed through the horizons as the horizons shift in space, and culminating in the final photograph of the wall as the technology to make the image reaches its limits and fails.

Laszlo Moholy-Nagy discusses the fluidity of space-time just as Einstein describes Special Theory of Relativity, both using the example of trains passing at differing speeds to show perception is relative to position. Moholy-Nagy calls this malleability and integration, a breakdown in the distinction between inside and outside, akin to the malleability of space created by my water bottle when it acted as lens. Specifically he relates the inside and outside to experimentation with photograms, see *Untitled Photogram, 1939* [20], since they 'produces space without existing space structure, only by articulation on the plane with the advancing and with the radiating power of their contrasts and their sublime gradations' (1995, pg. 153). The photogram is the first photographic inquiry into a fabricated space. There is no subject until the image is made; the subject does not exist without the photogram. Like my white pinhole images that resulted from the tiny tennis ball camera, the photogram acts as a thought experiment into the inquiry of the photographer's space. This space is not the physically inhabited space as such, but the space constructed by the photographer as she moves, measures and records.

## **An Image at Its Limits: *making the real***

### **Along the Camera's Border: *navigating through the photographer's perceptions***

**While Moholy-Nagy applies** his description of malleable space to Modern architecture, 'the changing aspects of vision, the sharpened identification of the inside and outside' (1995, pg. 155), he also implies this is an instrument of thought that can be used in photography, such as superimposition of photographs as a space-time synonym; space-time synonym being a representation of an instant, a specific time and place, the photograph's haecceity. It could be argued that this is a pretext for Baudrillard's simulacrum. Taking into consideration the captured moments when making my horizons, as a series the images represent a specific space-time at the same time that they represent an alternative space. The horizons are a liminal space between no-space and real, measurable space.

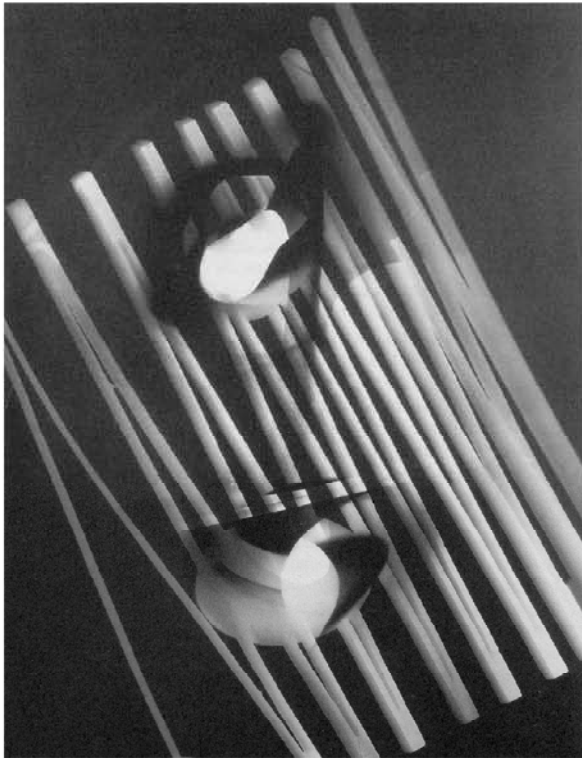
The tension created by superimposing the photograph's space into the viewer's space is where I started my final investigation. The white wall of the gallery serves as a point of reflection for the viewer and a subject for the photographer.

As I was photographing and printing some test images at near true to size, a one to one ratio, the camera's limits and the eye's assumptions became apparent. Despite careful measurements, the foreground came out true to size, while the background became larger than life. The disconnection between that being photographed and what the camera recorded could not have become clearer. Trained to see as a photographer, I had taken for granted that the proportions in the camera were what I was actually seeing; I had become dependent on my augmented eye.

**Testing methods** of turning a photograph into a membrane, a surface between wall and viewer, I began sanding down the back of some test prints. As I repetitively scraped the sandpaper across the back of my print, I felt the need to keep going, to see how far I could push the paper and have it still be a print. The act of sanding as subtraction, taking away the substance of the image, this is the point where I am physically oscillating between image and object. At a certain point, the wall comes through the image and the texture of the wall is picked up in the paper [21]; the distinction between the actual wall and the image becomes unclear which highlights the this-ness of the wall, the haecceity. In this sense, the image would refer to something different as a membrane if it had started as a print on a different substrate. By using a standard photographic print, an object, and pushing it towards a membrane, it becomes a mediator between image and wall that reveals the function and perception of both. The photograph is not the wall, but is an interface that reveals the perception of the wall.

Now that I had almost subtracted the image, I wanted to push it to all limits until it almost disintegrates revealing the breakdown of the machine and leaving me with a final image that challenged its own objecthood. The photographs of walls began to depart from horizons, the photographs being undefined planes of subtle colour and texture. The decisions from this point forward are all made based on the limits of my materials and space.

**Just as a corner only** exists as a juncture between two planes, a horizon is the visual meeting place of two objects in three dimensional spaces. Using this analogy as a metaphor for junction between image and real space, I chose a wall (in Room 2E05 on Massey's Wellington Campus [22]) with adjacent windows on either side. At a certain distance away from the wall the hills outside can be seen to line up with the height of the print, visually connecting the print to the outside horizon. The outside horizon is not in the image, the image is of the wall, but I am aware of its symmetry just as become sensitive to the light as it



