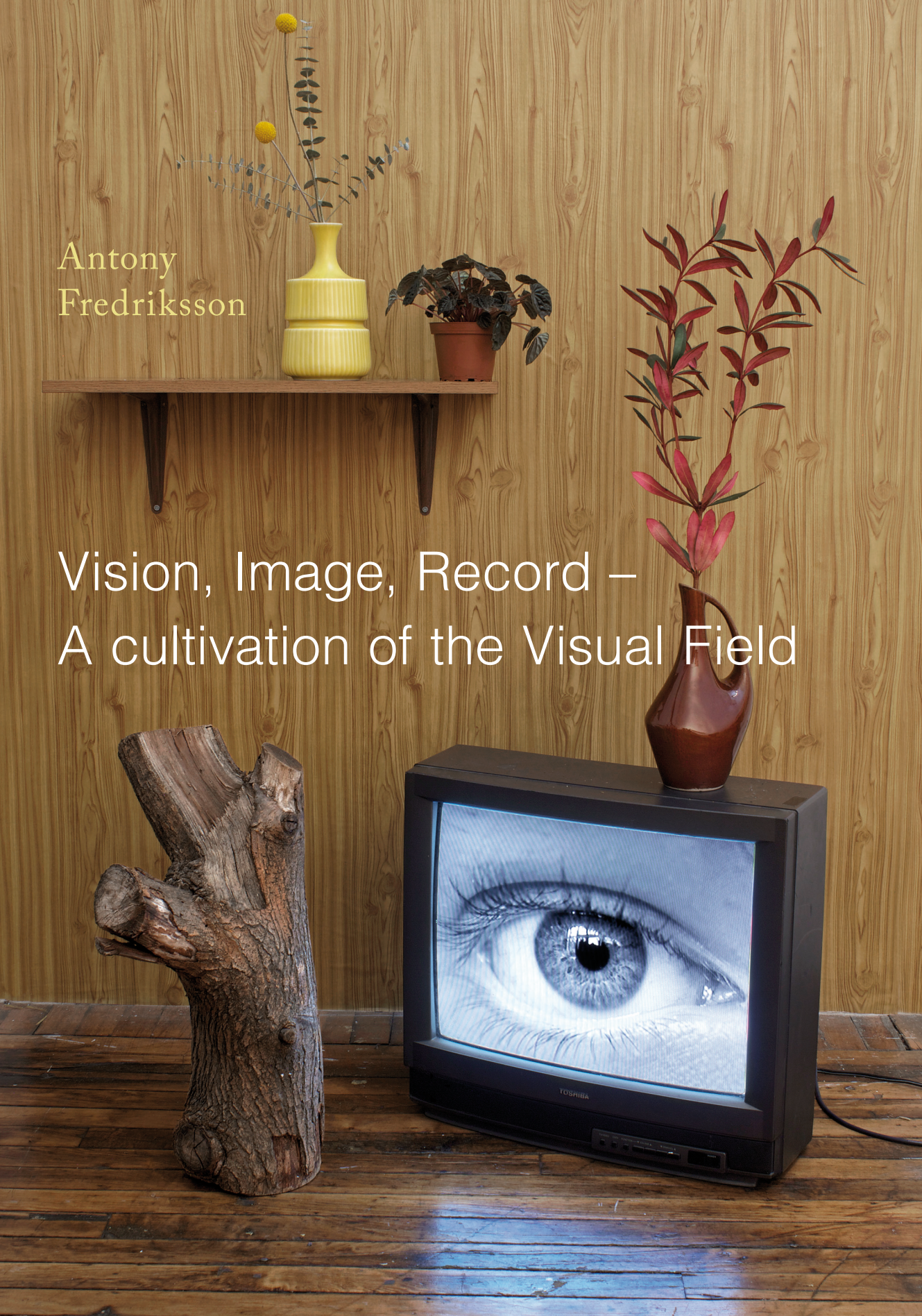
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Fredriksson
Vision, Image, Record –
A cultivation of the Visual Field
TOSHIBA

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Vision, Image, Record

A Cultivation of the Visual Field

Antony Fredriksson

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PART II: Towards a Common Sense

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Introduction: The Search for an Innocent Eye

> Our eye sees very poorly and very little – and so men conceived of the microscope in order to see invisible phenomena; and they discovered the telescope in order to see and explore distant, unknown worlds. The movie camera was invented in order to penetrate deeper into the visible world, to explore and record visual phenomena, so that we do not forget what happens and what the future must take into account.[1]
>
> Dziga Vertov

Alone, without being able to be addressed by the views of others, and the ability to share my own views with other people, I am foreign to this world. In a literal sense the image is an aid in this task of sharing views and because of this ability it functions as my guide in finding my orientation in this world, in cultivating my visual field. I might stand beside another person and see what she sees, but I do not necessarily know her reading of it.[2] The image adds a dimension to this relation, since it does not only show me what somebody else sees. When an image works properly it also shows *how* that other person sees, and thus the image becomes an agent.

Since I am constantly surrounded by images I usually just look through them, they don't exercise any particular power over me. During the occasions when images are able to address me in a profound way they adhere to some kind of reality that is not known to me. In these occasions something new is brought into my world, or to put it another way, something is renewed in me. What these occasions tell me is that the veracity of an image is not the same thing as the reality of an image. If *real* images would only show me objects I already know, things that I can verify, realism would become superfluous. The realism of an image is in this sense a certain behavior that helps the image to address me and make the world vibrant and vivid. Somewhere along the way this understanding of the image as a moral agent has

1 Dziga Vertov, *Kino-eye – The Writings of Dziga Vertov*, edited by Annette Michelson (Universty of California Press 1984), p. 67.

2 Here I paraphrase Jakob Meløe, "The Two Landscapes of Northern Norway", in *Inquiry*, vol. 31, 1988, p. 400.

become obscured by an epistemological framework for realism. In the second part of this thesis I will return to this moral understanding and re-establish the images role as a device for sharing our views. For now, I will start by outlining the story of how the image became to be conceived as a device for making representations of what we see. In this reduction the difference between *what* we see and *how* we see was obscured.

The three chapters in Part One are an attempt to outline a genealogy of the concept of image. The present work will consider the emergence of perspectivist painting and the rationalization of the visual field along with the idea of *species*, the concept for mental representation in medieval philosophy (chapter 1), the camera obscura as a model for vision in Renaissance philosophy (chapters 1 and 2) and the invention of photography and its relation to positivist philosophy (chapter 3). What is essential in this genealogy is the conceptual discussion. The status of *the image* is defined by how this concept is related to other concepts such as *vision*, *knowledge* and *the self*. When the image at a certain point, or more precisely at certain point*s*, starts to be conceived as an indexical copy of the visual field, a visual record, this development does not work in isolation. Depending on how we approach the concept of visual record, on how we understand its idea, different associations will announce themselves. Whereas the technological evolution of the different means of aided vision (the telescope and the microscope) and the means of visual recording (camera obscura, photography and film) is quite transparent, the philosophical background for the emergence of aided visual observation and the visual record is more complex. In order to understand how visual documentation and recording came about I want to examine different visual metaphors that originate from a certain ocularcentrism[3] within Western philosophy. These visual metaphors are entwined with changes in understanding, a cultivation of certain ideas and sensibilities, and of certain acts of vision itself. The connections I make have been made before and I will follow earlier

3 This term is widely debated and to some extent problematic, but in this context it signifies a certain tendency of emphasizing vision and the visual within Western philosophy. The connection between the visual realm and objective knowledge is one of the major issues of debate for the philosophers of the modern age. As Martin Jay points out, this "ocularcentrism" also signifies a certain denigration of language and the other sensual faculties that occur within the classical Greek philosophical tradition as well as within British empiricism and the rationalist philosophy of Descartes and his followers. See, Martin Jay, *Downcast Eyes – The Denigration of Vision in Twentieth-Century French Thought* (University of California Press 1993), p. 33, 80. For another discussion on ocularcentrism see, Catherine Wilson, " Discourses of Vision in Seventeenth-Century Metaphysics", in David Michael Levin (ed.), *The Discursive Construction of Sight in the History of Philosophy* (The MIT Press 1997), p. 117-118.

accounts of these developments. However, it still seems to me that this kind of project has to be redefined again and again, since the development of the image and its supposed connection to objectivity is ridden with tensions and discrepancies. It is by highlighting and analyzing these discrepancies and tensions that I think we can achieve not so much a definition, as a deeper understanding of what role images and visual records have played and perhaps still play in our culture. It is by analyzing these discrepancies that I hope to reveal some insights and fresh viewpoints on a subject matter that plays a crucial role in questions concerning our relationship with images.

My aim with this thesis is to describe how the concepts of image, vision and the self evolved in relation to one another in a specialized scientific and philosophical context. Mainly this entailed reductionism in which "the self" – the role of human psychology, our judgement, our attention and our will – was sidestepped. This development in our understanding is exemplified in the evolution of the pictorial arts. There is a short step taken, from an image as a representation of three-dimensional space on a two-dimensional surface, to an understanding of image as a transparent picture, a window towards the world. By taking this short step we easily lose the role of the self on the way. I want to show how this evolution has given rise to certain misconceptions that still inhabit our discourse on images. One metaphor that describes these misconceptions is the idea of the image as a "view from nowhere". Thomas Nagel used this expression as the title of his book on objective knowledge, and quite rightly he pointed out that there is a core idea within Western epistemology, an understanding of knowledge as something that stems directly from the natural world, without being filtered through, or manipulated by, human, subjective and anthropomorphous involvement.[4] Knowledge is in this sense a kind of information that the object transmits to the subject that requires an innocent eye that neutrally observes the natural phenomena. However the metaphor, the visual aspect of it, reveals the conceptual confusion at play here. A view can only reside in a subject with a faculty of vision. Without eyes, consciousness, attention, experience, there are no views. Influenced by Merleau-Ponty, Thomas Baldwin makes this point explicit when he writes: "perception is the capacity whereby there is a world

4 Thomas Nagel, *The View from Nowhere* (Oxford University Press 1986).

it cannot be just another fact within the world".[5] The view has to reside *somewhere*, it has to be situated in a living eye with a living body with a consciousness, in order to be a view. An image always requires a set of eyes in order to become a view. And with the set of eyes come a subject and a culture of seeing persons. In this sense it is unclear what the objectivity of the image stands for, and what its antithesis is. A visual record or a documentary image cannot constitute a view from beyond the anthropomorphic, subjectively situated view of the eye inside a human body. Visual records and documentary images are, like all other images, already embedded in a culture simply because of the fact that they are images.

We quite naturally categorize images as either fictitious or documentary, but the basis for this categorization is still muddled. It is hard for us to pinpoint why and how we make this categorization. The consequences of this difficulty are not merely theoretical. If someone, for example the Soviet filmmaker and theoretician Dziga Vertov in the quote above, claims that a certain image shows what actually is or was the case, despite what we as perceivers of this image think, believe or hold to be true, this gesture gives an immense power to that image. Such a conception of images in general, the fact that they can play such a part in our discourses, give an immense power to images. Can an image have such powers? Or, is it a certain rhetoric that gives them this kind of power? Can an image be a pure record of what actually occurred? When we want to answer these questions it is important to keep in mind that it is not nature, but the human faculty of vision, judgement and attention, the human eye and the human hand, that give images this power.

There is, I claim, a certain forgetfulness in traditional epistemological philosophy concerning the task of the image. In order to reveal this forgetfulness I investigate how the faculty of vision is treated in traditional philosophy and specifically how problems arise when vision is primarily understood as a relation between a singular subject and an object. There is a constant tendency within philosophy to sidestep the fact that vision becomes intelligible because we share the visual world with other people. To put it bluntly we need not only functioning eyes, but other people in order to see. In this context the role of the image becomes meaningful. We share what we see in images. We do not simply share visual

5 Thomas Baldwin in his introduction to Maurice Merleau-Ponty, *The World of Perception* (Routledge 2005). p. 11.

impressions or records of the visual, but ways of thinking about and understanding the visual: our focuses of attention, perspectives, judgements and emotions.

One of my main goals is to describe certain temptations within philosophy, temptations to keep to certain patterns of thought even when they obviously lead astray. In philosophy we tend to conceive of depiction as a mimetic art form, of knowledge as domestication and of perception as a reception of data. Although these ways of thinking about images, understanding and vision are not necessarily always wrong, they tend to create confusion specially when we limit our concepts to these frameworks of thinking. Catherine Wilson brings up this point in her reading of Friedrich von Schiller: "Schiller says, when a philosophical system is trying to exclude something essential, that thing will keep breaking in on it, ruining the effort and creating problems and inconsistencies".[6] What I find inspiring in Schiller's point is how he describes the structure of certain philosophical problems. He shows how they reside in a certain forgetfulness or narrow-mindedness. In my view the traditional epistemological philosophy is forgetful not only, in one case concerning the object, nature etc., and in the other case, the subject, attention, judgement, etc., but of the relations between two subjects. Images are a way of communicating something between human beings. In communication we are not dealing only with subjects and objects, but also with the other, the you, the second person. In Part Two of this thesis I will discuss the communicative role of images: the way the image caters to intersubjectivity. This will lead us to another understanding of image, vision and the self, in which knowledge, even the knowledge that resides in documentary images, is born out of dialogue. Influenced by Hannah Arendt's philosophy, Michael D. Jackson describes this kind of shift of perspective in epistemology beautifully:

> Judgment presupposes our belonging to a world that is shared by many. Unlike pure reason, judging does not consist in silent Platonic dialogue between me and myself, but springs from and anticipates the presence of others.[7]

6 Catherine Wilson 1997, p. 123.

7 Michael D. Jackson, "Where Thought Belongs: An Anthropological Critique of the Project of Philosophy", in *Anthropological Theory*, Vol 9 (3), 2009, p. 220.

> Unlike classical empiricism, where the observer makes himself a *tabula rasa* in order to register his impressions of the observed, judging requires active engagement and conversation – allowing *one's own thoughts* to be influenced by thoughts of others. Accordingly, judging implies a third position, reducible to neither one's own nor the other's: a view from in-between, from within the shared space of intersubjectivity itself.[8]

The image is not like a view from nowhere. It does not work without the influence of a subject, neither does it work without the influence of an*other* subject, a subject that is not my self. The concept of image builds upon exactly the fact that: "judging requires active engagement and conversation – allowing *one's own thoughts* to be influenced by thoughts of others." Images present us with a "third position, reducible to neither one's own nor the other's", it offers us "a view from in-between, from within the shared space of intersubjectivity." This is the meaning of the concept of the image that I want to bring forth in this thesis. And, as I will show, the concepts of visual record and the documentary image have a specific role in serving this purpose of the image.

If we ask why we tend to limit our thinking into frames that exclude certain fundamental aspects of our concepts of image, vision and understanding, the easy answer is that we do so because we are indoctrinated through a long history of thought. Philosophy is, in my book, to turn ones attention to the familiar, without falling back on our generic lines of thought. To do philosophy is to step aside from the usual temptations in our thinking and observe these patterns of thought in order to see what they consist of and eventually to see beyond them.

8 Michael D. Jackson 2009, p. 238.

Overview of the Genealogy

How can we have knowledge of the world? A common answer within philosophy is; through representation. But, this answer does not solve anything, since if our knowledge of the world consists of representations, we end up in the same question; how do we have knowledge of the representation? The epistemological theories that claim that our knowledge comes about through representations entail an infinite regress, the so called *homunculus fallacy*[9]. We can in this way stop this discussion in its tracks, since the idea of representation as a guarantor of our knowledge is easily shown to be misguided. In a sense I could stop my thesis here. But, this answer that is commonly pointed out within epistemology is not satisfactory to me. It does not end the debate concerning the role of the image. In our visual culture we do encounter images that grant us new ways of knowing. Images are able to transform the way we understand the world and in this sense they are epistemological entities, not because of their ability to reproduce semblances of objects in the world, but because of their *agency*, their power to transform. The problem that I described above is tied up with the idea that images carry knowledge *because* of their *representational* task. Although I would not deny that images have the task of representing the world, I claim that this is not the basis for why they are able to give us knowledge.

In order for an image to communicate knowledge and understanding it has to do something further than simply represent an object in the world. In order to find another understanding of the concept of image that pertains to the process of making something knowledgeable, I emphasize its role in focusing our attention, in cultivating our perceptions. At the end of Part One of this thesis I introduce the idea of a cultivation of the visual field. To speak of cultivation can be understood in different ways. One way to understand cultivation here is, according to a classical view, as a certain relation between the visual and seeing. In classical epistemology there is a gap between the natural and the cultural. The visual is conceived as natural whereas our faculty of sight is cultural. According to this view the

9 For an account of the *homunculus fallacy* see, Anthony Kenny "The Homunculus Fallacy" in John Hyman (ed.), *Investigating Psychology, Sciences of the Mind after Wittgenstein* (Routledge 1991), p. 156.

image is a way of domesticating the visual field, of bringing nature into culture. But there is another, more precise meaning that I am after with the expression "cultivation of the visual field". The cultivation that for example the impressionist painters practiced in their painting was not a way of domesticating the natural into something subjective and human. It was a way of reifying, of paying attention to certain details, it was an art of describing, an art of perceiving and attending to something, not primarily an art of thinking or rationalizing. The difference here is like the difference between discovering and creating. In order to discover something one needs to be attentive, to be able to grasp the ephemeral features of the visual world. This is not a practice of making something into something else (representation), but of adhering to what is. When we speak of representation, by the very definition of the term, it alludes to making a representation in the likeness of something else. When we talk of attention we do not construct a counterpart or an ersatz for an existing object in the world, we attend directly to that object. The different accounts that the use of these two different concepts (representation and attention) will give of our understanding of image, knowledge and the self, is an underlying narrative throughout this thesis. In order to understand this distinction I will start of by investigating how the image and its role as a representation entered epistemology. The visual record and later the documentary image are the primary examples in this discussion, since they allude to a neutral form of depiction. The idea of a pure visual record is a result of classical epistemology and by showing how this idea is put into play, I hope to show how certain discrepancies and tensions enter epistemology and the theory of perception.

It is not enough to point out the fallacy in the traditional kind of epistemological theory. It has to be pointed out where the temptation to think of knowledge as representation stems from, how it comes about. Within Western philosophy and science there is a very persistent idea that representation, the go-between between mind and matter, is that which grants us knowledge. This idea appears throughout the times and it seems hard to get rid of. In his book *Philosophy & the Mirror of Nature* Richard Rorty traces this idea to the philosophical development of the 17th century, to Descartes conception of the mind and Locke's empiricist framework for the concept of knowledge. Rorty points out how the need for epistemology: a *theory* of knowledge, stems from the problem that occurs when we start to understand

knowledge as an "assemblage of representations".[10] It is this development of how the concept of knowledge became tied up with representation that I want to track down. In Part One of this thesis I pose the questions: Why does this concept of image as a go-between appear, how does it appear and why is it so persistent? I want to clarify why it is comprehensible, through showing it against different backgrounds. This does not rid the idea of the fallacy that I pointed out from the start, but it hopefully lets us grasp why we are inclined to fall for the temptation of thinking in such paths.