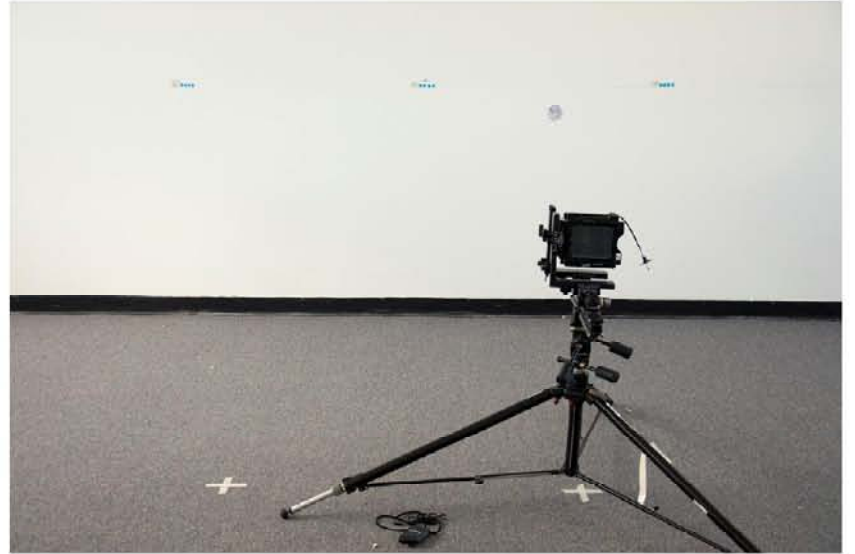
20. Laszlo Moholy-Nagy. Untitled, photogram.  
1939



21. M. Samsell. Detail sanded image from behind. 2008



22. M. Samsell. Room 2E05, Massey University Wellington. 2008



23. M. Samsell. Detail of wall and camera with measurements. 2008

moves across the wall and onto the floor to create subtle shadows. The height of the print chosen was based on the maximum height available from the print facilities; the moment that it also visually aligns with the horizon in Room 2E05 when standing 6meters from the west wall is a haecceity.

As I measure and photograph this haecceity becomes an embodied perception. As previously discussed with respect to Deleuze and Guattari, bodies in a Cartesian coordinate system have unique qualities; an object at certain coordinates is different as compared to the same object at different coordinates. The object is dependent on the coordinates for definition. As I carefully measure the distances from camera to wall, from midpoint to midpoint of each frame (a total of 7 frames is required), the reflective and ambient light, I am defining the wall in terms of my photograph. Using a 4x5 camera, I became acutely aware that the simple, elegant mechanism of the black box relied totally on measurements [23]. Before I input and manipulate the camera, it is only an object relying on theoretical relationships of light and space. The numbers I input define the relationship so that it can properly function. Mathematics is the language of specifics; f22, 1 second, 1.9 meters, ISO 120. Words are the language of action; looking, making, measuring, breathing. Then the visual language has the opportunity to be embodied thought, an embedded theory and action. Once everything is measured and taken into account, clicking the shutter seems easy. Under the black hood I refine the focus of the lens. My breathing seems amplified in my ears and I shorten my breath to keep the ground glass from fogging. The wall seems much farther away than its 1.9 meters and I become a part of the camera apparatus.

In each frame I only see one seventh of the wall; remember the camera eliminates periphery and isolates vision. At any given moment I only perceive part of the wall, but am always aware of the wall as a whole. As Merleau-Ponty describes the paradox in perceiving a three-dimensional object over time he posits, 'it is...by conceiving my body itself as a mobile object that I am able to interpret perceptual appearance and construct the cube as it truly is' (1962, pg. 236).

**When Merleau-Ponty's observer** walks around the cube it is with direction and intent, a vector that at the end of the circuit describes the observer's experience. It is only by completing the circuit that the object can begin to be perceived, requiring a bodily experience of the observer, just as it takes seven frames to fully capture the wall. A careful labour of measuring and moving the camera places me in the space as I observe it. I had to physically engage with the camera in order to find the essence of the image, my embodied perception. As I have to move within the space to photograph it, the viewer must move to perceive all the details and the full effect. It is only by moving closer into the image and then pulling back out, as one might focus a manual lens, that one can see the texture of the wall, then the grain of the film, followed by the pixels of the digital printing process, and finally the texture of the paper which closely mimics the wall.

**Interface and Membrane:** *the image between camera, photographer and viewer*

**The photographer's approach** to the wall, in relation to the camera, has just been described and considered. Now my image making process turns to the other side of the equation. The viewer has the photograph from which to infer the entire photographic relationship. Like focusing a camera, it is by going beyond the limits and then pulling back that the edge can be found. The point of failure in the image reveals the mechanism at work, edge of vision, focal length, white colour correction, and grain. Just as Georges-Pierre Seurat's Pointillism breaks down an image into differential dots of colour only to be visually blended by the eye, the grain and pixels of photographic media become more or less pronounced depending on the viewer.

The 8.48 meter long print took three days to render, print, stop, reload the printer, re-spool, and finally lay down the ink on paper. The printing process pushed the limits of the printer, the paper, the graphics programme, the rendering programme, and even the room in which it was printed [24]. For the first time in the process in making my final image I had to work with and depend on others in the process of making. Working with others to overcome the limitations of equipment and programmes made me physically feel like part of the machine and each conquest of a limit was my own subtle resistance, a silent rebellion to externally imposed limitations. When I pushed the pixel limits of Photoshop CS3, I had to make a decision to print at 90dpi. My first reaction was frustration at being forced to print at screen quality rather than print quality resolution. As I watched a test print roll off the Epson printer, the limitations of the print process were subtle. The pixels are only visible when about four inches from the print surface [25]. The grain of the film [26] is visible before the pixels become noticeable.

The limitations of the printing provided the transparency of machine; as the observer moves the subject shifts from wall, to image to photograph. The image is truly a membrane. Even the texture of the paper slightly mimics the texture of the wall so that the visible texture is ambiguously wall and photograph at the same time. This result is similar to what happened to the sanded images once placed on the wall. There is a moment where the photograph is indiscernible from the photographed object. The moment of transition occurs when the image is no longer a space, but instead is a medium and an object. It switches visibly from film to digital medium, print to wall, all depending on position, the viewer's vectoral body, the haecceity.

To encourage the viewer to understand the print as an object, and instigate an embodied perceptual experience, the final print was laid out flat and perpendicular to the photographed wall [27]. Set off from the wall, the print breaks from the traditional placement of a photograph within Brian O'Doherty's white cube and therefore isolates itself as an object. In fact, several comments from viewers, with no foreknowledge of the work, indicated that they did not even realize the print was a photograph



(above) 24. M. Samsell. Untitled, final print on spool. 2008

(above right) 25. M. Samsell. Untitled, final print pixel detail. 2008

(below right) 26. M. Samsell. Untitled, final print grain detail. 2008



until spending time inspecting it closely. Not able to see the entirety of the print in one encompassing glance, the placement forced the viewer to approach the photograph in segments, mirroring my camera's approach to the wall.

**As the physicist** Ernst Mach muses upon technological advancements and how this will lead to a shift in modern thinking, 'The boundaries between things are disappearing, the subject and the world are no longer separate, time seems to stand still' (as quoted in Virilio, 1994, pg. 6). In relation to Merleau-Ponty's ungraspable disembodied reality and blending of the real, Mach's observation highlights the disjunction between observation and perception. There are no clear lines between subject and object. When one becomes subject the other becomes object, but the roles are never concretized, always shifting. In my final image of the wall, there is not a distinct subject and object, but rather it is a circular, fluid, transitive relationship dependent on a body in space-time, the haecceity. As the viewer moves in space, the wall, the image the paper, the ink, the photographic process, and ultimately the viewer his/herself all have the opportunity to become the subject. Our perceptions are dependent on our position and the mechanisms in place, just like with my pinhole cameras. Just like any successful scientific hypothesis turned into theory, the experiment is reproducible; the results, however, are dependent on the individual, the subject.



27. M. Samsell. Untitled, final print installation, 2008

## **Conclusion:** *building a processual inquiry*

**My inquiry** began with questioning the photographic relationship and the hypothesis that the camera was object and the photographer subject. How does the camera mediate space, i.e. how does the camera change or create the photographer's space? What does the image convey to the viewer? How does the viewer approach the image?

From physically building cameras to asserting my own fabricated space with a camera, my studio practice serves as a point of inquiry to test the photographic relationships. Within each practice were several modes of investigation, common threads that intertwined the conclusions from one project into the start of the next. The theoretical thread led to research and testing of haecceity, Merleau-Ponty's embodied perception, and Virilio's prosthetic eye. Language, visual, verbal, and mathematical, help dissect and analyze the role of subject and object within the photographic relationships. To position and propel the discussion, a historical thread weaves through the experimentation of Man Ray, Moholy-Nagy, and Polke and leads to more contemporary artists such as Uta Barth and Barbara Probst.

The hand-made camera became a vessel for my intimate experience with my space, an object, a liminal space often overlooked, acting as a reference and blurring the distinctions between photographer and subject. In the third series of images to stem from my pinhole experiments, the cameras are the subject, a dark room created by the photographer to capture another image. Both types of images imply the existence of the other while referencing the influence of the photographer. What I hold special about this third type of image is the preciousness, the carefully hand-made space, and the subversion, turning waste into a camera that is not necessarily recognized as a recording device. Although clearly visible, it is an object

easily dismissed by passersby even as it records them. Making the camera instantly changes the space into one fabricated and recorded by the photographer.

**The horizon series addressed** the distinction between the photographer-camera and the viewer-image relationships; the space is fabricated by the photographer and camera, then later inferred by the viewer. Because of the subjective nature of the machine, the space of the photographer may differ from the one inferred by the viewer because the object of reflection is different. For the photographer, the camera is the object of mediation; the photographer's space is transitive, resulting from the fixation of the camera as a prosthesis and the embodied experience of the photographer within physical space. The horizons have always existed as objects in physical space, but they are not activated as horizons, a space, until the photographic mechanism fixates on them. The banal becomes Baudrillard's hyperreal.

In the instant the shutter opens and closes, an experience is distilled down to a moment; the resulting image acts as a singular index to that moment and that space, the haecceity embodied by the photographer. The viewer has the image to infer the space, the photographer's experience. Just as the photographer creates space, the viewer's space is subjective based on the individual experience. The image acts as an object submitting itself to the viewer's inference, but at that point the photographer's space is subjected to the viewer's perception.

**A reflective image asks** 'what is the subject and the object', this asking and unpacking is a performative act that first investigates the process (subject) and index (object). Haecceity and performative photography both are a 'becoming action', where the photograph acts as an interface instead of abstraction of reality. The photograph demands action from the viewer

and reveals the photographer. The relationship between camera and photographer as reflected in photograph can be seen as a performative act where haecceity is the image, the assemblage of intention.

The final work incorporates the results from the previous two series, the photographer's space as resulting from the camera and the viewer's performative act of looking. The viewer has an embodied experience viewing the photograph of the wall. Pixels blend into grain and grain blends into the image field as the viewer moves towards and away from the image. It is only by moving in the physical space of the image that the viewer can experience it, just as the photographer must move the camera around to capture seven frames that are a summation of the one wall. The viewer's embodied perception is a performative act that reflects the photographer's process of approaching the wall, recording the image to film and developing the resulting print.

Our perceptions are dependent on our position and the mechanisms in place, akin to the parallax resulting in a rangefinder camera or my constructed pnholes. Just like any successful scientific hypothesis turned into theory, the experiment is reproducible; the results, however, are dependent on the individual, the subject.

## Appendices

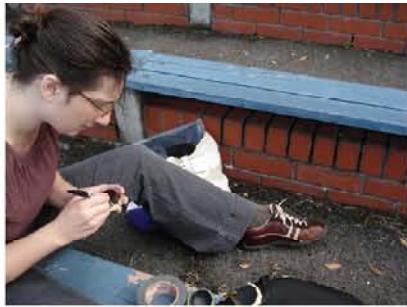
- 57      **Appendix IA:** *Pinholes - Records*
- 62      **Appendix IB:** *Pinholes - Dark Rooms*
- 67      **Appendix IC:** *Pinholes - Positives*
- 72      **Appendix II:** Horizons