This fallacy is far from an innocent mistake. It has vast consequences both for our concepts, our science and our technology. What I will present in the upcoming chapters is a very limited account of some key issues within early modern philosophy. My focus will be on concepts related to that of the visual record. The idea of the visual record was preceded by similar notions that were part of an epistemological debate about how vision and the visible are related to our knowledge. When the metaphysical worldview that was common for both Neo-Platonism and Christian theology is taken over by the mechanistic world view of science, the visual, the perceivable, the measurable and quantifiable announce themselves as veritable foundations for knowledge. It is not by chance that the visual realm becomes the foundation for certain knowledge for the philosophers of the 16th and 17th century and consequently it is not by chance that an idea of a record of the visual is conceived as an extraordinary aid for human understanding even before the technology of photography is completed. On the other hand it is not a very solid foundation. During the same period, this ocularcentric ideal is constantly under attack. The very same natural philosophers who introduce optical aids and visual observations as means of attaining objective knowledge often express their doubt concerning knowledge obtained through the senses. Stuart Clark writes: "between the Reformation and the Scientific Revolution, vision was anything but objectively established or secure in its supposed relationship to 'external fact'. Many intellectuals, at least – and it is an intellectual history that I am proposing here – seem to have been preoccupied precisely with questions to do with whether human vision did give reliable access to the real world after all – with whether vision was indeed veridical."[11] Along the same lines I want to make clear how,

10 Richard Rorty, *Philosophy & the Mirror of Nature* (Basil Blackwell 1980), p. 136.

11 Stuart Clark, *Vanities of the Eye – Vision in Early modern European Culture* (Oxford University Press 2007), p. 1.

even during the beginning of what we now call the Enlightenment, the idea of an objective visual order is constantly scrutinized and the supposed unity, fixity and objectivity of vision are never actually taken for granted. In order to explain the concept of visual record I will look at the role of vision in this dialectic of knowledge. Its place in the dialogue between the natural philosophers of the 16th and 17th century will later have implications for the invention of the camera and its role as a recording machine.

As Jonathan Crary points out, the invention of photography is not only a step forward in the venture of producing realistic images, it is also a step in the "immense social remaking of the observer".[12] Through its recording capacity photography enables vision in itself to become an object for knowledge. The photograph introduces the possibility of sharing what a certain person saw at a specific moment in a certain place. When Nicéphor Niépce, in the year 1827, manages to fixate the image inside a camera obscura on a pewter plate, a new understanding of representation is set on its way. During the time of its invention the philosophical discourse on photography will circle around questions concerning the potentially distorting vision of the self, about the projections of the self. The camera seems to point out that if our eyes necessarily are shackled by the judgment of the self, then the lens of the camera seems to be freer, more neutral and less prone to human error, more attentive than the human eye. But as in the earlier philosophical discourse concerning the certainty of knowledge obtained through sight, also the role of the camera as an objective renderer of the world is constantly contested and questioned.

Photography inaugurates a new form of metaphysics of the self in 19th century attitudes towards the image. Paradoxically, photography and the idea of an image that is separated from the temptations and intentions inherent in human psychology, stem precisely from a breach with a metaphysical philosophical tradition.[13] This rupture entails dissociation from the Enlightenment conception of seeing as a fundamental form of knowing. Rather than seeing the visual as a sign language of nature, as signs produced by the metaphysical entity of

12 Jonathan Crary, *Techniques of the Observer – On Vision and Modernity in the 19th Century* (The MIT Press1992), p. 4.

13 For a detailed discussion on this issue see, Marx W. Wartofksy, *Models – Representation and the Scientific Understanding* (D. Reidel Publishing Company 1939), p. 130.

nature or God as the author of nature, questions concerning the implacable involvement of the psychology of the subject in perception become paramount during modernity. As Donald Evans points out, this modern view emphasizes the absence of human contribution to the image. He quotes Matisse: "The photographer must intervene as little as possible, so as not . . . to lose the objective charm which it naturally possesses . . . Photography should register and give us documents".[14]

Photography is not the starting point for this idea of image as record. But it serves as a convenient model for century old dreams of an image that is not determined by the will, actions and conceptions of man. This ideal of a dispassionate observer can be traced back to the beginnings of the empiricist turn within science and philosophy. It is important to note that this attitude also carries moral undertones. It advocates certain skepticism towards the passions involved in sensual perception. As vision is conceived to be affected by the passions of the observer the scientific observer must acquire a dispassionate stance. Pamela H. Smith writes:

> But how was the philosopher to escape the havoc wreaked by the passions when he relied so heavily upon the body and the senses and was himself immersed in the sensory world? Natural philosophers in the seventeenth century sought to confront this problem by constructing a "dispassionate *Scientia*", that is, certain knowledge based on sensory perception that was not adversely affected by passions. This meant that a new philosopher would have to construct an "objective" method of investigation and distinctive identity in order to remove himself from the dangers presented by the immersion in the senses.[15]

In this way the visual was seen to be inhabited by a tension. The passions of the observer were conceived as something that intervened, disrupted and distorted the potentially pure visual information. It is in the context of this strife toward dispassionate observation and a neutral

14 Donald Evans, "Photographs and Primitive Signs", *Aristotelian Society Proceedings 1978/79*, New Series – vol. LXXIX, p. 217.
15 Pamela H. Smith, *The Body of the Artisan – Art and Experience in the Scientific Revolution* (The Univeristy of Chicago Press 2004), p. 226-228.

form of representation that the photograph found its role during the beginning of the 19th century. In a peculiar way the mechanical camera that records the workings of natural light, was conceived to be a superior interpreter of natural phenomena due to its automatic and supposedly neutral way of producing images. Or to put it in another way, the supposedly pure observation aided by the automatic camera was a means of bringing order into a fragmented and hardly observable natural and social world. The chaos or confusion was conceived as something that resided in the subject. As Lorraine Daston and Peter Galison point out, this ideology consists of an understanding where freedom *of* will is sacrificed in order to establish a freedom *from* will.[16] In this view, in order to understand nature one had to surpass one's psychological, anthropomorphic attitude and turn oneself into an unbiased observer. This modern venture was an attempt to rid science (as science is the realm in which the attempts to make objective visual records got on its way) of subjectivity and anthropomorphism. Daston and Galison trace the idea of what they call noninterventionist or mechanical objectivity to the practices of scientists of the 19th and 20th centuries. The goal for these scientists was essentially, as one of the pioneers in the photography of movement, Etienne-Jules Marey expressed it, to create a: "wordless science that spoke instead in high-speed photographs and mechanically generated curves."[17] Or, as one of Marey's contemporaries, French astronomer Jules Janssen, put it: "the photographic layer very soon will be the veritable retina of the scientist."[18] The underlying assumption here was that human language as well as human observation are prone to error and distortion whereas the mechanical machine effortlessly captures the true qualities of the visual world. This attitude that sought to eliminate suspect human intervention signified a striving towards a virtuous science where inward temptations, human judgments, theories and intentions were restrained by the automatic workings of different mechanical machines. As Michael Renov points out, the 100-year history of documentary film is deeply rooted in the modernist project that stems from the ideal of the dispassionate observer as a suitable attitude for extracting reliable knowledge.[19] If we take

16 Lorraine Daston and Peter Galison, "The Image of Objectivity", *Representations*. volume 0, Issue 40 (1992), p. 83.

17 E. J. Marey as quoted in Lorraine Daston and Peter Galison 1992, p. 81.

18 Jules Janssen as quoted in Christoph Hoffmann, "Representing Difference: Ernst Mach and Peter Salcher's Ballistic-photographic Experiments", *Endeavour*, volume 33, No. 1, 2009, p. 22.

19 Michael Renov, *The Subject of Documentary* (University of Minnesota Press 2004), p. 147.

Renov's account of the documentary seriously, the venture of creating visual records supports a skeptical attitude towards communication, dialogue and human testimony. It reflects an attitude in which our reliance upon another, our communication and language, and consequently our reliance on ourselves are brought under suspicion. To briefly describe my viewpoint on this matter: the need for social control derives from distrust concerning oneself and, consequently, skepticism towards the other. If we take the legacy of the denigration of anthropomorphism, human will and subjective psychology seriously, it will introduce a need for objectivity and control. In order to understand how things evolved to this point in the first place, I want to start by looking at how the visual record was established as a scientific tool above others.

I will begin this inquiry by looking at the discrepancy between the world and the self that announces itself in the discourses of natural philosophers and artists of the Renaissance. It is in this debate that we find certain theories of vision that will pave the ground for visual records and the practice of pure observation. If we trace this practice of observation to the beginning of the scientific revolution it becomes clear how it was connected to the emergence of a new empirical understanding of science that escalated from the Renaissance onwards. The advent of Keplerian optics in 1604 turned a certain understanding of vision on its head. Contrary to the Euclidian theory of vision[20] that was paradigmatic during medieval times, Keplers' theory indicated that the eye works as an image-making machine, but he also, due to the weight of earlier visual theory, held that the eye is a receiver of light rays that inscribe an image of the outer world on the retina.[21] Here lies a tension between the supposed activity and passivity of the eye and subsequently of our mind that will form one of many philosophical debates during the 17th century. For the philosophers who discussed Kepler's optics, knowledge seemed to consist of representations that were mediated through the human eye. Francis Bacon, Galileo Galilei and John Locke all had an understanding of knowledge that required the concept of representation. If our visual faculty, as Keplerian optics, Cartesian rationalism and later on Lockean empiricism seem to indicate, is constructed so that our

20 For an account of Keplers' theory of vision in contrast to earlier classical and medieval theories see, John Hyman, *The Imitation of Nature* (Basil Blackwell 1989), p. 1-19.

21 John Hyman 1989, p. 7. See also, Catherine Wilson 1997, p. 120.

eyes provide our minds or souls with visual representations, what then becomes of the self, the agent? On the other hand what becomes of nature? Who is the producer or the author of these representations? It is this interaction between visual representations and the self that will puzzle the scientist and philosophers of the modern epoch.

Another cluster of philosophical questions that was connected to the scientific revolution was the discrepancy between subjective perception and the new discoveries within cosmology. The heliocentric worldview of Copernicus was counterintuitive. What Kepler and Galileo and others discovered by means of observations aided by the telescope was not the kind of knowledge that could be attained by the human eye. On the other hand, these discoveries were still dependent on visual observation, that is, they still derived from the visual. One could then ask: if Keplerian theory of vision is correct, that is, if our eyes serve as image-making machines, then what status should be given the apparatuses of telescopes, microscopes and the camera obscura? The instrument became paramount in this new direction in science but its role was problematic. Pamela H. Smith writes:

> Many natural philosophers, including René Descartes, (1596 – 1650), Thomas Hobbes (1588 – 1679), and Gottfried Wilhelm Leibniz (1646 – 1716), believed that mathematics must be applied to knowledge gathered through the senses in order to give it the certainty of logical or geometrical demonstration. In contrast, Robert Hooke (1635 – 1703) argued that because the senses were so faulty, they needed the aid of instruments. Hooke took instruments that had been the province of mathematical practitioners and claimed that they could be transformed into natural philosophical instruments that would help to correct the deficiencies of the senses and ultimately lead to certain knowledge.[22]

Again there are two seemingly contradictive ideas at play here. One claims that knowledge received through the senses is principally unreliable. In this view (held by Descartes, Leibniz and Hobbes) the knowledge of the senses must be rationalized through

22 Pamela H. Smith 2004, p. 222.

mathematics and geometry, i.e. the visual must be made into something non-visual (mathematics) in order for it to become certain knowledge. The other idea at play claims that the senses are too weak, that they require instruments to "see better". The concepts of vision, rationality, knowledge and the instrument are then caught in the crossfire between these two ideas. What I want to make clear in the chapters that follow, is that vision became a central problem for philosophy due to the different discrepancies that seemed to inhabit this faculty. And furthermore, that these discrepancies occurred when vision was forcibly connected to different concepts of objective knowledge. This connection was made by reducing the subjective faculty of vision, i.e. visual experience, to something representable, to an image. I will describe this manoeuvre, how it occurs during different times with slight variation in philosophy, art and science.

Part I

To Discover and to Create – A Genealogy of the Concept of Image

1. The Camera Obscura and the Epistemology of Enlightenment

> An experiment, showing how objects transmit their images or pictures, intersecting within the eye in the crystalline humor. This is shown when images of illuminated objects penetrate into a very dark chamber by some small round hole. Then, you will receive these images on a white paper placed within this dark room and rather near the hole, and you will see all the objects on the paper in their proper forms and colours, but much smaller; and they will be upside down by reason of that very intersection. These images, being transmitted from a place illuminated by the sun, will seem actually painted on this paper which must be extremely thin and looked at from behind. […] and the same takes place inside the pupil.[23]
>
> Leonardo da Vinci

In this chapter I will begin to describe a dynamic in an early-modern Western culture of thought that allows a forgetfulness concerning some aspects of visual perception to prosper. I will look into the writings of Leonardo da Vinci (1452 – 1519), Francis Bacon (1561 – 1626), Galileo Galilei (1564 – 1642), and Johannes Kepler (1571 – 1630), as they all, in their own way, are a part of an evolution in which the visual world is charted and rationalized by the help of visual aids and geometrics. This evolution will bring about both conceptual and technological inventions. The camera obscura, the perspectivist painting and in the end

23 This comparison between the camera obscura and the workings of the human eye is one of the earliest written accounts of the camera obscura and one of the starting points for this analogy between apparatus and the human eye. Leonardo Da Vinci, *The Literary Works of Leonardo Da Vinci, Volume 1* (Phaidon 1979), p. 142. That is, one of the first appearances in Western literature. In Arabic philosophy the camera obscura had already been used and analyzed by Alhazen (c. 965-1039). The 13th-century philosopher Witelo picked up and commented on Alhazen's optical theory and through him Alhazen's optics reached the philosophers of the Renaissance. Later on, Kepler wrote his *Optics* as a commentary on Witelo's optical theory. See Marx W. Wartofsky, *Models – Representation and the Scientific Understanding* (D. Reidel 1979), p. 228.

photography can be said to be consequences of this culture's ways of thinking about vision and knowledge. This culture of philosophical empiricism required a concept of visual record and all these inventions answered to that need in slightly different ways. In investigating the premises for the evolution of the visual record, I want to bring about an understanding of both the rich, creative and prosperous scientific, artistic and philosophical revolution that was named the Enlightenment, and the downside of this development: a certain denigration of subjective experience and intersubjective communication that had its consequence in a confused theory of perception and epistemology. The first of the pivotal inventions of visual recording, the camera obscura, entered the intellectual discourse of Western philosophy in the writings of Leonardo and became immensely significant with Kepler, Locke and Descartes. The discourse around this device serves as a starting point for this genealogy of the concept of image.

The camera obscura played an essential part in the artistic and scientific revolution of early modernity. It served as an analogy and in some cases even as a model for the workings of the human eye and vision. The camera obscura seemed to explain how our vision comes about and how our perception works. Furthermore, it became a device that served as an aid for observation. Already during the Renaissance, the camera obscura was used to paint or draw copies of projections inside its chamber. This practice was carried out by artists such as Leonardo da Vinci in order to discover ways of reproducing a correct representation of three-dimensional space on a two-dimensional surface. Here it is important to be specific. Leonardo did not use the camera obscura in order to copy the natural world. He used it as an instrument that helped him deconstruct the workings of perspective and light.[24] It was a scientific practice in which the artist tried to unveil the geometrical qualities of a three dimensional corporeal world in order to reproduce a semblance of three-dimensionality on a flat surface.

The camera obscura enabled artists and scientists to isolate a piece of the world in order for them to observe, scrutinize and explore its visual qualities. What they actually observed in these kinds of cases was of course not the actual world, but *images*. As the

24 Svetlana Alpers, *The Art of Describing – Dutch Art in the Seventeenth Century* (John Murray 1983), p. 30.

practices of observation that were introduced in science by early empiricists such as Francis Bacon and Thomas Hobbes required a translation of objects and natural phenomena to a set of measurable and quantifiable qualities, the image inside the camera obscura served as a convenient aid for this kind of enterprise. It gave rise to an idea of a natural image that helps the scientist to focus on the significant qualities of the natural world. This reduction of the concept of image introduced a new set of philosophical problems. It led to a conceptual confusion concerning the status of the image. Images are producers of our experience, our concepts and our language in the sense that they help us conceptualize our visual world. We acquire knowledge through the workings of images. But at the same time images are also products of our conceptualization. Our relationship with images is a two-way street. What the empiricist paradigm often tended to turn a blind eye to, was the way in which images are products of our conceptualization, our judgement and our attention. This confusion appeared when the reduction and abstraction of empiricism was, so to say, swept under the carpet. When the scientist first chose a set of qualities, usually the size and the shape of an object, and then made a representation of the object by emphasizing or extracting these measurable qualities, he sometimes mistook the result of this reduction for the essence of the object. In this way the confusion was in many cases connected to a specific kind of self-deception. As I will show, this uncertainty concerning the status of the image was necessarily neither more nor less confused than our contemporary conception, but the confusion was due to quite different factors than our present difficulties with the concept of image.

The unclear status of the image emanated from classical theories of vision. The aim of ancient visual theory was primarily to defend a mechanical or causal theory of perception. As John Hyman points out, this understanding has its origin in the conceptual paradigm of ancient philosophy in which the tactile was regarded as the primary form of perception. From the beginning this was due to an understanding in which perception is impossible without physical contact. The fact that we, through vision, are able to discern the qualities of a certain object at a distance without being in actual contact with it, posed a problem for this theory. As vision seemed to deviate from this principle in subjective experience some kind of explanation was required. The most common solution was to introduce the concept

of the image as a mediator between the object and the perceiving subject.[25] For Democritus, arguably the first empiricist, active during 5th and 4th century BC, objects emitted *go-betweens* that were received by our senses. The ear received sounds, the nose received smells, the tongue tastes and the skin heat, coldness and pressure. The go-between of vision consisted of a thin film of atoms arranged in the shape of the object. In this way the visual go-between was something that left an imprint on the eye, that is, vision was not primarily optical, but tactile. It was like a tablet of wax on which the objects in the world imprint their patterns via corporeal go-betweens. The subjective experience of vision was relegated to the status of a kind of phantasm, a mere appearance of the world.[26]

The paradigm for this causal theory was the experience of touch. It exemplified a pure unmediated contact with the world in which the perceiver senses the actual object as it is in nature. As Giorgio de Santillana points out, Aristotle, who is later remembered as the philosopher who introduced logic and language as the base for understanding and knowledge, held that syllogisms can take us only so far. The direct contact with an object that is exemplified in the experience of touch, is not relative, it does not give us room for alternative interpretations. This characteristic of touch gives us a contact where human thought and the natural object of thought coincide. Heat is hot, coldness is cold, and so forth. In this Aristotelian view the tactile contact of touch exemplifies knowledge that goes beyond mere opinion. It seems to indicate a certainty of knowledge that is less evident in the words or signs that we use to signify things. In touch there is no affirming or denying, either we grasp an object or we do not, either way there seems to be no room for error or interpretation.[27] This kind of distinction can also be found in Epicurus who held that sense-input can never go wrong because the senses are divorced from the power of judgement that belongs to the soul. In this view, the errors when they occur, do not occur in the senses, but in judgement.[28] This view was adopted by Descartes, among others. One problem with this understanding of knowledge is that the other senses, most prominently that of sight, do not correspond to this

25 John Hyman, *The Imitation of Nature* (Basil Blackwell 1989), p. xi-xii.

26 Ibid., p. 3. See also, Marx W. Wartofksy 1979, p. 109.

27 Giorgio de Santillana (ed.) in Galileo Galilei, *Dialogue on the Great World Systems*, (University of Chicago Press 1957), p. 114.

28 Sandra Rudnick Luft, "Embodying the Eye of Humanism" in David Michael Levin (ed.), *The Discursive Construction of Sight in the History of Philosophy* (The MIT Press 1997), p. 173 and 176.

characteristic of the tactile without friction. In order to be able to keep this theory going the go-between of *species* was introduced.