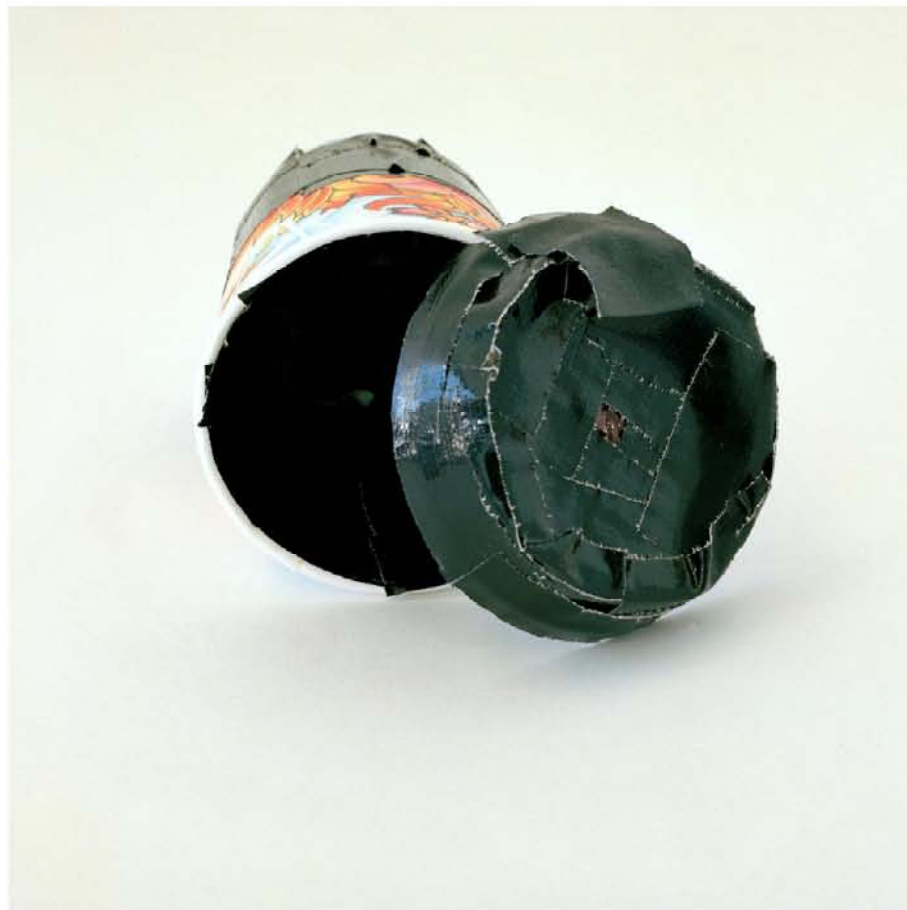








M. Samsell. *Arbus*. 2008



M. Samsell. *Supreme*. 2008



M. Samsell. *Fawn*. 2008

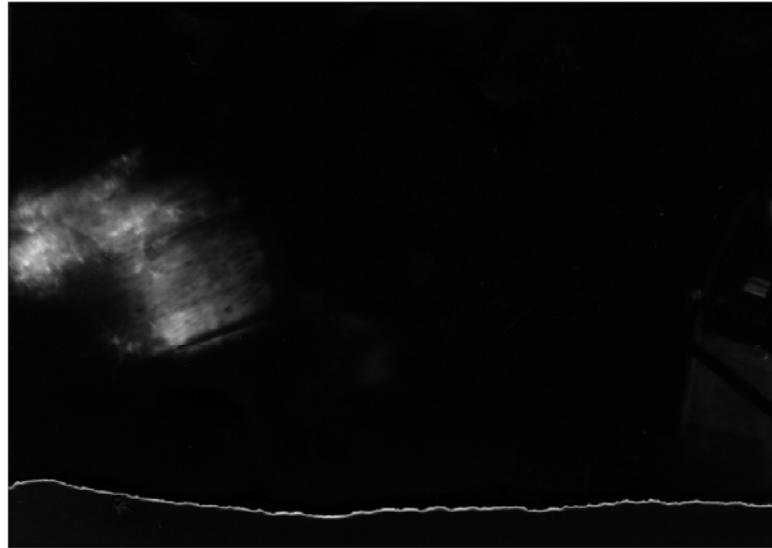


M. Samsell. *Dunlop*. 2008

IC *Positives*



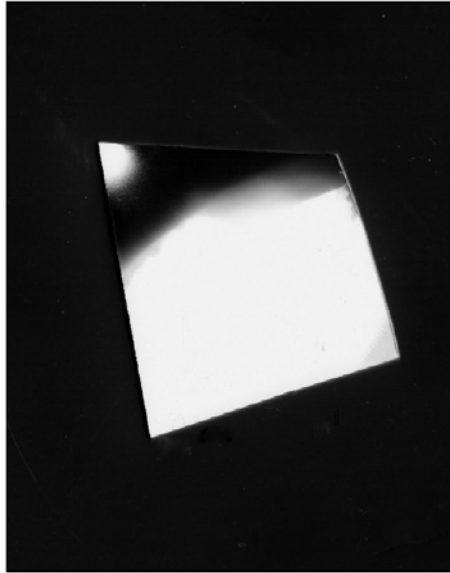
M. Samsell. *Studio*. 2008



M. Samsell. *Work*. 2008



M. Samsell. *Retreat*. 2008



M. Samsell. *Walk*. 2008

## || Horizons



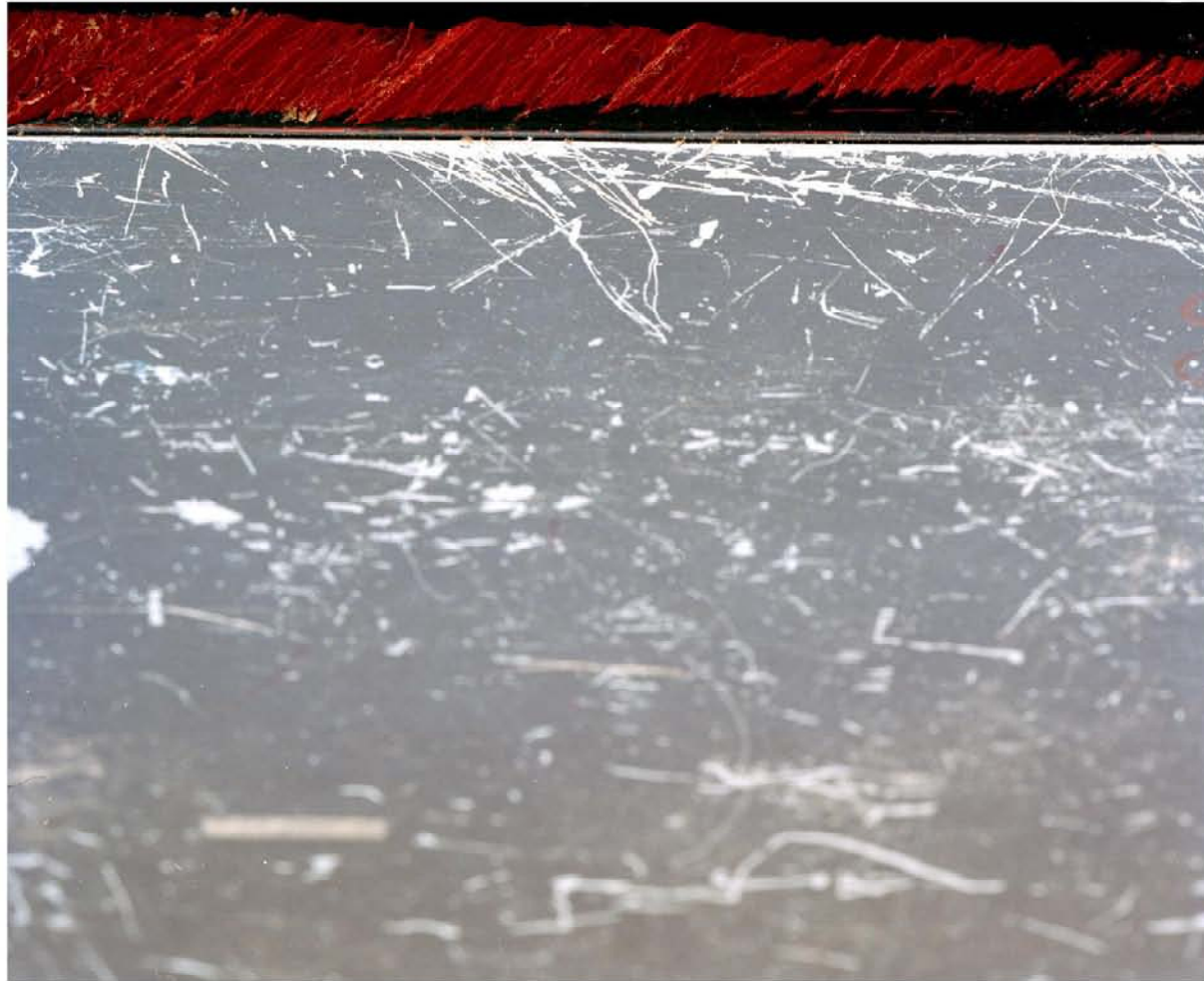
M. Samsell. Untitled (gutter, Nikon D80). 2008



M. Samsell. Untitled (gutter, Nikon D80). @008



M. Samsell. Untitled (garden shelf, Nikon D80). 2008



M. Samsell. Untitled (work table, Mamiya RB). 2008



M. Samsell. Untitled (work table, Nikon D80). 2008



M. Samsell. Untitled (lounge chair, Mamiya RB). 2008



M. Samsell. Untitled (lounge chair, Nikon D70). 2008



M. Samsell. Untitled (bed, Mamiya RB). 2008



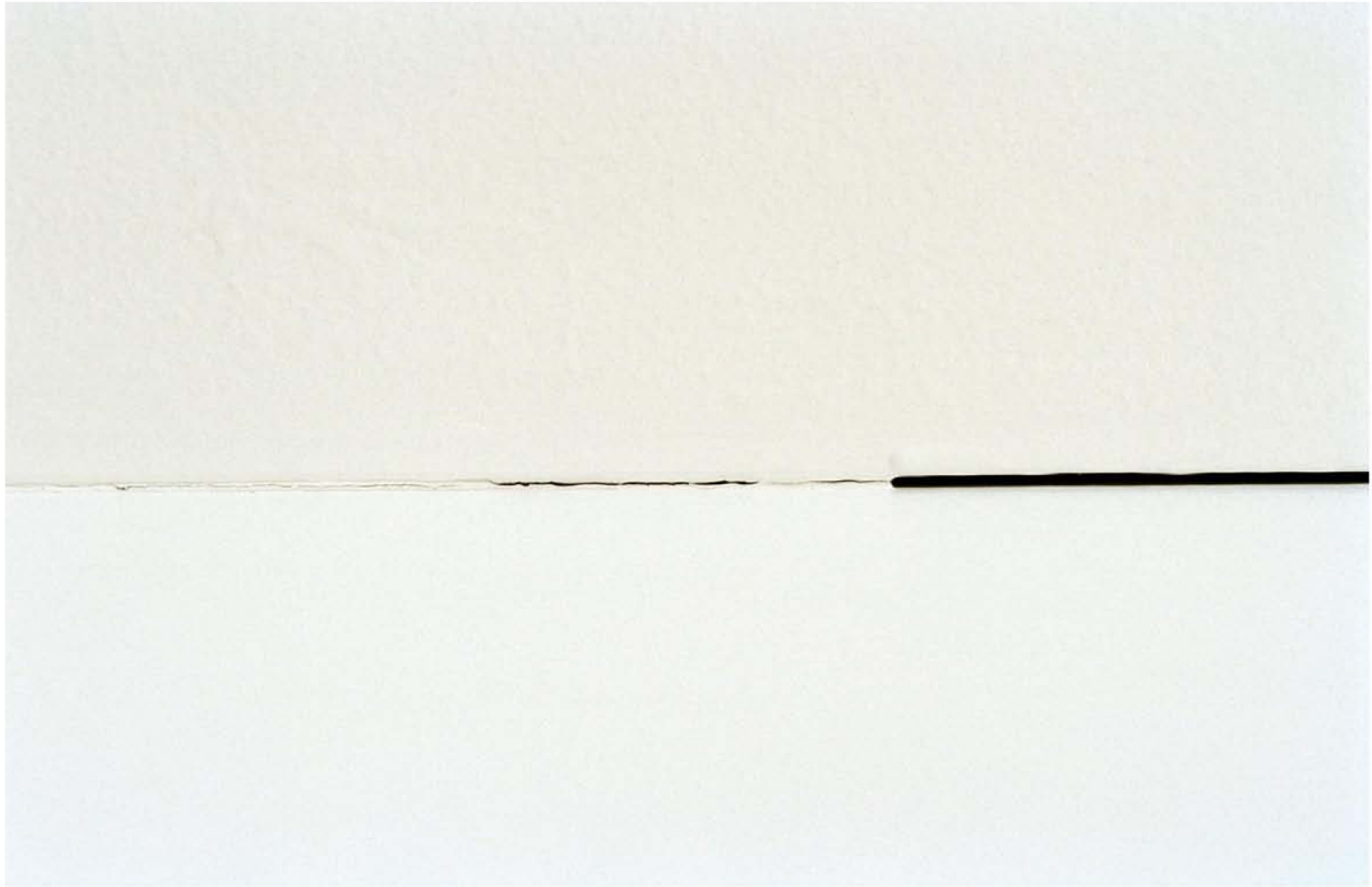
M. Samsell. Untitled (shower, Sony Cyber-Shot). 2008