Species can be understood simply as that which is specific for a certain object. For classical philosophy, that which is specific for an object is represented by some kind of substance that passes between the perceiver and object. It is a substance that exists in the world to represent the object prior to human language. Contrary to the go-between of language, the *species* shares the nature of the object. It is not produced by the human intellect to signify a certain thing. It is produced by nature, and therefore shares the natural qualities of the object. In this sense, *species* are corporeal representations of an object attainable by the senses, but beyond human language. Katherine H. Tachau describes the role of *species* as natural signs in medieval philosophy as follows:

> Another way of expressing this causally determined correspondence between objects and these veridical mental images (a way that brings [Roger] Bacon back to Augustine's and Boethius' semantics) is to state that the species are "natural signs" (*signa naturalia*) of their objects. These signs can be distinguished from conventional ones established or, in Baconian terms, "imposed" (*imposita*) arbitrarily as are the particular significative sounds of particular languages. The distinction lies in the fact that, in contrast to those that signify conventionally (*ad placitum*), the relation of intention or species to its generating object is innate, by virtue of their shared nature. This relation of natural sign to the object that it "signifies" is the nexus of knowing and meaning (*significatio*).[29]

As in the example of knowledge through touch, this theory of visual *species* is committed to explaining an objective form of knowledge. Contrary to our expressions in language, the visual *species* are natural signs, they are not culturally determined like the different languages of different cultures. However, here is the root to a certain conceptual confusion. While

29 Katherine H. Tachau, *Vision and Certitude in the Age of Ockham – Optics, Epistemology and the Foundations of Semantics 1250-1345*, (E.J. Brill 1988), p. 18.

trying to apply the criteria of knowledge that is derived from the directness of touch on the sense of sight, a discrepancy occurs. The direct relation between object and perceiver that is found in touch has become the relation of object, sign and perceiver in the case of vision. This invites the question: how does the sign signify? What Tachau notes in the passage above, is that the *species* are understood as intentional expressions, as if the object communicates its *meaning* through signs. This stands in contrast to a strictly empiricist theory where the go-between is postulated in order to explain a spatial causal relation between object and perceiver, since the *significance* of the sign cannot be a matter of spatiality or causality. This muddle is one of the innate problems of the empirical or causal theory of perception and it will determine the philosophy of perception to come. The fact that the word *likeness* at some point becomes connected solely to visual likeness, is determined by the privileging of this sense above the others in Western philosophy and science. As Hyman notes: "What Democritus called a likeness (deikelōn) was soon called an image (eidōlōn)".[30] This grammatical difference indicates the shift from a tactual to an ocular paradigm of perception. This is one of the reasons why vision became a central problem for philosophy in the first place. It introduces questions about how signs can communicate knowledge. Here we are dealing with two very different concepts of knowledge: one that is objective and certain, the other that is relative and inferred. The relation between these two epistemic concepts is still a source for puzzlement in philosophy. I will now look at the origins of this dialectic in Francis Bacons philosophy.

Distance and the Abstract – The Problem of Inference

The period during which Francis Bacon writes his *New Organon* is one of the starting-points for the new hierarchy of the senses. The distance that is required for vision as well as its abstract character both play a part in this order since these factors serve the new scientific methods of observation that evolve during this time. Furthermore, the geometrical understanding

30 John Hyman 1989, p. 3.

of vision that is constructed in the theories of Euclid and, later, Alhazen[31] serve the same purpose. The period of experiment and observation that gave us Copernican, Galilean and Keplerian cosmology was a time when the doctrine of Aristotelian logical categorizing of the world was tested by observations and experiments. The results inexorably indicated that the cosmology of the medieval Christian scholastic philosophers and of the ancient Greeks was inaccurate.

The new hierarchy of the senses was based on a shift in the understanding of the relationship of touch and vision. The shape of an object is perceivable by both touch and vision. Therefore these two senses often competed over the status of the primary sense. One reason for this division of the five senses was that sight and touch seemed to correspond with each other, whereas the other senses seemed hermetically sealed from one another. Francis Bacon, who can be regarded as a 16th century follower of Democritus, although he advocates a completely conversed hierarchy of the senses, expresses this view in his *New Organon*.[32] He writes:

> It is evident that sight holds the first place among the senses, as far as information is concerned; and so this is the sense for which we must first find aids. There appear to be three kinds of aids: either to see what has not been seen; or to see further; or to see more accurately or distinctly.[33]

> These factors pertain primarily to sight, and secondly to touch. These two senses are informative in a broad way about ordinary objects; whereas the other three barely give any information except directly and about objects peculiar to each sense.[34]

31 Contrary to Euclid, Alhazen's (965-1039 AD) theory of vision postulates that the eye receives light rays that are emitted by the object rather than the eye sending out visual rays towards the object. This does not however constitute any fundamental difference. Alhazen's account leads later on to Kepler's optical theory. The spatial and geometrical emphasis is the same as in the theory of Euclid. Both accounts contribute to a rationalization of subjective perception. See John Hyman 1989, p. xii and 5-6.

32 Francis Bacon, *The New Organon*, (Cambridge University Press 2002), p. 45-47.

33 Ibid., p. 171.

34 Ibid., p. 173.

Note how Bacon emphasizes that the other senses (smell, hearing[35], taste) perceive things directly, whereas sight and touch are senses that are informative. That is, they have access, not only to a direct contact with the object, but also to some kind of *information* about the object. Here the requirement of distance peculiar to sight is not considered to be a problem, but an advantage. To understand this correctly we have to distinguish between two different kinds of distance. Firstly, vision, unlike touch, is not possible without distance. Vision requires light and, therefore, it is the sense for which distance is essential. If we place a finger upon our eye we fail to perceive it visually (and begin to perceive it tactually). In this way, vision differs from touch as it requires distance while touch requires contact. The second point deals with what could be called the distance of abstraction. In Bacon's epistemology, information is something that exists for both touch and vision, whereas the lower senses of smell, taste and hearing[36] perceive things directly. In this latter case information signifies a kind of inference and conceptualization that can be made through vision and touch. He notes that changes in matter, for example that of a liquid that is vaporized, can be understood tangibly because of the slight loss of weight that occurs. This phenomenon is also perceived by vision, in the emission of fumes or similar processes. Another example is that of the rusting of metals, in which change in matter is perceivable both by touch and vision, since both the colour and the shape of the surface is altered in oxidation.[37]

These two senses are capable of tracking changes in nature, therefore being of the utmost importance for the natural sciences. But it is important to note that for Bacon, the actual causes of change in nature are dependent on spirits that inhabit different materials; and these spirits are not visible in themselves. The change that is perceived is a clue to the causes that are imperceptible. In this sense, Bacon's empiricism is dependent on sense-experience, but sense-experience is only a *means* of grasping occurrences that are beyond the perceivable.

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35 In this passage Bacon strays from his general understanding of the senses. Usually he refers to hearing as the second sense.

36 This is specifically a Baconian hierarchy of the senses. Other contemporaries such as Leonardo held that hearing was the other candidate for the higher conceptual senses together with vision, for quite understandable reasons. See, Leonardo, *The Literary Works of Leonardo Da Vinci*, vol. I, p. 367.

37 Francis Bacon 2002, p. 173.

He distinguishes between two kinds of shortcoming in the senses. There are cases in which the actual occurrence is not perceptible at all, and cases in which they are perceptible, but the human senses are too weak to distinguish what is going on. In the latter case, different visual aids are prescribed in order to help us get to the core of causes in nature.[38] This leaves in hand a world view in which a superior observer with a more powerful sense perception could understand the world more clearly. For example, Bacon claims that our tactile sense is too weak to perceive small shifts of temperature. In such cases a thermometer can show that the cause for the melting of a piece of wax is a slight increase in temperature, imperceptible to the touch of the skin.[39] Due to our weakness of sensitivity, some causes in nature, although perceptible, are overlooked. Here a contradiction occurs, since, on one level, for Bacon, humans err because of the weakness of our senses, but in a more fundamental sense humans err because of the anthropocentrism of our way of understanding. Bacon writes: "For errors of the senses should be assigned to the actual investigations of senses and the sensible; with the exception of the *great* error of the senses, that they set the outlines of things by the pattern of man, not of the universe; which can only be corrected by universal reason and a universal philosophy."[40] So on one level, our shortcomings in science depend on the weakness of our sense perception, but on the other hand they stem from a misguided trust in sense perception. This latter form of deception does not derive from perception *per se*, but from human judgment that plays a necessary part in perception. Bacon sees it as a human trait to infer or interpret things wrongly or distortedly because of our psychological disposition to find order, coherence and unity in nature. He writes:

> The spirit of man (being an equal and uniform substance) presupposes and feigns in nature a greater equality and uniformity than really is. Hence the fancy of mathematicians that heavenly bodies move in perfect circles, rejecting spiral lines.[41]

38 Ibid., p. 174.

39 Ibid., p. 125.

40 Ibid., p. 178.

41 Francis Bacon, "On the Dignity and Advancement of Learning" in Spedding, Ellis and Heath (eds.) *The Works of Francis Bacon* volume 9 of 15 (Houghton, Mifflin and Company 1882), p. 99. (Forgotten Books 2010)
<http://www.forgottenbooks.org/info/9781440040917>

So the tension actually exists between the universe or nature, as it exists within itself, and our human ways of interpreting it as a union rather than as fragmentary, order rather than chaos. In this tension the senses play the peculiar role of the go-between.

With this in mind Bacon, although he advocates a certain skepticism toward sense perception *per se*, still places touch and vision before the other senses. These two senses seem to correspond with each other in that they perceive the same aspects of the same occurrence, whereas the other senses cannot grasp this change that occurs in matter. The reason why touch in Bacon's case is not relegated to a lower class of senses is that it shares certain qualities with vision. We can feel as well as see the shape of a cube, whereas we cannot smell, hear or taste it. This union between touch and vision is what makes the Baconian categorization of the senses possible. In this way, touch and vision can maintain a distance that, according to Bacon, is required for the understanding of change in nature through observation. The interaction between these two senses permits a kind of inference that seems impossible for the other senses. In this way, the visual faculty that was problematic for Democritus due to its abstractness had become virtuous for Bacon because of the same quality.

Here we are dealing with two quite different approaches to objectivity. The first one considered the sense of touch as a paradigmatic example of the objective, due to its direct contact with the object in the world. The second account deals with quantifiability, measurability, observation and vision as bases for objectivity, since they differ from discursive, anthropomorphic, knowledge. Both can be understood as a reaction against the logical doctrine in Aristotelian philosophy[42], but at the same time these two accounts of objectivity stand in contrast to one another. The rupture in the paradigm of perception signifies a move from emphasizing the literal likeness of object and idea in touch, to emphasis on the inference of vision. The confusion that occurs in theories of vision during this time is based on the inability to distinguish these two concepts of knowledge from each other. Whereas the first emphasizes the corporeality, the contact and the directness of touch, the second one emphasizes the abstractness, the conceptuality and the distance of vision. The

42 Giorgio de Santillana in Galileo 1957, p. 16, n. 8.

tactual paradigm of perceptual theory cannot explain vision at all. But Bacon's account of vision, although it accepts vision as a proper or even superior form of knowledge, is still held down by the confused idea of sensual experience as something beyond human language and understanding. He writes: "And when a sharper understanding, or more careful observation, attempts to draw lines more in accordance with nature, words resist".[43] He expresses a certain skepticism towards human language, since language is distorted by judgment: by the will and the emotions of the subject. While words create abstract or synthetic categorizations of the natural world and its phenomena, vision dissects nature: "But it is better to dissect nature than to abstract; as the school of Democritus did, which penetrated more deeply into nature than the others".[44] In this sense Bacon does not know on which side of the fence he should stand. He wants to keep the Democritean epistemological theory going, but at the same time he seems to miss that however he wants to go about this issue, his understanding of the union between vision and touch inevitably requires human judgment. Dissection of nature by the means of visual observation is no less dependent on human judgment than is its logical categorization through language. This problem stems from the fact that neither the Democritean, nor the Baconian theory of vision, are actually committed to giving an explanation of vision. Their commitment is to objectivity, to a form of certain knowledge beyond human judgment.

The Geometry of the Senses: The Linear Perspective

During the mediaeval period a hierarchy was established based on the classical Greek geometrical theory of vision. The bond between geometry and vision seemed to indicate that this sense had another thing going for it than did the, so called, lower senses. The question that appears here is, as Hyman notes; "why is there a geometry of vision, but no geometry of smell or taste?"[45] This question arises, according to Hyman, from a confusion between

43 Francis Bacon 2002, p. 48.

44 Ibid., p. 45.

45 John Hyman 1989, p. 66.

vision and *visibility*. The Euclidian theory of vision postulates that our eyes emit (instead of receive) light rays in the form of a cone. Objects situated at the base of this visual cone (think of the light field of a flashlight) are visible whereas everything that falls outside of this circle remains invisible. In this way the circular visual field is projected onto the world by both eyes. That which is visible is in this case determined by the angle of the cone and the position of the perceiver, and therefore vision becomes a spatial matter. What is omitted in this theory of vision is judgment: the understanding and the knowledge, the memory and attention of the perceiver. What is gained is a completely objectified theory of vision which can be explained spatially and therefore geometrically.[46]

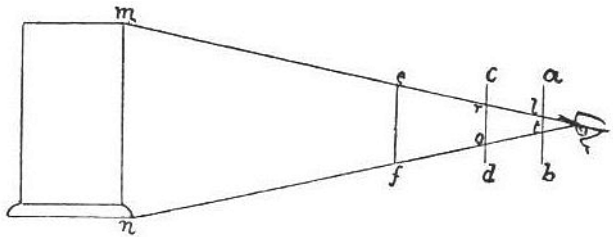
The image serves as a fruitful model for this geometrical theory of vision, but not any kind of image will do. The linear perspective that is the basis for Euclidian theory of vision will also become paradigmatic for the pictorial arts during the early Renaissance. For this way of constructing the visual picture-plane, it is essential that the position of the eye is known.[47] The perspectivist picture positions the viewer of the picture spatially at the point of the position of an imagined eye. This constructed point of view, necessary for perspectivist painting, is fixed in its place. It is not a moving eye in a moving body, but a single fixed eye, or as Svetlana Alpers interprets it, a dead eye.[48] Along the same lines, Erwin Panofsky points out that the perspectivist painting tacitly assumes that we see with one fixed eye, and that the cross-section of the two-dimensional picture plane **(illustration: 1.1)**, accurately represents

46 Ibid., p. 67.

47 Suren Lalvani describes how this way of constructing images was put into practice as early as 1425 in Florence by Fillippo Brunelleschi: "On a small 'half-braccio' square panel, Brunnelleschi painted the Baptistery, the piazza in front of it and familiar landmarks on either side, from a point within the central portal of the cathedral opposite of the Baptistery. The painting itself, as Edgerton points out, would have been copied from a reflection on a mirror positioned in the very same place. The mirror, serving as a base to Brunelleschi's "visual pyramid, would show all the lines of the piazza converging onto points identical with the optical plane, thus enabling him to establish the vanishing point which he then transferred in the form of a dot to the same location in the square panel. Once the painting was completed, Brunelleschi drilled a small hole through the back of the panel in the same position as the centric point. We may then assume that he asked volunteers to stand in the same position, within the central portal of the cathedral opposite the Baptistery, and instructed the volunteer to hold the painted panel in one hand, and peer in a monocular manner through the back of the panel at a mirror held in the other hand directly in front of the panel which reflects the painting. One may imagine that the mirror was lifted up or dropped down at one moment revealing the Baptistery, and at another moment the reflection, thus rendering the illusion significant […] ." Suren Lalvani, *Photography, Vision, and the Production of Modern Bodies*, (State University of New York Press 1996), p. 3.

48 Svetlana Alpers 1983, p. 36.

our optical impression.[49] That is, if we take the perspectivist painting to be aiming at correct representation of how we actually see.



1.1 *Leonardo's picture plane*[50]

It may at first seem like a relatively unproblematic assumption that the Renaissance perspectivist painting represents quite accurately how we see the world, but if we take this literally it becomes a very bold reduction. Alpers points out that Kepler, who advocated such a reduced understanding of sight, actually constructed a *de-anthropomorphized* theory of vision in which what we see consisted of pictorial representations. She writes: "He stands aside and speaks of the prior world picturing itself in light and colour on the eye."[51] In this *a priori* pictorial theory of vision, the visual as it exists in subjective experience is abandoned. This theory cannot, for example, account for what is going on when I search for a pair of scissors that are in front of my eyes. My attention to certain objects, my reaction to distractions etc., are not dependent on my position in a certain space. The ways in which things are significant or meaningful is ignored in this theory of perception. *How* we see, the many ways in which we observe, view and gaze, is reduced to a question of *what patterns* we see. *Optics* becomes the core of visual theory. In this theory of the objective vision of the single unmoving eye, the camera obscura becomes an even better model of vision than the actual human eye. But to

49 Erwin Panofsky, *Perspective as Symbolic Form*, (Zone Books 1991), p. 28-29.

50 Image taken from Leonardo Da Vinci, *The Literary Works of Leonardo Da Vinci* (Phaidon 1979).

51 Svetlana Alpers 1983, p. 36.

be fair, this geometrical theory of vision was not designed in order to explain human vision. It had several more specific purposes. The theory served as a foundation for perspectivist painting. Furthermore, it was constructed in order to help along the rationalization of visual space so that observations could be standardized within astronomy.

Galileo's and Kepler's observations, aided by the first telescopes, gave firm evidence of a cosmological order that was not geocentric. Nor was it fixed and finite, but constantly moving and infinite. The telescope gave the observer access to things that were too distant to be perceived by unaided sight. Here the telescope amplified vision's capacity to perceive at a distance. Galileo notes that if Aristotle had had access to a telescope he would have been forced to reevaluate his doctrine of logical reasoning, since: "we, by the telescope, are brought forty to fifty times nearer to the heavens than Aristotle ever came; so we may discover in them a hundred things that he did not see […]."[52] This indicated that observation should be considered superior to inner contemplation. In this view nature (or God) has a reasoning of its own that is not necessarily graspable by human comprehension, but peculiarly, by visual observation in connection to geometry. This was not only an abstract philosophical conclusion. Geometry played a fundamental role during this period since it was crucial for the understanding of the universe. Nature, the way that it exists prior to human experience, was conceived as a mathematical order. Geometry was not seen as something applied onto the chaotic phenomena of nature or the universe. It was *the* language of nature that existed irrespectively of human involvement. *Cosmology* signifies precisely this, a harmonious order of nature that exists independently of human understanding.

We have to note that the philosophers of ancient Greece, the medieval scholastics and the natural philosophers at the beginning of the modern age, were all system builders. Despite their internal disputes and quarrels they were all committed to a common project. If we look at the examples of Galileo and Bacon, they were both committed to a theory of nature as harmonious order, a cosmology. For them nature was not a chaotic rubble of occurrences, but

52 Galileo's understanding is that two contradictory doctrines emanate from Aristotle; one that holds that the senses give us access to the correct knowledge of the world and the other that holds that reason and logic are the base for correct knowledge. Galileo concludes that in the light of his discoveries, the former doctrine has shown its merits whereas the latter one should be abandoned. Galileo Galilei 1957, p. 59 and 66.

a system with an internal logic and with, as I explained above, a reasoning of its own.