M. Samsell. Untitled (windowsill, Nikon D80). 2008



M. Samsell. Untitled (studio wall, Nikon D70). 2008



M. Samsell. Untitled (studio wall, Pentax K1000). 2008



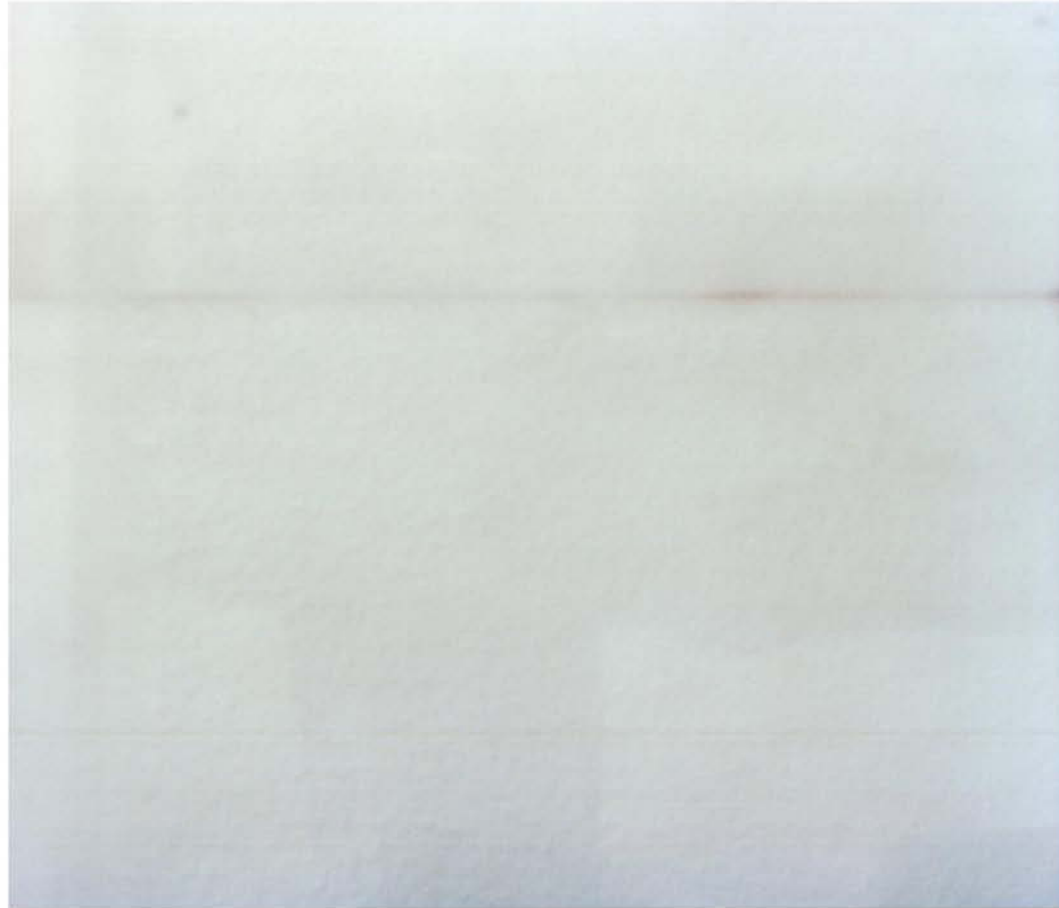
M. Samsell. Untitled (studio wall, Nikon D70). 2008