The threat against cosmology was an internal one. It stemmed from the empirical observations of the movement of the planets. The Aristotelian world view held that cosmos has the Earth as its centre. It is a finite order in which a finite set of planets and stars all orbit around one centre, the earth. This view changes radically during the 16th and 17th centuries. What Galileo and his contemporaries discovered, was not only mistakes, discrepancies or distortions in the Aristotelian cosmology, but a universe that is potentially completely decentralized. The unnerving discovery was not only that of the sun as the centre of our solar system or that of earths' roundness, but something much more frightening to an scientific sentiment, that there is not one, but several, possibly an infinite number of centres in the universe. This entails that there is no given set of directions, no given up, down, left and right, in the universe, since there is no given centre.[53] In order for there to be a science at all, Galileo had to find something to latch on to, something that is constant and rule-governed in a potentially infinite universe. What he grasps on to is the circular motion of the planets. This seems to be a constant that cannot be questioned. In this way geometry is that which keeps a belief in a cosmology alive, since it seems to be the only olive branch to latch onto if all preconceived rules of previous theories have to be thrown out of the window due to the new discoveries.[54] Later on Kepler discovers that, contrary to Galileo's theory, the planets actually orbit elliptically. But in a way this still seems to confirm that geometry actually is the key to a cosmological understanding of the universe, since it is precisely with the help of geometry that Kepler could correct Galileo's mistake.[55]

The example above might seem out of place in the context of a discussion of pictures and artifacts. But if we want to understand why vision, objectivity and geometry were linked together during this period, it is important to note that this union was established in order to dissolve an underlying impulse towards philosophical skepticism. It is exactly this skepticism that Bacon grants some merit in his criticism of the human disposition of

53 Democritus and Epicurus had already come to similar conclusions. See Giorgio de Santillana in Galileo 1957, p. 48, n. 46.

54 Giorgio de Santillana in Galileo 1957, p. 23 and 44.

55 Alexandre Koyré, *The Astronomical Revolution*, (Methuen 1973), p. 225.

seeing 'too much' order in nature. The possibility of an open universe called for some kind of objective fundament. In this sense the understanding of geometry as the actual language of nature does not seem that far fetched. In Galileo's view there can be no discrepancy between natural and human reason in mathematics. The point where natural reason coincides with human understanding is in arithmetic and geometry. These certain sciences are, for him, objective in the sense that when one grasps a mathematical proposition this understanding is analogous to that of nature.[56] Here we have a similar notion of knowledge as in the case of the objectivity of touch that Democritus advocated. For the atomists, the human idea coincides with the natural object in the experience of touch, whereas in Galileo's epistemology natural (divine) understanding coincides with human understanding when we grasp geometry. In the first case the "grasp" is literal, in Galileo's case it is abstract and metaphorical.

The Metaphorical Eye

This heavy legacy of the unity of image, vision and objectivity is a fertile breeding ground for the pictorial arts. On the other hand, the emphasis on a natural order brings manufactured artifacts under suspicion. Galileo expresses this in a comparison between a statue by Michelangelo and a living man: "but what is it in comparison to a man made by nature, composed by so many exterior and interior members, of so many muscles, tendons, nerves, bones, which serve to so many and sundry motions? But what shall we say of the senses, and the powers of the soul, and, lastly, of the understanding?"[57] Although Galileo regards Michelangelo as one of the finest artists of his time, he still holds a Platonic skeptical view on the arts as a whole. In comparison the work of art is always inferior to the natural object. The arts are in this case relegated to a practice of making semblances that require no real knowledge or understanding of the actual objects.

One thing that still gave the pictorial arts an advantage during this period was that the image seemed to be a better go-between than that of language. Leonardo expresses this as

56 Galileo 1957, p. 114.
57 Ibid., p.112.

follows: "Now tell me which is the nearer to the actual man: the name of man, or the image of man. The name of man differs in different countries, but his form is never changed but by death."[58] Here Leonardo counters Platonic iconoclasm by pointing out that, if we have to deal with appearances, then the image is at least an appearance that can portray qualities of objects that stem from the objects themselves, whereas language is dependent on cultural background, dialect and human judgement. In this sense the renaissance artist was not an artist in the contemporary meaning of the word. To depict forms as they appear in nature was a scientific practice. The geometrical field of vision that was introduced by Euclid became a basis for this scientific practice of the artist. Erwin Panofsky describes the role of perspective in renaissance art:

> For not only did it elevate art to a "science" (and for the Renaissance that was an elevation): the subjective visual impression was indeed so far rationalized that this very impression could itself become the foundation for a solidly grounded and yet, in an entirely modern sense, "infinite" experiential world. […] The result was a translation of psychophysiological space into mathematical space; in other words, an objectification of the subjective.[59]

For Leonardo the concept of the image was immensely important, not only because of his practice as a painter, but because it seemed to explain the contact between the world and the subject. In his conception of vision Leonardo reveals that he is still firmly influenced by medieval theory in which images occur as an effect of transparent radiation that is mediated through the illuminated atmosphere between the object and the eye.[60] Along the lines of Alhazen's theory[61], for Leonardo, the object projects light-rays in the formation of a pyramid

58 Leonardo 1979, vol. I, p. 368.

59 Erwin Panofsky 1991, p. 66.

60 Leonardo 1979, vol. I, p. 135.

61 Alhazens work was commented upon by Witello during the 13th century. Later on Kepler based his works in optics on the work of Witello. See, Marx W. Wartofsky 1979, p. 228, n. 1.

whose apex is at the iris of the eye. The iris inverts these rays so that they can form an image of the object inside the eye. This radiation that creates images is emitted from every object, even from the eye. This results in a, from a modern perspective, exotic theory in which the illuminated atmosphere is full of images transmitted between the objects.[62] Every object that projects an image of itself is also able to receive images. In order to exemplify this phenomena Leonardo uses the analogy of two mirrors that are placed opposite of each other. The endless regression of images that occurs in the reflection of the mirror is an analogy for every object's relationship to every other object. He writes:

> Thus, by this example [of opposite mirrors], it is clearly proved that every object sends its image to every spot whence the object itself can be seen; and the converse: That the same object may receive in itself all the images of the objects that are in front of it. Hence the eye transmits through the atmosphere its own image to all the objects that are in front of it and receives them into itself, that is to say, on its surface, whence they are taken in by the common sense, which considers them and if they are pleasing commits them to the memory.[63]

These *images* that Leonardo refers to are invisible, except for certain devices like the mirror, the camera obscura and the human eye. Only through the workings of the visual faculty of our consciousness (our sense) do they appear visual. This faculty also disregards certain

62 In his writings Galileo reveals a similar understanding of vision. He holds that the telescope actually mediates images of the stars to the observer. He noticed that stars, when observed at night by the naked eye, our unaided natural vision, seem proportionally bigger than when observed through a telescope. That is if one compares the size of the star as it should appear for the naked eye if one were to take into account the magnifying capacity of the telescope. Galileo explains this by holding that the impression of the planet in natural vision is distorted by the workings of the human eye. The moisture in the eye adds an effect to the visual impression. This distortion is neutralized by the telescope. See, Harold I. Brown, "Galileo on the Telescope and the Eye", in *Journal of the History of Ideas*, volume 46, No. 4 1985, p. 487-510. In this comparison between the image attained by unaided vision and the image of the telescope, the human eye is conceived as a mechanical device, an inferior machine compared to the telescope. Another peculiar thing that happens in this comparison is that vision, the way we see, is reduced to images. In this case one could ask: how can an image occupy more or less space on the retina? We do not see images on our retinas and are not able to compare them with other images. Since we do not perceive the world *as images* the question of what space they occupy is misguided. I will discuss this fallacy in depth in chapter 6.

63 Leonardo 1979, vol. I, § 65, p.138.

images that aren't aesthetically pleasing. Here the image is understood as if it existed *a priori* in nature. A similar distinction was also part of the medieval theory of light. The term *lumen* was used to signify geometric rays that were reflected and refracted when light travelled between objects. This *lumen* existed whether it was perceived by the human eye or not, whereas *lux* was used as a term to indicate light as it appears in human vision of the eye. Colour was also considered to be a quality of light that was solely attainable by the human eye, on top of the geometrical qualities of form and outline that existed in *lumen*.[64] Colour was then a quality that existed only for the human eye, whereas form also existed for other senses and prior to human perception. This issue is complicated since again a confusion between human judgment and the qualities of the objects as they exist *a priori* is present. Tachau points out how this division played an essential part in the medieval discourse on perception. For Alhazen and Roger Bacon light (*lux*) and colour were the proper objects of vision. These two qualities were attained solely through the visual sense organ. Other qualities of the object – distance, position, solidity, shape, magnitude, discreteness, continuity, number, motion, rest roughness, smoothness, transparency, opacity, shadow, darkness, beauty, ugliness, etc., –required human judgment. In this sense, the two purely visual qualities light (*lux*) and colour were not inferred, but sensed directly. Tachau writes:

> Hence, while seemingly claiming without reservation that intentions are *res* imparted by the object, Alhazen in fact suggests at the same time that they are in part the conceptual result of mental operations. … Alhazen's concern with describing psychological and epistemological processes resulted in an ambiguous status for the *intentio*.[65]

What is clear here is that this muddle concerning the status of intention and object, judgment and perception is a consequence of the insistence of holding on to the image as the visual *species*.

64 Martin Jay 1993, p. 29.

65 Katherine H. Tachau 1988, p. 15.

Leonardo's writings reveal that he does not advocate a theory that requires that corporeal *species* play a part in vision. Instead he speaks of the qualities of light, of illumination and radiation as they have taken the place of pressure. But his paradoxical conception of images as invisible bears witness of a certain residue from earlier visual theories that were committed to the tactile paradigm. In order to prove that illuminated objects actually project images he introduces the afterimage as an example of this phenomenon. He writes:

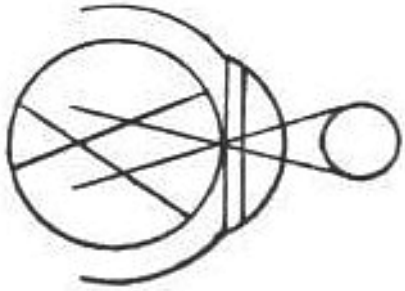
> If you look at the sun or some other luminous body and then shut your eyes you will see it again inside your eye for a long time. This is evidence that images enter the eye.[66]

Here the image is considered to be a trace or an imprint on the eye. For Leonardo this tactile aspect is metaphorical, but it still shows the persistent influence of the tactile theory of vision.[67] The so called afterimage that appears in the eye when looking at an illuminated, or in the case of the sun, an illuminating object indicates for him that our eyes function much like the camera obscura. It is in the writing of Leonardo that this analogy finds one of its earliest expressions. He also notes the inversion of the image that occurs inside the chamber of the camera obscura that will become one of the key sources for philosophical confusion later on. Contrary to the camera obscura, Leonardo however concludes that our eyes invert the light rays emanating from luminous objects twice **(illustration: 1.2)**. Once by the pupil and a second time by the crystalline lens and hence we perceive the images inside our eyes the right way up.[68]

66 Leonardo 1979, vol. I, p. 132.

67 The understanding of vision as an imprint on the eye was discussed by Aristotle, Avicenna, Averroes, Augustine, Alhazen and Roger Bacon. The experiences of afterimages, dreams, delusions and optical illusions were often explained with this phenomena of a lasting imprint on the eye. In this way Leonardo partook in a long tradition of ancient visual theory. See, Katherine H. Tachau 1988, p. 23.

68 Leonardo 1979, vol. I, p. 144-145.



1.2 *Leonardo's double inversion*[69]

Later on the falsity of this description was revealed. As Felix Platter (1536-1614) and later Kepler discovered, the light rays were not inverted twice, but only once by the lens in the cornea. This meant that just like in the camera obscura, the image projected on the retina (the back of the eye) was upside down.[70] Due to his mistake Leonardo was not occupied with this inversion to the same extent as Kepler, Descartes and other philosophers who later dealt with this problem. But it was not only because of his belief in the two inversions as an empirical fact that Leonardo discarded the problem of the discrepancy between the psychological sight of the subject and the *a priori* image that is captured by the eye. For him there was a clear distinction between the eye that works like an optical device and the mind which by its intellectual powers regards the world. He writes; "The senses are of the earth; Reason stands apart from them in contemplation".[71] Therefore the images inside the eye, however they may appear, are completely meaningless without the active contribution by reason.

What is notable in Leonardo's thinking is that, contrary to the philosophers that later adapted the camera obscura analogy, he did not confuse this device with the mind of the observer. Leonardo's analogy was that of the eye and the camera obscura, not of the mind and the camera obscura that Kepler and Locke put forth later on. This difference will, as I will

69 Image taken from Leonardo da Vinci, *The Literary Works of Leonardo Da Vinci, Volume 1* (Phaidon 1979).

70 John Hyman 1989, p. 2-3.

71 Leonardo 1979, vol. II, p. 239.

show, prove to be significant. For Leonardo the intellectual effort that the painter puts into the painting was what made the visual arts virtuous and human. Painting depended not only on visual observation, but on discerning, judging and deliberating. These activities depended on the judgment of the observer.[72] The active mind did not merely observe the images inside the eye, it regarded and scrutinized them as well as connected them to other images and contexts. Due to the intellectual capacities the mind could grasp the workings of nature, its laws and causalities, its history. The proper painter went beyond a mere copying of the world because he was able to understand the causalities that constituted the workings of nature. The task for the painter was not to copy the objects in nature, but to imitate nature itself, to understand how nature produces the visual. This mainly involved two significant aspects, the laws of perspective and the laws of shadow and light (*chiaroscuro*).[73] While a sculpture produces an object that takes advantage of the light and shade produced by natural light, the painter has to *re*-produce this phenomenon of light and shadow in the painting. While the sculptor imitates the object in nature, the painter imitates nature. Leonardo writes: "Painting requires more thought and skill and is a more marvelous art than sculpture, because the painter's mind must of necessity enter into nature's mind in order to act as an interpreter between nature and art, it must be able to expound the causes of the manifestations of her laws …".[74]

There are two things I want to extract from this reading of Leonardo. Firstly, he quite sensibly considers the camera obscura as a useful tool that helps him understand and reconstruct the laws of perspective. This is completely understandable because he is involved in the practice of making pictures. This preoccupation with the status of the image and vision and their relation to our understanding is logically linked to his practice.

Secondly, Leonardo is still an advocate of the ocularcentric ideology, in that he gives vision such an enormous role. As the empiricist scientists after him, he holds that all our knowledge originates from perception[75] and that there is a clear hierarchy between the senses in which vision holds the highest status. But his understanding of vision as a causal process

72 Ibid.

73 Leonardo 1979, vol. I, p. 94.

74 Leonardo 1979, vol. I, p. 97-98.

75 Leonardo 1979, vol. II, p. 239.

in which images enter the eye makes this ocularcentric ideology into a muddled theory of knowledge and perception. What, I claim, is problematic in this account is that the concept of image is redundant in an explanation of our interaction with the world. We do not perceive the world as images. Let's presume that Leonardo's account was correct: that there actually are images floating about in the illuminated atmosphere and that our eye actually is a device for capturing these images. How could this theory tell us anything about our psychological, subjective experience of vision? These images, whether they exist or not, are not present for us *as images*. This problem is not solved if we, instead of talking about images, use the concept of likeness. This would be just as absurd, since how could we determine that the *species* bears a likeness to an object if we only have access to the *species* (likeness)?

The point being that we are not in contact with likenesses, appearances, images, go-betweens, ersatzes, simulacra, sensations, sense-data etc. when we are engaged with the world in perception, since we, as Merleau-Ponty would have it, do not look *at* the world, but *in* the world. He writes:

> Objective thought is unaware of the subject in perception. This is because it presents itself with the world ready made, as the setting of every possible event, and treats perception as one of those events. For example, the empiricist philosopher considers a subject x in the act of perceiving and tries to describe what happens; *there are* sensations which are the subject's states or manners of being and, in virtue of this, genuine mental things. The perceiving subject is the place where these things occur, and the philosopher describes sensations and their substratum as one might describe the fauna of a distant land – without being aware that he himself perceives, that he is the perceiving subject and that perception as he lives it belies everything that he says of perception in general.[76]

What was called *species* in medieval philosophy has its counterpart in what was called *sensation* in 18th and 19th century philosophy and psychology, and in that which is occasionally called

76 Maurice Merleau-Ponty, *Phenomenology of Perception* (Routledge 2007), p. 240.

sense-data in contemporary philosophy and psychology. Here it is important to note that all these concept share the problematic role of a go-between between mind and matter. It makes no essential difference, whether the go-between is situated in the air, in the eye or in the brain. As Anthony Kenny puts it: "The interaction between mind and matter is philosophically as puzzling a few inches behind the eye as it is in the eye itself"[77].

The distinction, immensely important for my purposes, that Merleau-Ponty points out, runs between our actual subjective experience of perception and an objectified, rationalized understanding of vision in which a go-between is required. If anything it is this hardly articulated distinction that I want to clarify, not only here but in the following chapters. As I have shown, there is a very intricate way in which the concept of the go-between enters philosophy. It is a conceptual construct that aims at explaining inferred knowledge, a mediator between nature and judgment. However it does not go together with our experience of vision without friction. It is this tension that is the key instigator for trouble in Renaissance understandings of nature, vision and record. Therefore this is the starting point for my inquiry concerning what our troubles with the concept of visual record consist of.

With this I do not want to denigrate the role of the image, quite the contrary. The image gives us an opportunity to step away and contemplate, whereas our everyday experience and engagement with the world makes such a perspective difficult and in some cases impossible. This is what the concept of image means among other things: an opportunity to look at the world, not in the world. It is from this circumstance that the concept of image draws its significance. It plays an important role in how we conceptualize. But it is not only the producer of our experience, our concepts, our language, it is at the same time a product of our conceptualization. Whether we talk about actual physical pictures like paintings, photographs, films etc. or about inner concepts, they emanate from us, from our actions, judgments and memory. The image is a way of making things into external objects for our observation. That is, images do not exist *a priori* in nature.

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77 Anthony Kenny, "The Homunculus Fallacy". In John Hyman (ed,) *Investigating Psychology, Sciences of the Mind after Wittgenstein* (Routledge: 1991), p. 157.

On another level this confusion that takes form in Leonardo's camera obscura analogy, is misleading even in an empirical context. The phenomenon that appears in the camera obscura and on the retina, although it is the same optical phenomenon, does not explain our visual impression accurately, since the retina is not a passive white sheet of paper but a concave organ.[78] As Panofsky points out, the first problem, that of the purely geometrical discrepancy between retinal image (concave) and perspectival painting (plane surface), was already recognized during early renaissance.[79] This discrepancy as it was purely a matter of the workings of the light-rays on different surfaces could be corrected trough geometrical calculations. The same can be said about Galileo's conception of the telescope. Whether we consider the telescope to be a superior or an inferior device compared with the human eye, as long as we consider them both to be mechanical devices, the discrepancy between them is a purely pre-psychological matter. But the other fact, i.e. the fact that the concave surface within the retina[80] consists of an organ, a moving organ, inside a living body, meant that the eye that Leonardo refers to in his analogy with the camera obscura is, if it has any relevance at all, not an actual eye. It is a metaphorical eye. A corresponding discrepancy between the empirical and the metaphorical can be found in Richard Rorty's analysis of the Lockean concept of knowledge. Rorty shows how the problems in epistemology run deep in philosophy due to two competing and contradictory accounts of what knowledge consists of. He writes:

> if (like Aristotle and Locke) one tries to model *all* knowledge on sense-perception, then one will be torn between the literal way in which part of the body (e.g., the retina) can have the same quality as an external object and the metaphorical way in which the person as a whole has for example, froghood "in mind" if he has views about frogs.[81]

78 John Hyman 1989, p. 16.

79 Erwin Panofsky 1991, p. 31.

80 It would take a long while before the sensitive layer of the retina was to be thoroughly anatomically examined. From 1840 on, it was known that the cones and the rods within that layer react upon light. In this sense the workings of the organ of the retina are understood more as a photochemical process than a passive screen. See, Sarah Kofman, *Camera Obscura of Ideology* (The Athlon Press 1998), p. 49.

81 Richard Rorty 1980, p. 146.

It is this division between knowledge of the senses and conceptual knowledge that is at play as a background factor in the discourse on vision and visual instruments.