M. Samsell. Untitled (studio wall, Mamiya RB). 2008



M. Samsell. Untitled (studio wall, Pentax K1000). 2008



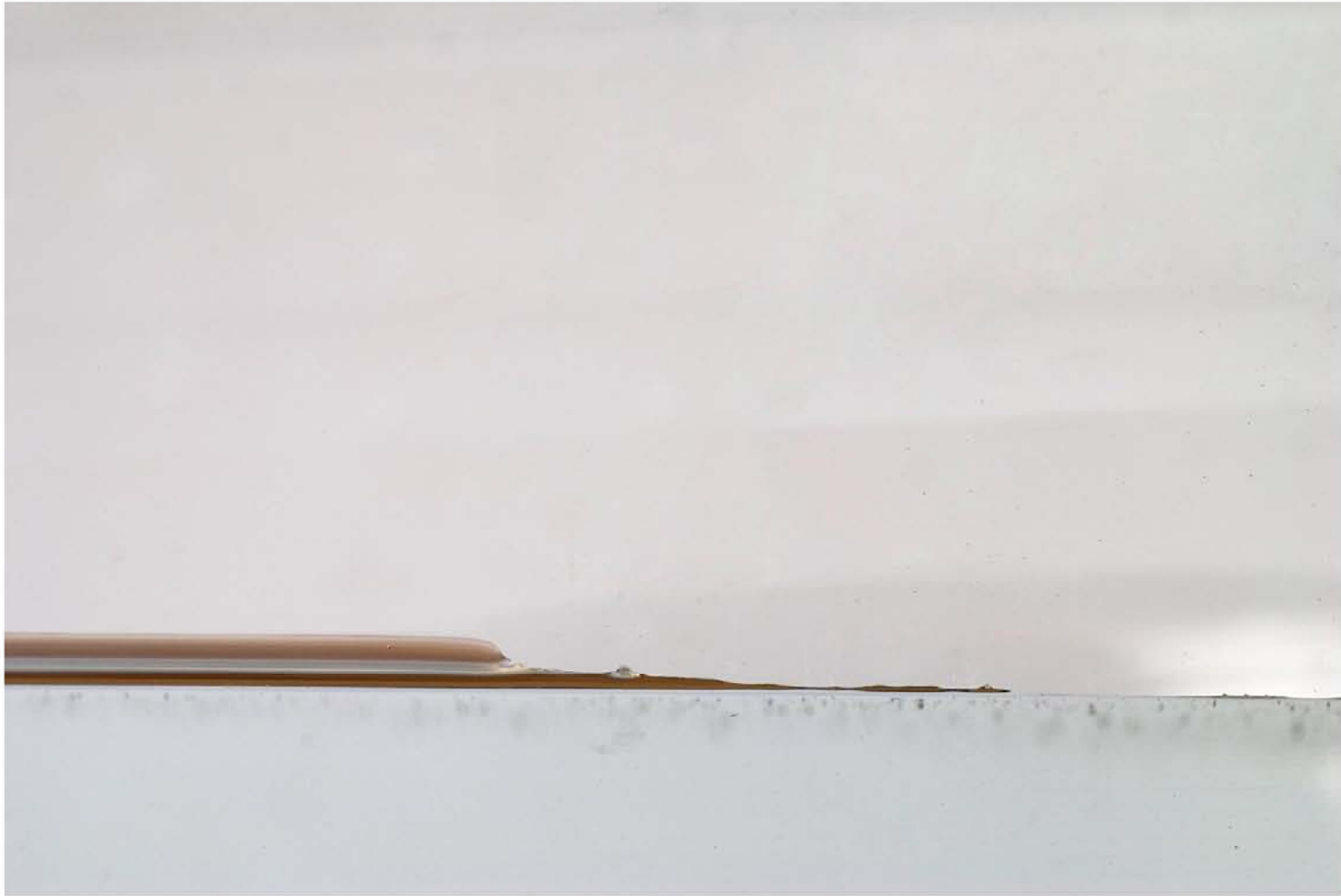
M. Samsell. Untitled (water, pinhole camera with Mamiya RB back). 2008



M. Samsell. Untitled (water, Nikon D70). 2008



M. Samsell. Untitled (water, Nikon D70). 2008



M. Samsell. Untitled (water, Nikon D70). 2008

## Bibliography

- Barthes, R. (1981). *Camera lucida : reflections on photography* (1st American ed.). New York: Hill and Wang.
- Baudrillard, J. (1983). *Simulations*. New York: Semiotext(e).
- Biggs, M. A. R. (2004). Learning from Experience: Approaches to the Experiential Component of Practice-Based Research. In H. Karlsson (Ed.), *Forskning, Reflektion, Utveckling* (pp. 7-22). Stockholm: Swedish Research Council.
- Calvino, I. (1974). *Invisible cities* ([1st ed.]). New York,: Harcourt Brace Jovanovich.
- Cartier-Bresson, H. (2006). Untitled. In C. Traub, Steven Heller, & Adam B. Bell (Ed.), *The Education of a photographer* (pp. 12-22). New York: Allworth Press.
- Crary, J. (1995). Modernizing Vision. In S. A. Yates (Ed.), *Poetics of space : a critical photographic anthology* (1st ed., pp. 85-97). Albuquerque: University of New Mexico Press.
- Dean, C. (2006). The trouble with (the term) art. *Art Journal*, 65(2), 24-33.
- Deleuze, G., & Guattari, F. (2004). *A thousand plateaus : capitalism and schizophrenia*. London: Continuum.
- Derges, S., & Kemp, M. (1999). *Susan Derges, liquid form 1985-99*. London: Michael Hue-Williams Fine Art.
- Elkins, J. (Ed.). (2007). *Photography theory*. London ; New York: Routledge.
- Everts-Grigat, S., & Institut für Auslandsbeziehungen. (1995). *FotoKunst : Dieter Appelt, Anna und Bernhard Blume, Thomas Florschuetz, Jürgen Klauke, Astrid Klein, Sigmar Polke, Klaus Rinke, Katharina Sieverding*. Stuttgart: Institut für Auslandsbeziehungen.
- Fried, M. (1998). *Art and objecthood : essays and reviews*. Chicago ; London: University of Chicago Press.
- Garoian, C. R., & Mathews, J. D. (1996). A COMMON IMPULSE IN ART AND SCIENCE. *Leonardo*, 29(3), 193-196.
- Green, D., & Joanna Lowry. (2003). From presence to the performative: rethinking photographic indexicality. In D. Green (Ed.), *Where is the photograph?* (pp. 47-60). Maidstone ; Brighton: Photoworks ;Photoforum.
- Hanrahan, S. (2000). An exploration of how objectivity is practiced in art. *Leonardo*, 33(4), 267-274.

- Hoving, K. A. (2006). The Surreal Science of Soap, Joseph Cornell's First Soap Bubble Set. *American Art*, 20(1), 14-35.
- Huberman, A. (2007). Naive Set Theory. *Dot Dot Dot*(15), 50-57.
- Hughes, G. (2007). Game face: Douglas Huebler and the voiding of photographic portraiture (Bernd Becher). *Art Journal*, 66(4), 52-69.
- Ihde, D. (2004). Has the philosophy of technology arrived? - A state-of-the-art review. *Philosophy of Science*, 71(1), 117-131.
- Iversen, M. (2007). Following Pieces: On Performative Photography. In J. Elkins (Ed.), *Photography Theory* (pp. 91-108). London ; New York: Routledge.
- Jaros, M. (2005). Materia Poetica: Models of Corporeality and Onto-poetic Pata-physics of the Post-mechanical Age. *Technoetic Arts: a Journal of Speculative Research*, 3(1), 3-12.
- Koler, C. A., & Bergstrom, L. (2005). Complex curvatures in form theory and string theory. *Leonardo*, 38(3), 226-231.
- Kotz, L. (2005). Language Between Performance and Photography. *October*(111), 3-21.
- Kuchler, S. (2007). The string in art and science: Rediscovering the material mind. *Textile-the Journal of Cloth & Culture*, 5(2), 124-138.
- Lee, P. M., Higgs, M., & Gilbert-Rolfe, J. (2004). *Uta Barth*. London ; New York: Phaidon.
- Lehoux, D. (2007). Observers, objects, and the embedded eye; or, seeing and knowing in ptolemy and Galen. *Isis*, 98(3), 447-467.
- Lévinas, E. (1987). *Time and the other and additional essays*. Pittsburgh, PA: Duquesne University Press.
- Lissitzky, E. (1995). A. and Pangeometry. In S. A. Yates (Ed.), *Poetics of space : a critical photographic anthology* (1st ed., pp. 67-75). Albuquerque: University of New Mexico Press.
- Marsh, A. (2003). *The darkroom : photography and the theatre of desire*. Melbourne: Macmillan.
- Merleau-Ponty, M. (1962). *Phenomenology of perception*. London: Routledge & Kegan Paul.
- Mills, C., & Muellner, N. (2006). No ideas but in things: Photography at learning's limit. *Art Journal*, 65(2), 84-101.

- Moholy-Nagy, L. (1995). Space; Space-Time and the Photographer. In S. A. Yates (Ed.), *Poetics of space : a critical photographic anthology* (1st ed., pp. 145-156). Albuquerque: University of New Mexico Press.
- Museion (Bolzano Trentino-Alto Adige Italy). (2005). *The perception of the horizontal : Caspar David Friedrich, Albin Egger-Lienz, Piet Mondrian, Kazimir Malevich, Ferdinand Hodler, Lyonel Feininger, Mark Rothko, Roy Lichtenstein, Cy Twombly, Kenneth Noland, Jan Dibbets, Ed Ruscha, Agnes Martin, Wim Wenders, Lawrence Weiner, Hiroshi Sugimoto, Andreas Gursky, Kimsooja*. Köln: W. König.
- Niedenthal, S. (2002). Learning from the Cornell Box (Joseph Cornell, computer graphics). *Leonardo*, 35(3), 249-254.
- Nixon, M. (2007). 'o and x'. *October*(119), 6-20.
- O'Doherty, B. (1999). *Inside the white cube : the ideology of the gallery space* (Expanded ed.). Berkeley: University of California Press.
- Osborne, P. (2003). Photography in an Expanding Field: Distributive Unirty and Dominant Form. In D. Green (Ed.), *Where is the photograph?* (pp. 63-70). Maidstone ; Brighton: Photoworks ; Photoforum.
- Peirce, C. S., Hartshorne, C., & Weiss, P. (1931). *Collected papers* (2nd, 3rd printing ed. Vol. vol. 3 - 4). Cambridge: Harvard University Press.
- Polke, S., Museum of Contemporary Art (Los Angeles Calif.), Site Santa Fe., & Corcoran Gallery of Art. (1995). *Photoworks: when pictures vanish*. Los Angeles ; Zürich: Museum of Contemporary Art ; Scalo.
- Probst, B., Irvine, K., Bate, D., Meinhardt, J., & Columbia College (Chicago Ill.). Museum of Contemporary Photography. (2007). *Exposures* (1st ed.). Göttingen ; Chicago ; London: Steidl ; Museum of Contemporary Photography ; Thames & Hudson distributor.
- Ranciere, J. (2007). The emancipated spectator. *Artforum International*, 45(7), 270-281.
- Raskin, D. (2006). The shiny illusionism of Krauss and Judd. *Art Journal*, 65(1), 6-21.

- Richon, O. (2003). Thinking Things. In D. Green (Ed.), *Where is the photograph?* (pp. 71-79). Maidstone ; Brighton: Photoworks ; Photoforum.
- Rosenkrantz, G. S. (1993). *Haecceity : an ontological essay*. Dordrecht Boston: Kluwer Academic Publishers.
- Schaffer, S. (2004). A Science Whose Business is Bursting: Soap Bubbles as Commodities in Classical Physics. In L. Daston (Ed.), *Things That Talk, Object Lessons from Art and Science* (pp. 146-192). New York: Zone Books.
- Schmetterling, A. (2007). Archival obsessions: Arnold Dreyblatt's memory work (The 'Wunderblock'). *Art Journal*, 66(4), 70-83.
- Sekula, A. (1986). THE BODY AND THE ARCHIVE + PHOTOGRAPHING CRIMINALS. *October*(39), 3-64.
- Selichar, G., Hochleitner, M., Oberösterreichisches Landesmuseum. Landesgalerie., & Galerie Fotohof. (Eds.). (2004). *Third eye*. Salzburg: Galerie Fotohof Salzburg.
- Smith, P. H. (2006). Art, science, and visual culture in early modern Europe. *Isis*, 97(1), 83-100.
- Stevens, W. (1923). *Harmonium*. New York: Alfred A. Knopf.
- Stoney, R., Porter, G., Campbell, J., Glass, D., Shelton, A., Gus Fisher Gallery., et al. (2003). *Dead ringer : Joyce Campbell, Darren Glass, Ann Shelton*. Auckland, N.Z.: Gus Fisher Gallery : University of Auckland.
- Traub, C., Steven Heller, & Adam B. Bell. (2006). The Education of a photographer. In (pp. xvii, 237 p.). New York: Allworth Press.
- Tret'iakov, S. (2006). The biography of the object. *October*(118), 57-62.
- Turvey, M. (2007). Vertov: Between the organism and the machine (Dziga Vertov). *October*(121), 5-18.
- Vertov, D., Kaufman, M. A., Nyman, M., British Film Institute., & Kino International Corporation. (2003). Man with a movie camera [videorecording]. New York: Kino International.,
- Virilio, P. (1991). *The Aesthetics of Disappearance* (P. Beitchman, Trans.). New York: Semiotext(e).
- Virilio, P. (1994). *The vision machine*. Bloomington London British Film Institute.,: Indiana University Press.
- Wise, M. N. (2006). Making visible. *Isis*, 97(1), 75-82.