I will begin the next chapter with a discussion on John Locke's epistemology, and particularly the analogy that he establishes between human understanding and the camera obscura. I will then move on to show how Kepler's optics is a new starting point for a philosophical discourse concerning the relationship between vision and optics. In his optical theory of vision, Kepler continues to create theoretical problems when he fails in making a tenable distinction between subjective phenomenological experience of vision and the objective rationalization of the faculty of vision. By analyzing Kepler's efforts I hope to show how problems caused by a misleading idea of objective vision run deep within philosophy and science.

2. The Self of the Observer and the Deception of Vision

> In our study of Anatomy there is a mass of mysterious Philosophy, and such as reduced the very Heathens to Divinity: yet amongst all those rare discourses, and curious pieces I find in the Fabrick of man, I do not so much content my self, as in that I find not, there is no Organ or Instrument for the rational soul: for in the brain, which we term the seat of reason, there is not any thing of moment more than I can discover in the crany of a beast: and this is a sensible and no inconsiderable argument of the inorganity of the Soul, at least in that sense we usually conceive it.[82]
>
> Thomas Browne 1643

> I pretend not to teach, but to inquire; and therefore cannot but confess here again,—that external and internal sensations are the only passages I can find of knowledge to the understanding. These alone, as far as I can discover, are the windows by which light is let into this *dark room*. For, methinks, the understanding is not much unlike a closet wholly shut from light, with only some little openings left, to let in external visible resemblances, or ideas of things without: would the pictures coming into such a dark room but stay there, and lie so orderly as to be found upon occasion, it would very much resemble the understanding of a man, in reference to all objects of sight, and the ideas of them.[83]
>
> John Locke 1690

Ludwig Wittgenstein points out in his *Philosophical Investigations*: "The concept of the 'inner picture' is misleading, for this concept uses the '*outer* picture' as a model; and yet the uses of the words for these concepts are no more like one another than the uses of

82 Thomas Browne, *The Works of Thomas Browne* (John Grant 1927), p. 54.

83 John Locke, *An Essay Concerning Human Understanding*. Alexander Campbell Fraser (ed.) (Oxford University Press 1894), p. 211-212.

'numeral' and 'number'."[84] It is this kind of confusion that occurs in the beginning of the Enlightenment in the philosophy of John Locke. It is important to note that, in the quote above, Locke actually talks of ideas as pictures. Whether we interpret this literally or metaphorically, the idea that our perception consists of pictures is here put into play and it becomes dominant during the times.

What is particularly interesting for my purposes in this often quoted passage by Locke, is not only analogy between the camera obscura and human understanding. It is also the way in which Locke indicates that the only major difference between these two is that our understanding, that is, the empty sheet of paper that our experiences are inscribed upon, can fixate these images whereas the camera obscura has no such proficiency. The obvious connection between this passage and the photographic apparatus has been highlighted in several theoretical contexts. In the next chapter I will discuss this connection between empiricist and positivist epistemology and the invention of photography in detail. But for now I want to articulate the actual context in which Locke elevates the camera obscura to a model for our understanding.[85] This is important for my question concerning the genealogy of the concept of visual record, since if we, like Locke, conceive the mind as a container of images, sensations or sense-data, then we presuppose that our knowledge consists of a content, an input, for example in the form of an image, and this is, as I will show, a highly problematic assumption. This model will always leave one crucial question unanswered.

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84 Ludwig Wittgenstein, *Philosophical Investigations*, *Revised German-English Edition* (Blackwell 1998), p. 196e. I will discuss Wittgenstein's distinction between the inner and the outer picture in depth in chapter's 4 and 6.

85 Locke's camera obscura analogy is in fact a variation of Socrates' speculative idea of the soul's faculty of memory, as a block of wax. In *Theaetetus*, Plato writes: "SOC. Please assume, then, for the sake of argument, that there is in our souls a block of wax, in one case larger, in another smaller, in one case the wax is purer, in another more impure and harder, in some cases softer, and in some of proper quality. […] Let us, then, say that this is the gift of Memory, the mother of the Muses, and that whenever we wish to remember anything we see or hear or think of in our own minds, we hold this wax under the perceptions and thoughts and imprint them upon it, just as we make impressions from seal rings; and whatever is imprinted we remember and know as long as its image lasts, but whatever is rubbed out or cannot be imprinted we forget and do not know." Plato, *Plato with an English Translation II: Theaetetus, Sophist*, translated by Harold North Fowler (William Heinemann Ltd. 1952), p. 185-187. What is interesting if we compare Locke's dark room with Socrates' block of wax is that, again, a tactile imprint has been exchanged for an optical metaphor. Furthermore it is important to note that, whereas Socrates' wax analogy permits a kind of relativity and interaction, different souls contain blocks of wax of different size and with different qualities and the impressions are not fixed, they overlap and efface one another, Locke's camera obscura model is a simplified version which indicates that basically all souls are alike, they are blank surfaces on which impressions imprint themselves in the same way.

If our knowledge consists of images how do these images signify? Locke's assumption introduces a gap that is problematic. At the same time it is an assumption that has had and in many peculiar ways still has a strong foothold in our culture. We still talk of knowledge as if it would consist of something, as if it consists of a content: impressions, input, information, fact, sensation or sense-data. And in some contexts this way of talking will prove confusing. It is this idea of knowledge as content that leads us to think of our experience as content, and in this reduction severe philosophical difficulties will follow. I will return to this issue throughout this thesis (particularly in chapters 4 and 6). What is important for now is to notice how Locke's epistemology has a changed emphasis as compared with the classical epistemology. For Aristotle and classical epistemology in general, the process of sense-perception is characterized by the metaphor of an imprint on a piece of wax. But in the classical view our experience does not consist of an *image* imprinted in the wax, but of the effect that the external world has on the wax. i.e. the emphasis is on the imprint: the process of tactile pressure on our organs.[86] For Aristotle the imprinting plays the fundamental role in the wax metaphor. Whereas for Locke the observation of the imprint is where the important aspect of the metaphor lies. In this way Locke invites the idea of a mind's eye that observes the images in the mind. In this way *representation* becomes a key-factor in epistemology. For Aristotle the wax-tablet is not fundamentally a visual or optical metaphor and it does not involve images.[87] This distinction reveals the difference between the classical paradigm with its concept of a corporeal *species* that inflicts pressure on the eye, and the early modern optical theory of vision in which the image in the eye is a projection of light and shadow.

The Lockean metaphor serves as an answer to the puzzle that is expressed in the quote by Thomas Browne. If we cannot find an organ or an instrument in our body for what we call reason, what shall we then make of this "reason"? Browne simply discards his own question and postulates that reason is a metaphysical entity that does not reside in the make-up of the human body. Locke, on the other hand, takes another path and claims that our

86 Stuart Clark, *Vanities of the Eye – Vision in Early modern European Culture* (Oxford University Press 2007), p. 14.

87 See, Richard Rorty, *Philosophy & the Mirror of Nature* (Basil Blackwell 1980), p. 142-144.

understanding basically is a container for our sense perceptions. In this sense, our bodies contain an organ like the camera obscura. The eye is the sensory organ that most clearly corresponds to this analogy and in this way vision is the primary sense in epistemology. It is this epistemological theory that will have consequences for the concept of *image*. According to this Lockean line of thought, the state of things manifest themselves in a self portrait of nature, an imagined *a priori*, authorless, objective image that is produced by the workings of natural light. As if there would exist a latent, universal image-world against which all other images could be compared and verified. Or simply: that our knowledge consists of images. Martin Jay describes how this understanding of the mind will gain momentum during the Enlightenment. In the following passage Jay quotes Voltaire:

> "What is an idea?" Voltaire asked in his *Philosophical Dictionary*. "It is an image", he immediately replied, "that paints itself in my brain . . . . The most abstract ideas are the consequences of all the objects I've perceived. . . . I've ideas only because I've images in my head."[88]

What I want to make clear in this chapter is how this supposed connection between the visual realm and the pictorial content of the mind was a construction that emerged with the help of several misleading visual theories and metaphors. To understand the central role of vision in early modern philosophy one has to start with the actual problems, the discomfort that this Lockean concept of vision introduced to philosophy. As I showed in the previous chapter, one of the paradigmatic problems in this philosophical discourse was concerned with the status of *species*. Although the philosophers of the 17th century for the most part had got rid of the idea of *species*, they were still stuck with the same general epistemological model as their predecessors and consequently with the same uncertainties and similar conceptual problems.[89] Whether we talk about likenesses floating about in the illuminated

88 Martin Jay, *Downcast Eyes – The Denigration of Vision in Twentieth-Century French Thought* (University of California Press 1993), p. 83.

89 See, Stuart Clark 2007, p. 2.

atmosphere or of images imprinted on the retina, the same discrepancy between the world and its appearance is present. Both theories conceive of perception, not as a contact between the perceiver and the object, but as a contact between perceiver and image, image and object. The difference between the theory of *species* and that of the retinal image is simply a question of where the intermediary is situated. In both cases, what I really see is produced in me by the influence of an intermediary object. They are foremost causal and empiricist theories of vision, they only differ in emphasis on different intermediaries or different stages in the causal chain. Both of these theories depend on the concept of mimesis, an understanding in which our perception of an object is dependent on a go-between that bears its likeness. This mimetic theory leaves out the essential part that the subject with her judgment plays in perception. Or more precisely, this theory creates a certain conception of the subject as a passive, neutral receiver of input, a dispassionate observer. The camera obscura and its place in Kepler's *Optics* is a starting point for this kind of theory of vision within philosophy after its first appearance in the writings of Leonardo. This device will for different reasons serve as a metaphor for an empiricist understanding of knowledge.

The epistemology of the 16th century entailed a constant quest for finding a form of representation that goes beyond human subjectivity and opinion. In this context the idea of the *species* plays the part of a natural sign, an image that descends from the natural object, not from our interpretations. As I mentioned earlier, the natural sign had not always been conceived as an image. For the atomists, the *likeness* of *species* was not primarily a pictorial likeness. It consisted of something tactile, a thin film of atoms that entered the eye, as if even the eye actually touched the object in nature and as if the object left a trace, an imprint on the organ. This theory came with slightly different focuses. Aristotle distinguished between form and matter by using the wax-tablet metaphor. The wax adapts the form in the imprint produced by the natural object. No matter travels from the object to within the eye, the thin film of atoms is only a medium, in-between the object and the organ.[90] Furthermore, in Aristotle's view, the wax-tablet is an organ that is conditioned by the medium (that is

90 Stuart Clark 2007, p. 14.

conditioned by the object): the organ does not observe the imprint, it (the organ) is the surface that is imprinted. In this sense there is no need or place for a conception of a mind's eye in classical theory of perception, neither is classical epistemology concerned with images or representations.[91]

When the wax-tablet metaphor is exchanged for the camera obscura metaphor, the emphasis in epistemology is altered. The camera obscura metaphor indicates that the workings of light produce images by themselves, that images occur as a natural phenomenon. The impression inside the camera obscura is not a tactile trace, but a projection of light. This new focus will help along optics to become the core of visual theory. The task for Galileo, Bacon and Kepler, among others, was to gain access to the correct descriptions of nature, Bacon writes: "The task and purpose of human Science is to find for a given nature its Form".[92] They enter a philosophical debate on whether these forms are inaccessible by perception or whether we grasp these forms in direct perception. The camera obscura model of vision seems to indicate the latter. It tempts us to think of nature as a force that produces images of itself in our mind. What the model also brings in is the notion of a minds eye. The organ that sees is no longer the surface on which the impression is imprinted, but the mind's eye that observes a visual projection.

In a sense, this was a very successful model that advanced the sciences and our common knowledge of cosmology. The belief in nature's capacity to present us a given order (when we observe it correctly) was an attitude that helped the scientists to find new methods for their inquiries. However, the problem with this venture was that they acted as if there were *given* correct descriptions of the world waiting to be discovered. The telescope, the microscope and, to some extent, the camera obscura became aids for accessing these descriptions. These instruments were needed in order to help natural vision along when certain objects and phenomena were too elusive to be grasped through observation solely by the human eye. On top of the amplification of the visual faculty, there was another aspect that became important. When one looks into a microscope or a telescope, it is as if one were looking at an image

91 Richard Rorty 1980, p. 144.

92 Francis Bacon, *The New Organon*, (Cambridge University Press 2002), p. 102.

(while one is not). These devices fix a certain view. This is an aspect of their function. This is why the camera obscura played such an important role in the imagination of the natural philosophers, since even though it does not help one see further like the telescope or closer like the microscope, it shares the function of fixating with the other devices. And it is this aspect that will prove to be deceptive. The visual aids helped the natural philosophers to forget that what they actually accessed in their observation was conditioned by their devices and that the devices were conditioned by their inquiries.

Isaiah Berlin describes this as a core problem for the philosophers of the Enlightenment. He mentions Leibniz and Condillac, who were obsessed with the idea that there is one and only one structure of reality and that it is a structure that can be described in a purely logical language. In this line of thinking there is an idea of an index to reality, a natural order, be it a substructure of logics and mathematics or a Platonic metaphysical superstructure. In the case of medieval philosophy the idea of *species* served as model for such an index, whereas for Locke the retinal picture played the same part. What is forgotten in this line of thought is that descriptions depend on the actual questions that one poses to the universe, that the answers that you get are conditioned by your questions.[93] This critique will be developed within philosophy from Giambattista Vico onward as a countercurrent against the ideals of the Enlightenment.[94] One of the most devastating arguments against the idea of *the given* is found in Nietzsche. He points out the paradox inherent in this idea, as follows: "The greatest of all fables is the one relating to knowledge. People would like to know how things-in-themselves are constituted; but behold, there are no things-in-themselves! But even supposing there *were* an 'in-itself', an unconditional thing, it could on the very account *not be known*!"[95] It is this kind of blindside in the empiricist attitude that led to a history of accumulation of errors within the theory of vision.[96] What this theory leaves aside is that the likeness of images to a certain object cannot be reduced to a question of what is seen: it

93 Isaiah Berlin, *Against the Current – Essays in the History of Ideas* (Oxford University Press 1981), p. 6.

94 Ibid., p. 4.

95 In this passage Nietzsche actually addresses Kant's concept of the thing-in-itself, but Nietzsche's point also works as a more general critique of a certain, frequent, misconception within philosophy. Friedrich Nietzsche, "The Thing-in-Itself and Appearance, and The Metaphysical Need." In Ruth F. Chadwick (ed.), *Immanuel Kant Critical Assessments* (Routledge 1992), volume 1, p. 81.

96 John Hyman 1989, p. xiv.

is always also a question of how we see, of how we conceive, or understand a certain thing. In the end, it is a question of who the observer is, what kinds of questions, goals or actions that guide him or her, i.e. a question concerning our *relation* to the world. Things are not like images: by definition, the thing and the image of it are distinct, and therefore the way in which we use images to resemble our ocularity or to remind us of it is preconditioned by our concepts. As in Nietzsche's account of the idea of the thing-in-itself, an image cannot be unconditioned, the concept of image does not yield to such an understanding. But as I will show, this is exactly what Kepler and his followers constructed: an idea of an image that is unconditioned by the human subject.

Kepler writes: "Since hitherto an Image has been a Beeing of the reason, now let the figures of objects that really exist on paper or upon another surface be called pictures."[97] As often in philosophy, whether this distinction leads to clarity or obscurity, is determined by what we make of it.[98] The problematic interpretation of this distinction will lead to an absolute understanding of the concept of an image (what Kepler calls picture), that is objective in the sense that it is not conditioned by our reason: judgement, memory, passions and subjectivity. Against the backdrop of the general development of perspectival painting, we can find a context in which this categorization makes sense. If we look at a certain development within the pictorial arts during the time, we might find a clue for why he was tempted to come up with such a distinction. Leonardo was in no way apologetic about the dependence of the visual arts on human rationality. The Italian perspectival image required a thorough knowledge of geometry, an understanding of the correct placement of the vanishing point and of the picture plane as the intersection of the Euclidean visual pyramid. In this sense these images truly were "beings of reason".

The Italian Renaissance painters were not simply looking at an outside world and copying how it looked, they constructed a way of portraying the extended world on two-dimensional

97 Johannes Kepler, *Optics: Paralipomena to Witelo & Optical Part of Astronomy* translated by William H. Donahue (Green Lion Press 2000), p. 210.

98 The distinction that Kepler makes is a distinction between an internal image of reason and an external image on paper, cloth or other surfaces. This distinction is, as I will show, immensely important. In philosophy we need to distinguish between inner representations and external images, these two concepts have very different meanings. I will get back to this discussion in Ludwig Wittgenstein's philosophy in chapter 6.

surfaces. In this sense the visual field was thoroughly theorized and rationalized, it was not something that existed there as a given, it required mastery of geometry and an understanding of how geometry was applicable on what one saw. Perspectival painting was constructed in accordance with a whole set of intricate rules and preconditions. When looking at *View of Delft* by Vermeer, one could say that every single one of these perspectival inventions is at play in the painting. But there is something that has shifted in its emphasis compared to the paintings of the Italian masters. It is evident that it is more a result of looking, observing and fixating a viewpoint, than of constructing, imagining and reasoning. Alpers quotes Eugène Fromentin's analysis of the work of another Dutch painter: "It is the surfaces, the materials of the world that have caught the eye in Ter Borch. Fromentin catalogues for our eyes 'the apparel, the satins, furs, stuffs, velvets, silks, felt hats, feathers, swords, the gold, the embroidery, the carpets, the beds with tapestry hangings, the floors so perfectly smooth, so perfectly solid'. It is as if visual phenomena are captured and made present without the intervention of a human maker."[99] That which earlier had to be constructed was later conceived of as something readymade. This distinction is helpful to keep in mind when one tries to understand the evolution, not only in the pictorial arts, but a progress of "a specific cultural ambiance – the empirical interest of what is commonly referred to as the age of observation."[100] When the visual field is properly rationalized and when the pictorial conventions of representing three-dimensional objects on a two-dimensional surface are set, it is easy to forget about the vast project that lead to these developments. When the conventions of Renaissance painting have been at play for a longer period, it is easily forgotten that these conventions are man-made and not more or less natural than any other ways of depicting. In such a context it might seem like there is a category of images, that are "not beings of reason", and the image in the camera obscura makes up for a perfect example of such an image. The renaissance project did not solely consist of making a new kind of images, but of making "the pictorial equivalent to vision"[101]. This development pawed the way for the idea that vision actually consists of pictorial content.

99 Svetlana Alpers, *The Art of Describing – Dutch Art in the Seventeenth Century* (John Murray 1983), p. 30.

100 Ibid., p. 32.

101 Stuart Clark 2007, p. 16.

It is against such a backdrop that the new Keplerian understanding of the concept of image should be understood. What Kepler calls picture, a ready-made optical image that is not of reason, plays an interesting mediating role in this kind of cultural transformation. But Kepler also does something else. At some points he uses this distinction to isolate what he calls *picture* from all that is subjective; judgement, memory, attention etc. Kepler distinguishes between the concepts of picture (*pictura*) and image (*imago rerum*). The latter *imago rerum* had earlier been referred to as *idola*, it signified the visual *species* that enters the eye from the outside world and travels onward to the seat of reason.[102] On one hand this distinction is a way of not letting go of the idea of the natural sign, on the other hand it introduces the muddled concept of a picture (*pictura*) that is a sign without an intentional significance. It is as if Kepler could not decide whether nature communicates its essence through natural signs or whether nature essentially is beyond anything that our reason projects onto it. It is in this development that the camera obscura starts to have a slightly different meaning and use. It becomes a highly deceptive model not only for vision, but, as in the case of Locke, for our understanding and knowledge.[103]

The Error of the Senses

I do not think we can grasp what the actual issues in a theory of vision consist of if we do not take into account how they interact with other issues in epistemology. The evolution of the theory of vision that Kepler plays a key part in is a development on many levels. The outset for Kepler, as for his predecessors, is a skeptical understanding of sense-perception.[104] For him vision gives us mere appearances. On the other hand he is, like Galileo, dependent on observation and the information that it brings. When looking at the world through a telescope vision is easily conceived of as a purely optical occurrence in the world. In this way it seems to be something different from the subjective experience of seeing. Vision becomes

102 Svetlana Alpers 1983, p. 36.

103 See, Richard Rorty 1980, p. 144.

104 Stuart Clark 2007, p. 28-29.

observation, a specialized mode of perception. The camera obscura is a device that helps us conceive of vision as merely a play of optics, and I think this is why Kepler paid so much attention to this apparatus. It is both the actual apparatus and its role as a model for vision that intrigued Kepler. What it basically signifies is a pure and innocent way of perceiving, but it is also this conception of purity that will lead the theory of vision astray.

During the Enlightenment the specialized perception of observation becomes elevated to an essential form of perception. In this development observation starts to signify a form of perception that goes beyond the influence of the subject with its passions, preconceptions, theories and idiosyncrasies. Around these times the ideal of a dispassionate observer enters the scientific community.[105] This development is influenced by the scientific and philosophical evolution of the times, but it is also at play in the practices that are inspired by the invention and the use of the camera obscura. Henry Wotton, Francis Bacon's biographer, who visited Kepler in Linz in 1620 to present him with a copy of Bacon's *The New Organon*, noted Kepler's use of the camera obscura. He recollects this visit in a letter to Bacon, as follows:

> He hath a little black tent, exactly close and dark, save at one hole, about an inch and a half in the Diameter, to which he applies a long perspective-tube, with the convex glasses fitted to the said hole, and the concave taken out at the other end, through which the visible radiations of all the objects without are intromitted falling upon a paper, which is accommodated to receive them. And so he traceth them with his Pen in the natural appearance, turning his Tent round by degrees till he hath designed the whole aspect of the field.[106]

These panoramic drawings by Kepler usually depicted landscapes. They were a kind of collage of views that gave a continuous 360 degree representation of the visual field. Wotton saw the potential in this technique. He thought that it would be an ideal way of drawing maps and

105 See, Pamela H. Smith, *The Body of the Artisan – Art and Experience in the Scientific Revolution* (The Univeristy of Chicago Press 2004), p. 226.

106 Henry Wotton as quoted in Francis Bacon 2002, p. ix.

harbor plans.[107] These kinds of maps became common in the Netherlands during the 17th century, they portrayed cities viewed as a panorama, not as a birds-eye-view that later on became the standard. This is one use that gave the camera obscura a practical significance. Before this, during his stay in Prague, Kepler also used the camera obscura to create public spectacles. During these events he constructed a kind of camera obscura classroom. He sealed off all windows in a room and made a small aperture that let in the natural light. The wall opposite of this light source was painted white. The public entered the room while the aperture was covered and the show consisted of Kepler removing the cover and in this way activating the camera obscura. Thus the outside view was projected on the white wall inside the room, not unlike a cinema experience. He referred to these events as magic ceremonies.[108]

The interest that Kepler had in such ceremonies was a philosophical one. They seemed to indicate that vision is mysterious. It is a mystery how the play of light and shadow can produce images that in comparison to other man-made images seem very much like our visual impression of the world. A similar account can be found in Leonardo's notes, he writes:

"O marvelous necessity . . . O mighty process. Here the figures, here the colours, here all the images of the parts of the universe are reduced to a point . . . Forms already lost, can be regenerated and reconstituted"[109]. Leonardo's wonder stems from the way in which the light that passes trough a small pinhole can reconstitute a view of the outer object inside the camera obscura. It is not the utility of the apparatus or the actual image that it produces that grasps Leonardo's attention, but its process or the workings of nature that enables these images. For both Kepler and Leonardo the camera obscura escapes explanation. Of course, up to a certain point the contemporary optical theories could explain the processes in the camera obscura, and both Kepler and Leonardo were on top of these theories, but the phenomena itself, the way an image is created by the rays of light, was beyond theoretical explanation. Somehow the process in the camera obscura seemed to enable the natural world to construct

107 Svetlana Alpers 1983, p. 49-50.

108 Johannes Kepler, *Kepler's Dream – With the Full Text and Notes of Somnium, Sive Astronomia Lunaris, Joannis Kepleri*, edited by John Lear (University of California Press 1965), p. 100.

109 Leonardo as quoted in Martin Kemp, *The Science of Art – Optical Themes in Western Art from Brunelleschi to Seurat* (Yale University Press 1990), p. 189.

an appearance, an image of itself, by the workings of light.[110]

In this way the visual seems to consist of mere appearances. And for Kepler appearances are not to be trusted. This becomes clearer in another example – that of Kepler's scientific project of correcting the theory of earth's motion. Although we, if we consult our vision, might believe that the sun circles around the earth, astronomical observations together with mathematical calculations will prove otherwise. Kepler's point here is that our visual impression might deceive us into drawing untruthful conclusions. This is the analogy that Kepler puts forth in his *Somnium*, a written account of a dream in which Kepler imagines how the inhabitants of the moon would perceive the motion of earth. To the inhabitants of the moon, their home planet seems to be stationary and the stars seem to circle around it, just like we perceive earth as stationary and the rest of the celestial bodies as if they would circle around earth.[111] The conclusion that Kepler draws from this is that there is something deceptive in the visual faculty, that the direct visual experience leads us to an occult understanding of the world, in which phenomena occur without understandable causes. In this sense, vision does not permit us to understand the make-up of the world, the causes of phenomena. It brings us mere appearances.

Leibniz picks up this Keplerian discussion. In a letter to Queen Sophie Charlotte of Prussia, in the year 1702, he points out that "*sensible qualities* are in fact *occult qualities*"[112]. Although the senses, according to Leibniz, allow us to know particular qualities like sounds, colours, odours, and flavuors, we do not comprehend the causes of these qualities. Vision alone does not allow us to understand how light and colour come about. Therefore science has to use some other means than pure sense perception in order to understand the causes in nature and our understanding has to consist of something beyond sense perception. There has to be some kind of *common sense* that ties together the different sense perceptions, Leibniz writes:

> Therefore, since our soul compares the numbers and shapes that are in color, for example, with numbers and shapes that are in tactile qualities,

110 Stuart Clark 2007, p. 29.

111 Kepler writes: "Here is the hypothesis of the whole dream: that is, an argument for the motion of earth, or rather a refutation of arguments constructed, on the basis of perception, against the motion of earth.", Johannes Kepler 1965, p. 114.

112 Gottfried Leibniz, *Philosophical Essays*, edited and translated by Roger Ariew and Daniel Gaber (Hacket 1989), p. 186.

> there must be an *internal sense*, in which the perceptions of these different external senses are found united. This is called *imagination*, which contains both the *notions of the particular senses*, which are *clear but confused*, and the *notions of the common sense*, which are *clear and distinct*. And these clear and distinct ideas, subject to imagination, are objects of the *mathematical sciences*, namely arithmetic and geometry, which are *pure* mathematical sciences, and the objects of these sciences as they are applied to nature, which make up applied mathematics.[113]

Leibniz understands mathematics as an axiom that the human common sense applies on the different sense inputs. For him knowledge is dependent on "an inborn light within us"[114] (mathematics) by which we resemble God in that we do not only grasp the order in nature, but we are also capable of giving order to things within our grasp.[115] Here Leibniz enters an already established discourse. As opposed to Galileo, he does not conceive mathematics as a pre-existing pre-psychological order that we can discover, but a power that is inherent in our intellect. What he claims is that human reason can *give* an order to nature by the workings of reason. Like Leonardo, he gives reason a primary status (as opposed to pure sense-perception). Due to its intellectual capacities, the mind can grasp the workings of nature, its laws and causalities, its history. Kepler's skepticism towards direct sense-perception can be understood against such a rationalist understanding of the role of vision. This issue concerning the status of vision is a pivotal point for the philosophical discussions of Kepler and his contemporaries, since the evolution of astronomy and the optical aids of the times are dependent on issues concerning the reliability of visual observation. For Bacon, vision is a special sense since it is the only sense for which we can find aids that magnify, enlarge and correct the sensory input. Instruments like microscopes, magnifying glasses and telescopes help us interpret nature since they give us more accurate "presentations or exhibits".[116] In this understanding, these presentations are that which is prior to our interpretations of nature. The visual aids

113 Gottfried Leibniz 1989, p. 187.

114 Ibid., p. 191.

115 Ibid., p. 192.

116 Francis Bacon 2002, p. 170.

help along our interpretation of natural phenomena, but the presentations themselves are not inferred information, but magnified or clarified sense perceptions. This is what Bacon calls "instances of first information" (Leibniz calls them "notions of the particular senses, which are clear but confused").[117] Here the discourse on vision moves in two different directions. One is skeptical, emphasizing that pure vision is merely appearances, and that science and rationality require common sense that imposes its workings on the visual sensations. The other direction of discourse emphasizes the power of pure sense perception or observation, to grant us scientific and unbiased knowledge of the world.

Recall the quote by Bacon in the last chapter, pointing out that visual aids were helpful because of their ability to correct errors due to the weakness of the senses. He wrote: "For errors of the senses should be assigned to the actual investigations of senses and the sensible; with the exception of the *great* error of the senses, that they set the outlines of things by the pattern of man, not of the universe; which can only be corrected by universal reason and universal philosophy".[118] It is peculiar that Bacon holds that we should find aids for the senses, if the senses on the other hand are deceptive, as they conceive things by the patterns of man. He rejects Aristotelian logic and Plato's metaphysics[119] because they stand in the way of a pure science based on empirical observation, but he then goes on to denigrate sense perception. Leibniz is less apologetic about human reason's interference with nature. For him, reason (the common sense, mathematics and imagination) are required in order for us to understand the world. But Bacon is reluctant toward this kind of philosophy. He clearly states that "the patterns of man", stand in contrast to *universal reason*. It is as if reason resided in nature itself. In this debate, the status of vision becomes, once again, unstable.

This ambiguity is evident in Kepler's understanding of vision. Kepler makes a distinction between two kinds of deception in connection to vision: "deception of the sense of vision, arising partly from the technique of observation […] and partly from the simple sense of

117 Ibid., p. 170.

118 Ibid., p. 178.

119 Ibid., p. 79.

vision itself […]".[120] In the first case questions are concerned with our failure to discern certain things, the way in which optical aids distort the shapes of things, i.e., weaknesses and distortions in the purely visual observation of the world. The latter, more fundamental error is based on misguided belief in knowledge obtained through the senses *per se*. The starting point for Kepler is a Platonic skeptical attitude towards sense perception. He claims that vision does not correspond with the actual make-up of the world, therefore it is deceptive. Like Bacon, Kepler seems to have two contradictory concepts of vision. There are two competing theories at work in this paradox, theories that can be reduced to something like this:

A. Empiricism

1. In vision, reason adds something to the visual input.
2. This addition is an error that distorts the input.
3. If the input were to be pure it would be correct.

B. Rationalism

1. Visual information is an appearance of the world. If we solely consult the visual input when we want to understand the world, vision will deceive us.
2. Reason is required in order to correct this confusion.
3. Pure reason is the fundament of knowledge

On the one hand, the way in which visual aids have helped science along during this period seems to indicate that the natural order consists of a purely visual pattern. If our sense perception is acute enough – if we are able to arrive at distinct and pure visual observations – this will reveal the order of nature. This temptation ties science to the Empiricist theory frame. In this interpretation, direct experience or direct perception seems to be what gives

120 Johannes Kepler 2000, p. 171.

sciences access to *the* natural order. The competing Rationalist assumption is that sense-perception stands in the way of a correct understanding of the order of nature. This leads to emphasis on the errors that occur when we understand the world solely through our visual faculty. This can be exemplified by how Kepler thinks that it is actually vision (not earlier theories) that deceives us into believing that the sun circles around earth, that perception is deceptive *per se*. The latter understanding resonates with a heavy legacy of Platonism within philosophy.

In this way, the concept of vision starts to split up. Depending on theoretical emphasis, the eye is conceived, either as a passive instrument that receives visual input, or an active organ that creates the visual input. It is then in the context of these two contradictory theories that we should understand Kepler's two concepts; that of the image and that of the picture.

During this period, there is a certain temptation to connect epistemology with optics, or to use optical vocabulary as metaphors in epistemological theories, as for example Locke does in the quote above. If optics, as the camera obscura analogy seems to point out, works in nature, irrespective of the workings of human reason, theories and judgements, then would not optics be a proper model for how we are in contact with the given nature? It is this kind of idea that Locke puts forward in the camera obscura analogy in *An Essay Concerning Human Understanding* that is released in 1690. When Kepler, in 1604 releases his *Optics*, he is much more uncertain of the status of vision, image and knowledge in relation to optics, than Locke is. Kepler is tempted by the kind of analogy that Locke put's forth 86 years later, but he never actually fully arrives at such an understanding since he understands, at least to a larger extent than Locke does, the inherent tension in such an assumption.

Kepler's Image and Kepler's Picture

What Kepler brings to the theoretical discussion is a new distinction between the concepts of *image* and *picture*. What Kepler calls picture entails a new kind of understanding of the

images on the retina.[121] These retinal pictures are not visual *species* received by the eye. Kepler acknowledges that the image inside the retina cannot have been transmitted from the outside through the lens of the eye: "The remaining possibility, therefore, is that what inheres in the eye is an image of the action and effect, not of light, but of illumination".[122] In this sense the eye becomes an "image-making-machine" as opposed to an "organ for receiving images".[123] However, this is again a marginal shift in the general theory of vision. As in the intromissionist theory of Alhazen, Kepler's understanding still relies on the image, now located on the retina, as a connecting mediator between the observer and the object.[124] The problem for him and for the philosophers to come consists of the question: how are we to articulate the connection between the image on the retina and our experience of sight? He writes:

> I say that vision occurs when an image [lat. *Idolum*] of the whole hemisphere of the world that is before the eye, and a little more, is set up at the white wall, tinged with red, of the concave surface of the retina. How this *image or picture* [my emphasis] is joined together with visual spirits that reside in the retina and in the nerve, and whether it is arraigned within by the spirits into the caverns of the cerebrum to the tribunal of the soul or of the visual faculty; whether the visual faculty, like a magistrate given by the soul, descending from the headquarters of the cerebrum outside to the visual nerve itself and the retina, as to the lower courts, might go forth to meet the image – this, I say, I leave to the natural philosophers to argue about.[125]

Although Kepler states that he leaves some questions to the natural philosophers, he cannot help but to be puzzled about why, at some point, vision escapes optical explanations. He continues: "For what can be pronounced by optical laws about this hidden confluence, which,

121 Svetlana Alpers 1983, p. 36-37.
122 Johannes Kepler 2000, p. 42.
123 John Hyman 1989, p. 70.
124 Ibid., p. 7.
125 Johannes Kepler 2000, p. 180.

since it goes through opaque, and therefore dark, parts, and is administered by spirits, which differ entirely in kind from the humors and other transparent objects, has already completely removed itself from optical laws."[126] The actual eye can be understood as a camera obscura that works according to the laws of optics, whereas vision, the way in which we have visual impressions of the world, cannot be explained by optics. Here occurs a division between the visual and the optical. The former cannot be reduced to the latter.

In this development the meaning of the camera obscura analogy changes. For Leonardo the camera obscura received images, whereas for Kepler the camera obscura was a device that made pictures appear. In the first case the already existing image enters the camera obscura, in the second case there is no image before it is brought about in the camera obscura. This opens up the possibility of the interpretation that *the visual impression*, the way we perceive the world through vision, is a purely human way of knowing the world. The world by itself is then not visual.[127] In this understanding the actual eye does not perform anything that differs from what a mechanical machine would perform. One might say that Kepler pushes the *organ* of vision further back into the cavities of the skull, beyond the mechanical apparatus of the eye. Therefore the question concerning where the actual "seer" *resides*, entails puzzlement for Kepler.

Kepler does not solve the mystery of how our visual impressions are connected the picture on the retina, but he puts the mystery on hold and liberates the investigation of the eye from all non-optical factors. In his *Optics* Kepler is able to explain the physiology of the eye and the phenomena of light and colour better than anyone before him. In order to do so he is depends on a clear distinction between *pictures* painted or projected upon a surface (on the back wall of the camera obscura, on sheets of paper or cloth or on the concave retina) and *images* that are the human visual impressions of things. Here *image* signifies the world as it presents itself to reason. This concept of *image* signifies a composition of the optical picture and that which human reason adds on to it.

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126 Johannes Kepler 2000, p. 180.

127 Descartes will later on put forth this idea, but as I have noted earlier this theory also has its roots in atomism. Epicurus, one of the predominant atomists held such a view. J. M. Rist writes: "There is, of course, no need to infer that for Epicurus all sensation is a mental operation. Indeed the opposite is true. As Lucretius tells us, the bodily organs of sense are not mere eyes of the soul. It is they themselves, not the soul in them, which see and hear and perform other activities of the sense". J. M. Rist, *Epicurus – An Introduction* (Cambridge University Press 1972), p. 32.

In this sense the image, for Kepler, is not purely optical. In his examination of the anatomy of the eye and the optic nerve he understands that vision cannot be purely optical since the optic nerve is not an optical device but an organ, it consists of a dark and opaque passage. He goes on to distinguish between the optical means of vision of the eye and the visual impression. The latter cannot consist of a picture, but of some kind of direct contact or pressure performed on the "optical" nerve. He writes:

> This image, which has an existence separable from the presence of the object seen, is not in the humors or the tunic, as we proved above. Therefore, it is in the spirits, and vision occurs through this impression of images upon the spirits. However, the impression itself is not optical, but physical and mysterious. But this is a digression. I return to explaining the means of vision.[128]

Kepler understands that vision is not explainable simply by optics. But, although he in this context talks of spirits and illumination instead of lenses and rays of light, he is still held back by his insistence on giving a causal explanation of how visual impressions come about. On this point he reveals that he is still under the influence of the atomist theory, in which sense perception is dependent on some kind of contact and consequently within the classical discourse of the theory of vision. He refers to the after-image that has been a key concept throughout the history of visual theory and makes a comparison between the visual impression and pain, the sensation of a physical blow to the body.[129] For Kepler there is some kind of disposition in the human body for sensing the world that lies beyond the apparatus of the eye. In a footnote Kepler recalls an anecdote of a man who lost one of his eyes. When this man covered his other seeing eye and placed a shining object under his nostrils, he claimed that he still, although practically blind, could discriminate this shiny object. Kepler understands this as evidence of the activity of spirits in perception. He concludes that either

128 Johannes Kepler 2000, p. 181.
129 Ibid., p. 42.

the cavity of the blind eye still transmits some sort of information to the spirits that interpret the input, or, alternatively, the information is transmitted through the nostrils.[130]

Although the example might seem quite occult and medieval, Kepler is very sensible in distinguishing between optics and our psychological visual impressions. He quite rightly points out that optics cannot explain how we see. Optics play an important role in how our vision comes about, but it does not function as an explanation of our subjective experience of vision. This far, everything is comprehensible. But he fails to understand that if this distinction is to be made properly, then optics, in a very distinct meaning, is completely beyond our sense-perception. The play of light and colour can be treated as a natural occurrence in the world that exists with or without our presence. On a physical level light is refraction and reflection. But when we see light and colour our position is different, because as Thomas Baldwin points out: "perception is the capacity whereby there is a world it cannot be just another fact within the world".[131] Therefore, the comparison that Kepler occasionally makes between optics and subjective experience is not viable. I will make this point clearer by continuing to, on the one hand, trying to understand what Kepler's actual goal was, and on the other hand, by keeping in focus the error that has slipped into his theory.

Errors in the Techniques of Observation

The fact that different lenses and different apertures in the instruments that were used for astronomical observation gave different visual images entailed a problem for the practice of observation of the heavenly bodies. One particular event that puzzled Kepler was an observation that his mentor Tycho Brahe performed in Prague in the year 1600. When observing a solar eclipse inside a camera obscura, because this indirect way of viewing was a safe way to look at the sun, he noticed that the diameter of the moon seemed smaller than normally. Kepler concluded that, since it is neither possible that the moon is further away during the eclipse, nor that its size has changed, the device has to distort the appearance of

130 Ibid., p. 181.

131 Thomas Baldwin in his introduction to Maurice Merleau-Ponty, *The World of Perception* (Routledge 2005). p. 11.

the moon.[132] In 1604, after consulting the contemporary anatomical literature on the eye, Kepler went even further in his skepticism towards the apparatus. If the device of the camera distorts and if it works in a similar way as the human eye, then, he concluded, even the eye to some extent alters the dimensions of the objective world.[133] Due to the supposed error the instrumental role of the eye was put under scrutiny. The eye started to become conceived more like a device, less like an organ.

Kepler's interest in the visual devices stemmed from a turning inward from the actual world toward the aids that we use to observe the world. In order to do proper observations in astronomy he had to rely on the telescope and the camera obscura and in the end on the human eye. In order to carry out correct observations, he had to understand the instruments of observation. In the case of the eye, the camera obscura, and the telescope, he investigated the distortions that these devices produce in observation. He was simply occupied with finding and perfecting the correct apparatus in order to make correct observations. When he wrote his *Optics* Kepler was more concerned with astronomy and cosmology than with the theory of vision *per se*. This resulted in a divided theory of vision, that on the one hand indicated that optics does not explain vision, but on the other hand showed that vision required optics.

This is not necessarily a paradox, since although vision cannot be reduced to optics, there is something about optics that makes it fundamental for vision. As Kepler points out, this is proven by the fact that certain people whose vision is impaired in one way or another, can correct this ailment with the help of optical devices such as spectacles with concave or convex lenses. A convex lens that corrects vision for one man can distort it for another. In this sense, the power of the eye is relative to the input of light. Different eyes give different visual impressions.[134] Another fact that proves the optical nature of vision is that vision requires light. We do not see in complete darkness.[135] Also, a very strong light source will disrupt vision because it overwhelms the visual impression.[136] Therefore vision seems to be fundamentally dependent on optics. According to Kepler, the size and shape of the refracted

132 John Hyman 1989, p. 69 and Svetlana Alpers 1983, p. 33.
133 Johannes Kepler 2000, p. 69-70.
134 Ibid., p. 217.
135 Ibid., p. 51.
136 Ibid., p. 193.

bundles of light rays are relative to the size and shape of the apparatus of observation. The optical apparatus intersects the rays and depending on its size and form, it captures and leaves out different pieces of optical input.[137] Based on this he concluded that, depending on the differences in construction of the optical devices, the information also differs. For example, the eye differs from a camera obscura since the eye has a lens whereas the camera obscura of the times had a pinhole as an aperture.[138]

For Kepler, the image that occurs inside the camera is then different from an image inside the eye in two senses. Firstly it is different because of the structural differences between the eye and the camera obscura. Secondly, Kepler concludes that the images differ since the eye is connected to the visual organ and the visual faculty in a direct way. He writes: "Briefly, an image is the vision of some object conjoined with an error of the faculties contributing to the sense of vision. Thus the image is practically nothing in itself, and should rather be called imagination".[139] Here Kepler does not refer to an optical distortion, but to an error that occurs because of what the visual faculty contributes to the image. He fails to keep a clear distinction between optics and epistemology. When he compares "the optical picture" with the "image of reason", he makes a comparison that he himself has rejected in other passages. Like Locke, he compares images with our experience in a straightforward way and thus steps outside of the purely optical discourse. The point here is that the image of reason, if this concept can have any merit, cannot be another picture that differs from the picture on the retina. Our vision does not consist of pictures. What our mental faculties contribute to an image, cannot consist of a pictorial content, because thinking, judgement, interpretation, our concepts and experience are not correlate with pictures.

Bacon makes a related assumption when he writes; "The human understanding is like

137 Ibid., p. 69-70.

138 Catherine Wilson "Discourses of Vision in Seventeenth-Century Metaphysics", in David Michael Levin (ed.), *The Discursive Construction of Sight in the History of Philosophy* (The MIT Press 1997), p. 121. Wilson also notes that Leibniz, although he generally agreed with the Lockean idea of the understanding as a camera obscura-like construction, held that the surface in the mind is not like a white sheet of paper. Rather he conceived it as a dynamic surface that changes due to the impact of the different sensations that enter the eye. The surfaces are then never identical for different perceivers, unless they have perceived exactly the same things, which of course is impossible. Because the surface is not fixed, it also entails that the projections of outside objects will manifest themselves differently in different minds.

139 Johannes Kepler 2000, p. 77.

an uneven mirror receiving rays from things and merging its own nature with the nature of things, which distorts and corrupts it".[140] If we take the analogy of human understanding as an uneven mirror literally, it simply means that a proper mirror would do the job correctly, that is, the error is due to the structural make-up of the surface. Like Kepler, he wants to exemplify, by analogy, how human opinion and a belief in earlier theories has distorted the sciences, and how the new empiricist ethos of unbiased observation has lead to a revolutionary step forward in the natural sciences and maybe most clearly in the new astronomy.

Both Kepler's and Bacon's optical analogies invite new problems. The vocabulary of the optical theory often serves as metaphors for the epistemological theory. But these metaphors are ill fitted since there can be no error in optics. When we claim that an uneven mirror distorts, there is no error *per se*, different surfaces just reflect light in different ways. What is right or wrong, what is erroneous, can only come into play when we perform a certain task with the help of optical means, for example when we observe the motion of the planets through an optical telescope. In these cases the task, that which can fail or succeed, is not performed by the visual aids or devices, the task is performed by the observer with all faculties of judgement, interpretation and thinking at play. We do not see a clear fixed picture when we look at the world, since our eyes travel in the visual field, they attend to some things or aspects and disregard others, they look gaze, observe, squint and peer. The eye is not a machine and even if it were a machine, it would at least be much more than simply an *optical* machine. Optics cannot explain how we, in vision, attend to things, how we focus on certain things in the visual field, whereas other things are completely ignored. It is only in relation to different tasks that we can connect optics to the concept of knowledge and understanding (and misunderstanding), i.e. optics cannot tell us anything about attention (I will return to this discussion on the concept of attention in chapter 6).

Nietzsche expresses this clearly, as follows: "There would be nothing which could be called knowledge if thought did not first so *recreate* the world into 'things' which are in its own image. It is only *through* thought that there is *untruth*."[141] What I want to pinpoint by using this quote is how we cannot sidestep the workings of reason and thought if we want to understand the

140 Francis Bacon 2002, p. 41.

141 Friedrich Nietzsche In Ruth F. Chadwick (ed.) 1992 ,volume 1, p. 87.

faculty of vision. This sidestepping does maybe help us construct a reductionist theory of vision, a theory that might be suitable for specific tasks, for example Kepler's task of explaining the workings of optics in order to construct better visual aids for astronomical observations. But, when Kepler along with Bacon goes on to consult the same theoretical framework in order to explain our experience, our visual impressions, it will accumulate error.

The optical analogies of Bacon, Kepler and Locke, that connect our understanding of the world with pictures on the retina, do exactly this. The analogies sidestep or denigrate the role of the self of the observer, as if the involvement of earlier knowledge, memory, thought, judgement or attention would ruin the objective optical information that resides in the retinal picture. As if a newborn child would see the world as it actually is constituted. The advancement in the natural sciences of the time makes these kinds of analogies potent and at highly deceptive at the same time. As I have showed, Kepler is not blind to these kinds of problems, but at times he gets carried away and makes conclusions that will resonate throughout the history of theory of vision. The concept of the retinal picture as a specific kind of image is one of these highly deceptive results of his works in optics. There is a general tendency within the theory of vision during the Renaissance that is shared by Leonardo (1452-1519), Bacon (1561-1626), Kepler (1571-1639) and Galileo (1564-1642). They are all important participants in a venture in which a new theory of vision is constructed. Geometry, perspectivist painting, optics and the camera obscura serve as models for this theory of vision. At points these actors seem to forget that the models were a result of a rationalization of the visual field; that they themselves constructed a certain theory that required certain models. Then they proceed to take these models as accounts of "how we actually see".

The Advent of the Mind's Eye: An Accumulation of Error

In order exemplify what could be meant by the concept of visual record as an image unconditioned by our faculties of reason, let's think of what it actually would mean if the retina could be disconnected from the visual faculty. What would be left then would be the

purely optical retinal picture that Kepler constructs. He writes:

> The result of this is that if it were possible for this picture on the retina to remain while the retina was taken out into the light, while those things out in front that were giving it form were removed, and if some person were to possess sufficient keenness of vision, that person would recognize the exact configuration of the hemisphere in the compass of the retina, small as it is. […] the fineness of this picture within the eye of any person you please is as great as the acuteness of vision in that person.[142]

We can maybe call this a side product of Kepler's theory, but irrespective of whatever emphasis he himself put on this issue, this conception of image (as a Keplerian picture) will start to live a life of its own in both the philosophy of perception and the conventions of pictorial art. If the retinal image could be reproduced as an external picture, it would depict a perfect panoramic view of the hemisphere. It is exactly something like this that the inventors of photography thought they had achieved 200 years later. Prior to the actual technology of photography, this idea had already established itself firmly within the scientific discourse. According to this line of thought the state of things manifests itself in a self-portrait of nature, the imagined *a priori*, authorless, objective image produced by the workings of natural light; as if there existed a latent, universal image-world against which all other images could be compared and verified. The most obvious problem here is that if this were possible, then of course, the perfect external picture would also be distorted by the faculty of human vision when seen. This metaphor short-circuits itself. If we hold that there is a rift between things as they exist in nature and things as they exist for us in perception, we have to adhere to this categorical gap all the way. However, if we stick to this theoretical framework it will soon enough reveal itself to be incomprehensible.

When the retinal image ceases to be a metaphor and is taken for an actual entity in the

142 Johannes Kepler 2000, p. 181-182.

world, a line has been crossed. The theory of *species* was essentially a hypostasization of an objective fundament for perception. When this significant building block of the theory of vision was tampered with by Kepler, the whole theory started to crumble. He quite rightly understood that the *species* was an unnecessary link in the theory of vision, but he did not completely rid his theory of this concept and he did not thoroughly analyze the consequences of what it would mean to erase this concept. As John Hyman points out: "The theory of the retinal image answered the crucial question of medieval optics: the scaffolding had served its purpose and should have been dismantled. Instead, Kepler mistook it for a part of the building: what he constructed as a scientific problem was nothing more than the extension of a metaphor."[143] The idea of *species*, as well as the idea of the retinal image, had served as metaphors with a certain purpose. They played the part of explaining the connection between subject and object.

Kepler compared two things that are not comparable: on the one hand the optical laws of refraction and reflection of light rays that pass from the object to the camera obscura and to the retina, on the other hand, the subjective visual impression, our psychological way of perceiving the visual. The latter does not correlate with the laws of optics in any straightforward way. If it did, if what we actually see were solely a question of what optics permits us to see, given the circumstances of light, the position of the eye in space, the structural qualities of our eyes etc. – then we could conclude that our vision is made up by objective optical information, images. But our concept of vision runs deeper than this.

In order for us to understand how the union of objective knowledge, image and vision came about, it is important to understand the highly problematic evolution of this concept. The theory of vision was still, or maybe even more so, a muddle after Kepler's new discoveries in optics. He left a problematic question to the philosophers after him. If our eyes are "image-making machines", then who or what perceives these images? The question that Kepler puts forward to the natural philosophers is confused. What occurs is an infinite regress. As if another set of eyes were required to look at the retinal picture (**illustration 2.1)**. As Kepler himself acknowledges, this question cannot be answered by optics. The idea of an eye in the mind that is the consequence of Locke's camera obscura metaphor, when it stops being a

143 John Hyman 1989, p. 1.

theoretical framework for epistemology and starts to become conceived as an actual entity in our mind, will set off philosophy on a troublesome path. Descartes brings the questions raised by Kepler into the mainstream of philosophy. He writes:

> But now I must tell you something about the nature of the senses in general, the more easily to explain that of sight in particular. We already know sufficiently well that it is the mind which senses, not the body; for we see that when the mind is distracted by an ecstasy of deep contemplation, the entire body remains without sensation, even though it is in contact with various objects.[144]

What Descartes claims is that vision comes about in the mind, not in the eye. Although he, based on his readings and experiments, believes in the existence of the retinal image, he does not see it as the cause for vision (as Kepler occasionally does). Descartes points out that we have visual mental representations when we are sleeping[145] therefore vision cannot be dependent on retinal pictures. Here lies an very important point, what he actually says is that we have mental representations and we have vision, but that these two do not correlate in any straightforward way. This is why the "concept of the 'inner picture' is misleading" when it uses "'*outer* picture' as a model."[146]

Descartes points out how the mimetic conception of knowledge that claims that we know the world through go-betweens or likenesses is inhabited by the problem of resemblance. Our thoughts, ideas and experiences can obviously not be explained by their resemblance with external objects, since this would entail an infinite regress.[147] Descartes goes on to point out that the images that occur in the eye do stimulate our minds, but so do signs and words. The latter can obviously not constitute our knowledge through their *likeness* to the object, since words do not resemble. But neither do images resemble the object in all their qualities, since if they did,

144 René Descartes, *Discourse on Method, Optics, Geometry, and Meteorology* translated by Paul J. Olscamp (Hackett Publishing Co. 2001), p. 87.

145 Ibid., p. 108.

146 Ludwig Wittgenstein 1998, p. 196e.

147 René Descartes 2001, p. 101.

then they would not be distinct from the actual objects, i. e. they would cease to be images. Only in shape is there a resemblance and even here there is a discrepancy since, "on a completely flat surface, they represent to us bodies which are of different heights and distances".[148] That an image resembles something means then that we already have accepted certain preconditions. The image is not *like* the object, since it is two-dimensional whereas objects are extended, they have a volume, etc. Here the concept of resemblance splits up. Similarity between two objects is not comparable to an image's way of representing an object. In the first case, one object can be conceived as a copy of the other object. The important Cartesian point is that in the second case the image represents through signification, it is, as in the case of the relationship between word and object, a case of a sign that we use to signify a certain thing. This argumentation is designed to put an end to the idea of the *species* as natural signs.[149] There can then be no similarity or likeness without the intervention of human reason. The thought or idea of an object cannot share the *nature* of the object, nor can an image do so. This cannot be the case since if we think about how images resemble things, this requires something more than two objects: object of the senses and object in nature. In order for there to be resemblance there has to be a third instance, human thought, judgement or understanding, what Leibniz and Descartes called the common sense, that *sees* the resemblance between object and image. Even Locke is pressed to draw such a conclusion, he writes:

> Every act of sensation, when duly considered, gives us an equal view of both parts of nature, the corporeal and the spiritual. For whilst I know, by seeing or hearing, &c., that here is some corporeal being without me, the object of that sensation, I do more certainly know, that there is some spiritual being within me that sees and hears. This, I must be convinced, cannot be the action of bare insensible matter; nor ever could be, without an immaterial thinking being.[150]

148 René Descartes 2001, p. 90.

149 Ibid., p. 68.

150 John Locke 1894, p. 406-407. Interestingly this passage was part of an addition that was included in the second edition.

Here *seeing* signifies something beyond mere reception of visual input. Whereas Locke's statement still is prone to the criticism that his model of understanding still entails an endless regression, it at least shows that he was not completely unaware of the mistake that a solely optical explanation of vision carries with it. In the statement above he does not consider that the so called "object of sensation" is superfluous, and furthermore, highly problematic. However, the important notion here is that Descartes' catch on this issue puts forth, at least the possibility of a conclusion in which judgement is integrated in seeing. More clearly than Kepler, Locke or Leibniz, he disregards the idea of pure visual sensations. This is an inevitable conclusion. Although Descartes epistemology entails its own discrepancies, if we take into account how dominating theses ideas of "innocent perceiver", "metaphorical eye" or "purely optical picture" have been, the point that Descartes makes, really rings true in the context. He anticipates Kant who introduces the concept of judgement as something that, if analyzed properly, leaves no room for conceptions of objectivity in the way that they have existed before. Kant writes:

> For the logical form of the understanding in judgment must precede, and the appearances (as mere appearances) must be regarded as determined with regard to each of these forms, otherwise no experience can arise from them. We can also use the word "experience" in place of the words **"object of the senses."** For we do not cognize the things in themselves; we can know nothing of them except all our possible experience of them, and only insofar as this is determined *a priori* by the form of sensibility and that of the understanding.[151]

There is a certain vagueness in the quote above, but the bottom line is that the idea of *object of the senses*, that I have discussed in its many forms in the past two chapters, is something that inevitably will cause tension, discrepancies and confusions. This problematic idea is shared by what we, in hindsight, call empiricism and rationalism. And although both Descartes and Kant make an effort to rid philosophy of this problematic, the door is still left open.

151 Immanuel Kant, *The Cambridge Edition of the Works of Immanuel Kant, Notes and Fragments*, Paul Guyer and Allen W. Wood (eds.) (Cambridge University Press 2005), p. 307.

Conclusion: The Innocent Eye is Blind

What I have hopefully been able to articulate in these chapters is that there is something uncanny about the visual sense that keeps on creating confusion in philosophy. But, let us take a step back and think about what this actually means. In order to understand where the actual problem with the idea of retinal image, or its correlate, the idea of mental representations, resides, let us briefly consider a slightly different approach. In his essay *Studying Perception* Olli Lagerspetz considers what mental representation can mean in our subjective experience of vision, how we can understand this concept outside of the specialized epistemological discourse within philosophy. Lagerspetz writes:

> Sometimes I literally think in images. I might visualize the walk from one part of my hometown to another. Here my mental images literally represent something. I am using them in planning, to stand proxy for real streets and buildings. But when I really walk and look around, what I am seeing is not images but shops, cars, people, events, and whatever there is for me to look at.[152]

Through this example we can acknowledge that our concepts and our ways of conceptualizing the world around us in order to orient ourselves within it can consist of representations. But these representations do not correlate in a straightforward way with what I see, how I look at things. In this case the mental representations are not a helpful part of an understanding of what it means to see. On the contrary, vision and seeing reveal themselves to be something other than mental images. This example points out in what way mental representations and vision are *not* comparable with each other. This is not to say that there are no possible connections between vision and mental representation.

The theory of vision within philosophy that I have traced, and the concept of image that has evolved from it, is one where the visible exists regardless of human intervention. It

152 Olli Lagerspetz, "Studying Perception" in *Philosophy*, 83/2008, p. 208.

is a highly strained theory since, if this were to be the case, we still would not have access to this visual realm as it exists (looks) prior to our engagement with it through our senses. I have pointed out some understandable reasons for the construction of such a theory. The important point here is to understand that if we want to hold on to this kind of concept, we at least have to understand that it is a result of a highly specialized and specific discourse within arts and science. Pragmatically, the hypostasization of an indexical visual order that exists in nature, a visual self portrait of nature, has helped along science and visual arts to achieve some crucial goals. But when we understand this, we also understand that this concept of an objective visual realm does not denote nature as it exists by itself, an *a priori* image-world, perception divorced from judgement and human psychology. On the contrary objectivity and its union with the visible, is a highly abstract concept that has been constructed during a long time-frame. Objectivity cannot be discovered in nature: it has to be constructed. Observation is a specific action within a world of possible ways of perceiving. Our ways of perceiving the world are connected to our actions. Seeing in this sense consists, not of one unified task of distinguishing between truth and falsity, correctness and incorrectness, etc., but of different tasks related to our judgements, concepts and thought, as well as to the natural world. The ways in which we can meaningfully talk about what we see are not fixed or predetermined, like for example the movement of the planets in the solar system. When we look into the significance of vision and images, we ask questions that go beyond the dichotomy of truth and falsity. This puts into question the whole meaning of the concept of visual record. At least the visual record cannot acquire its meaning in the sense that Kepler thought it could, due to its detachedness from reason and the subject. The Innocent eye that Kepler and his contemporaries sought was, as Kant had shown, blind.

In the following chapter I will follow up how positivism, together with the invention of the photograph, will evoke similar problems as the retinal picture and the idea of *species* have brought up earlier.

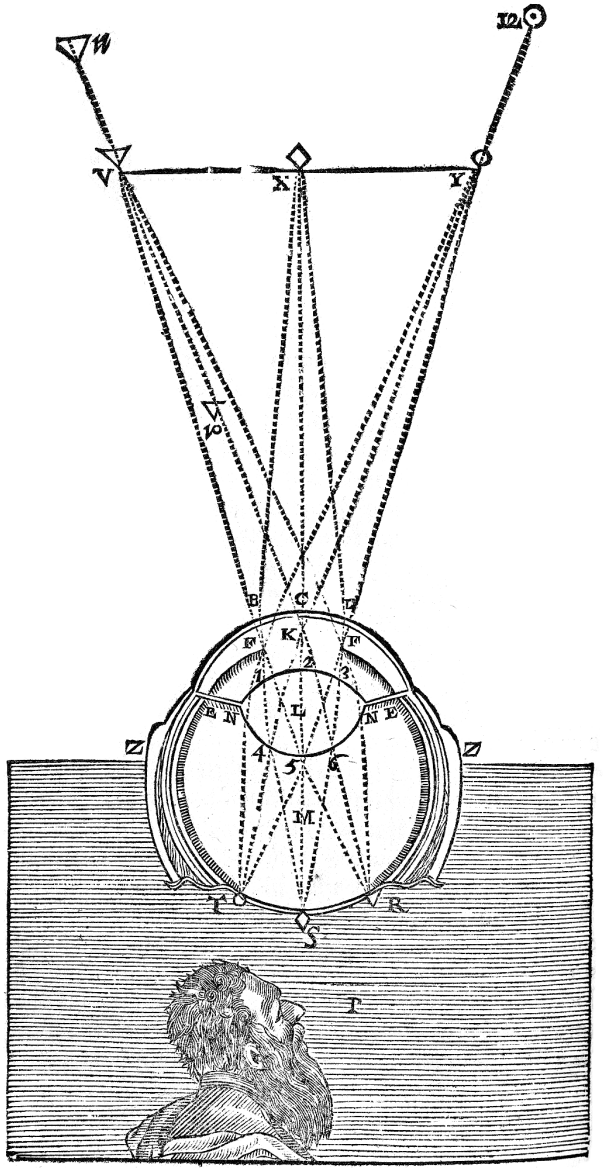

Image 2.1[153]

153 Image taken from René Descartes, *Opera Philosophica, Renatus Des-Cartes* (Amsterdam 1685), p. 70. Courtesy of Åbo Akademi University library.

3. Photography: The Go-between of the Record

> From now on, matter would at last be mastered without any illusion of ruling or inherent powers, of hidden qualities.[154]
>
> Theodor Adorno and Max Horkheimer

> We should not find excuses for ourselves in our good intentions; let us see what becomes of these once they have escaped from inside us. There is something healthy about this unfamiliar gaze we are suggesting should be brought to bear on our species. Voltaire once imagined, in *Micromégas*, that a giant from another planet was confronted with our customs. These could only seem derisory to an intelligence higher than our own. Our era is destined to judge itself not from on high, which is mean and bitter, but in a certain sense from below.[155]
>
> Maurice Merleau-Ponty

My starting-point for this chapter is that the status of the image as record cannot be dependent on the medium of depiction. Rather images become records through their use. It is in relation to what we do with images that they get their status. In the examples I have discussed, in natural science and specifically in astronomy, it was the requirement to establish an unbiased form of observation that gave us visual records. So far my goal has been to puncture all categorical statements for and against the possibility of objectivity. This is not to say that objectivity is a nonsensical concept. I just want to specify contexts in which the concept is useful and the ways in which categorical statements about objectivity – about the given, nature as it exists in itself, vision as a phenomenon in nature – cause problems within epistemology. The claim to objectivity, to have a meaningful use, requires a context. This is what I have articulated in my discussions of the ideas of *species* and of the retinal image.

154 Theodor Adorno and Max Horkheimer, *Dialectic of Enlightenment* (Verso 1979), p. 6.

155 Merleau-Ponty, *The World of Perception* (Routledge 2005), p. 89.

In the context of a time-period in which metaphysics and earlier ideological doctrines (i.e. Christianity, Platonism) fail to serve as an explanation of the natural world, the concept of *species* and that of the retinal image, were highly useful ideas. As they indicated that the natural world has its own way of conditioning us in our perception, they helped science and philosophy to focus attention on observational and empirically founded visual phenomena. This change of focus had vast advantages. The concepts of *species* and the retinal image were working tools in the construction of an epistemology of the Enlightenment. In what follows I will show how the photograph played a similar role as a go-between between mind and matter. These ideas had, even before the advent of photography, in one sense already established the conception of a kind of image that consists of a neutral recording of the visual field. Furthermore, these habits of thought were connected to actual depiction in perspectivist painting. This being said, photography and the discourse around this medium hold a special place in this discussion.

Photography has often been conceived of as an indexical picture. It has been said to be a *trace* of the object, due to the fact that it is brought about through a process in which light reflected from the actual object in nature inscribes its image on photographic paper.[156] What this view entails is that only the photograph can be a proper record, since it is essentially a recording of or by light, whereas other forms of depiction – engravings, paintings, etc., – are man made reproductions of colors and forms in the visual field. Photography invites the temptation to think of it as something beyond an image, Roland Barthes writes: "I wanted to learn at all costs what Photography was 'in itself' by what essential feature it was to be distinguished from the community of images"[157]. My issue with this idea is that it sometimes entails that the photograph constitutes *the* standard for visual records, all other forms of depiction being essentially something else. On Barthes' view, other forms of depiction give us *merely images*, whereas photographs are something beyond the status of image. What I want to make clear in this chapter is that photographs, and photography, held a similar position in the discourse about the epistemology of the image, as did the earlier ideas of

156 For an elaborate example of this idea, see Roland Barthes, *Camera Lucida* (Hill and Wang 1981), p. 80-82.
157 Ibid., p.3.

species and of the retinal image. When photography came about it appealed to sensibilities of the kind Barthes is expressing when he conceives of the photograph as something beyond image. My point is that this idea will be inhabited by similar misconceptions as were the ideas of the *species* and of the retinal image.

In this chapter I will be concerned with the history of the invention of photography and the scientific milieu around it. The invention of photography introduces a new kind of image, conceived to be better suited for use as record, as compared with earlier forms of depiction. It cannot be denied that photographs are products of an automatic process. However, the problematic assumption that sometimes follows from this definition is that they, because of their automatic origin, somehow sidestep human involvement. In this view the photograph becomes the non-human image. This assumption is common both for the inventors of photography and many of the most influential 20th century theorists. For example, André Bazin writes, "For the first time an image of the world is formed automatically, without the creative intervention of man [...] . All the arts are based on the presence of man, only photography derives an advantage from his absence."[158] Here Bazin seems to be influenced by the mind/natural world dichotomy that I have dealt with in earlier chapters. This way of characterizing the photographic image begs the question: what could it possibly mean to sidestep human involvement? Does this sidestepping leave us with a *pure* visual record, that which is left when all human judgments and conceptions are left aside? As I have shown earlier, this cannot be the case since, if photographs indeed were all this, when seen they are nevertheless brought back into the world of human understanding. As Donald Evans puts it: "If the camera is to be said to see anything at all it can only be said to see what the viewer of the photograph can see"[159]. In this sense the idea of a pure visual record beyond the human is misguided. The whole idea of an image that exists somehow beyond, or despite human perception is absurd, because it disregards the fundamental fact that images and photographs are vehicles of communicating something, not (only) between the object and the subject, but between a producer and the viewer of

158 André Bazin, *What is Cinema?* (University of California Press 1997), p. 13.

159 Donald Evans, "Photographs and Primitive Signs", *Aristotelian Society Proceedings 1978/79*, New Series – Vol. LXXIX, p. 217.

the image. Of course, even the theorists who claim that the photograph is a special kind of image would admit that every image (and everything that can be seen) has to be seen by somebody in order to be acknowledged. My point here is that the categorical claim that the photograph is, by necessity, more objective than any other form of depiction, sidesteps the fact that even photography as a technique, as well as the individual photograph, come about through a complex goal oriented process, a process put into work and regulated by a human agent.

However, as I have shown earlier, and as I will continue to point out in this chapter on photography, there is a persistent desire within Western science and philosophy to construct an external view on reality, a view from beyond the human. This desire is linked to a bundle of other pivotal philosophical questions that I have addressed earlier. Problems within the classical and early modern theory of vision stemmed from the fact that, in order to rationalize the visual field, scientists like Euclid, Al-Hazen, and Kepler, to some extent disregarded what can be called subjective vision. As long as this choice of focus was deliberate it did not necessarily entail problems. Kepler suggested that, in order to understand vision and observation better, it might be fruitful to see what can be said about the visual faculty without taking subjective experiences of vision into account. That is, he wanted to focus on what can be said about vision from a third person perspective, on what we still can agree upon if we stick strictly to this perspective on vision, conceived of as a phenomenon in nature, not as experience. The same line of thought was applied to science in general. The method of choice for the natural sciences was to figure out what science can say about objects when we disregard the different roles they play in our everyday life. The task of science was to construct an understanding of reality that was not relative to personal experiences, opinions or earlier theories. It is in this ideology that the idea of an image as record becomes paramount, but at the same time this idea carries with it a temptation to forget about the inevitable involvement of the self in seeing. As we get carried away by this temptation our concepts get jolted and unsolvable paradoxes start announcing themselves: expressions beyond language, images beyond human perception, a world picture as seen from the view of nowhere. These are conceptual failures, failures in meaningfully thinking and talking about the concepts of the image, record, judgement and the self.

It is in our thinking, in a *theory* of perception, not in actual perception, that we establish this rift between the objective and the subjective. Richard Rorty points out how the view of knowledge as an assemblage of representations was a product of 17th century philosophy. He goes on simply to point out that this theory is optional, that it is important to understand that it played a role in the theory of perception, in epistemology and in philosophy in general, but that it need not play a role in any other philosophical discourses. The theory is a helpful tool in some cases while in others it might prove to be incompatible.[160]

So, the rift between subject and object is a consequence of a theory, not an actual state. This line of thought is articulated by Merleau-Ponty who points out how this discrepancy between a certain theory, or philosophical system, and our understanding of vision in our subjective experience is a consequence of the presupposed rift between mind and body. Merleau-Ponty writes: "Here, for the first time, we come across the idea that rather than a mind *and* a body, man is a mind *with* a body, a being who can only get to the truth of things because its body is, as it were, embedded in those things."[161] The world of perception is then "a world in which being is not given but rather emerges over time."[162] The theory of a rift between mind and body cannot account for how we, as perceiving and experiencing beings, are involved in the world, how this involvement is a process. The view of Merleau-Ponty entails that objects are not merely bundles of given qualities, forms, colours, odours, tastes and sounds etc. They have a meaning for us that develops over time, through our relationship to them and our interaction with them. The relationship between the perceiver and object is a dynamic one. This relation cannot be exemplified by an instantaneous snap-shot of the visual field as Locke or Kepler would have it. Bill Nichols points out this discrepancy: "Seeing" involves our experience, conception, memory and judgement. How I see something reveals something about who I am. But a picture cannot carry with it a theory of how it is to be viewed, a concept cannot be illustrated".[163] When we try to understand what it means *to see*,

160 Richard Rorty, *Philosophy & the Mirror of Nature* (Basil Blackwell 1980), p. 136.

161 Maurice Merleau-Ponty 2005, P. 56. In this quote Merleau-Ponty refers to Malebranche's, *The Search after Truth*, translated and edited by T. Lennon and P. Olscamp (Cambridge University Press 1997), I, ch. 7, s.5, pp.35-36.

162 Ibid., p. 54.

163 Nichols, Bill, " 'Getting to know you . . .': Knowledge, Power and the Body". In Michael Renov (ed.), *Theorizing Documentary* (Routledge 1993), p. 182.

it becomes evident that the philosophical branch of empiricism, at least the generic form of it that uses the concept of image as a model for understanding, has completely missed the mark while trying to explain perception. The idea of record does not make sense if it is taken to serve as a model for how we see.

Towards the end of this chapter I will introduce another understanding of the concept of visual record that is based on the recordings capacity to sharpen our focus on certain aspects of the visual field. The task that I see as central for recording, is the practice of cultivating our visual field, of highlighting, foregrounding, accentuating certain features. In this sense the visual record is not a copy of the external visual field, but a kind of heightened attention that is conditioned by our different goal oriented tasks and the different questions with which we address our environment. This is the key idea that I want to develop at the end of this chapters and in the chapters to come. That is, I do not wish to abandon the idea of visual record as meaningless, but as long as it is connected to a certain understanding of objectivity, anti-anthropomorphism and neutrality, it will cause havoc within epistemology.

Still, the construction of an ideal of objectivity as well as the practice of constructing new visual aids and recording technologies will continue to thrive during the beginning of modernity. Photography and several other technological inventions are both constructed and used in the practices of observation by scientists of the 19th century. During this period the likes of Étienne-Jules Marey, Ernst Mach, and Francis Galton, among many others, study a wide range of phenomena, from locomotion, cardiology, aeronautics to sociology, anthropology, and psychology by the means of automatic apparatus. These scientists do not only use the technology of photography. They also perfect, modify and adapt the invention that was first set forth by Nicéphore Niépce, Fox Talbot and L. J. M. Daguerre. Marey, Mach and Galton not only pick up the technique, but also the expectations and predictions of the pioneers of photography. The photographic technique that can be used for a variety of different forms of depiction has a scientific aura about it that has to do with its convergence with an ideology that strives to find truth ”beyond the limits of the human”[164]. This ideology

164 I have borrowed the expression from Germaine Dulac as quoted in Hannah Landecker, ”Microcinematography and Film Theory”, *Critical Inquiry*, Vol. 31, No. 4 (Summer 2005), p. 934.

is formalized in the new doctrine of positivism during the 1830's. Positivism constructed a "view from nowhere"[165] that was alien in comparison to the subjective world of perception. It is exactly this alien aspect that appeals and reawakens hopes and expectations of a new science and a new worldview. But again, the underlying assumption of a view from beyond the limits of the human continued to muddle 19th century understandings of vision, image, record, and the subject.

The View from Nowhere

For Bacon and his contemporaries, and even for George Berkeley in the 18th century, God was a superior observer, because this omnipresent being was a guarantor of the existence of the perceivable world.[166] This idea is reproduced in positivism, that is, the positivists understand the human senses as being far too weak, too tied up with subjective conceptions, or too inattentive to grasp the workings of nature. But instead of God, the positivists turned to the automatic machine as a superior observer. In the absence of God, the record was required in positivist theory to grant an external view on nature: physics, chemistry, and the new discipline of sociology. What these machines did was that they introduced a kind of "automatic seeing"[167] that could promote a scientific view on phenomena. In this sense positivism was purely ideological. By means of visual recording, the observational gaze of science was brought into a public domain by the reproductive capacity of photography, and later that of film. Tom Gunning brings up this relation between the invention of cinema and other inventions that were used, not only to record, but also to transform our understanding

165 Thomas Nagel, *The View from Nowhere* (Oxford University Press 1986).

166 In Berkeley's dialogue between Hylas and Philonous, Philonous claims: "To me it is evident, for reasons you allow of, that sensible things cannot exist otherwise than in mind and spirit. Whence I conclude, not that they have no real existence, but that seeing they depend not on my thought, and have an existence distinct from being perceived by me, *there must be some other mind wherein they exist*. As sure therefore as the sensible world really exists, so sure is there an infinite omnipresent spirit who contains and supports it." George Berkeley, *The Works of George Berkeley Bishop of Cloyne,* Volume Two, edited by A. A. Luce and T. E. Jessop (Thomas Nelson and Sons Ltd. 1949), p. 212.

167 Hannah Landecker 2005, p. 926.

of human life. He writes: ”Cinema emerged within a welter of new inventions for the recording or conveying of aspects of human life previously felt to be ephemeral, inaudible, or invisible: the telephone, the phonograph, or the X-ray are only a few examples.”[168] The scientific method of detached observation was brought into a larger social context, and the recording and reproductive capacity of the camera enabled this development. In this sense positivism was more than only a movement within science. It was an attitude that privileged a *scientific* way of seeing. It also had an impact on how we, as perceiving subjects, understand the world. Jonathan Crary describes this as a part of a ”massive reorganization of knowledge and social practices that modified in myriad ways the productive, cognitive, and desiring capacities of the human subject.”[169] The new machines and the doctrine of positivism taught us a new way of looking at things. Or, maybe more precisely, they gave us means to popularize a scientific view, in a way that was not possible earlier. What is interesting for my purposes in the transition to modernity is the shift toward an even more rigorous skepticism toward subjective vision. When photography and later film, along with the new doctrine of positivism, establish an idea of an external view upon, not only natural phenomena, but also human life, it is a shift towards an understanding in which the self becomes a source for puzzlement. As if we had not known ourselves properly before.

A change in epistemology, a shift in the theory of knowledge, was the essential impact of this development. I will explain how this change also had an impact on the conception of the image, but in order to do that, I will first articulate how the epistemological development got on its way. There is a certain familiar misconception in positivism that will, on the one hand, cause confusions concerning the status of the image, similar to those described earlier. On the other hand, the positivists' disbelief in a God-given natural order will take these confusions to another level. In his *Positive Philosophy*, Auguste Comte describes the evolution of science as a progression linked to the development of human intelligence. He proposes that there are three stages in this development of the mind: the theological, the metaphysical, and the positive. These three concepts signify three methods of philosophizing. He sees it as his task

168 Tom Gunning, ”Moving Away from the Index: Cinema and the Impression of Reality”, *Differences*, volume 18:1 (Duke University Press 2007), p. 35.

169 Jonathan Crary, *Techniques of the Observer – On Vision and Modernity in the 19th Century* (The MIT Press1992), p. 3.

to outline the last positive stage. In a peculiar way, questions concerning vision, observation, and the record are at the core of this new doctrine. Although positivism is understood as a novel way of philosophizing in comparison to the older metaphysical doctrines, as a discipline, it still requires the concept of the go-between. However, it is a new kind of go-between. Comte writes:

> The Positive Philosophy, which has been rising since the time of Bacon, has now secured such a preponderance, that the metaphysicians themselves profess to ground their pretended science on an observation of facts. They talk of external and internal facts, and say that their business is with the latter. This is much like saying that vision is explained by luminous objects painting their images upon the retina. To this the physiologists reply that another eye would be needed to see the image. In the same manner, the mind may observe all phenomena but its own. It may be said that a man's intellect may observe his passions, the seat of the reason being somewhat apart from that of the emotions in the brain; but there can be nothing like scientific observation of the passions, except from without, as the stir of the emotions disturb the observing faculties more or less. It is yet more out of question to make an intellectual observation of intellectual processes. The observing and observed organ are here the same, and its action cannot be pure and natural. In order to observe, your intellect must pause from activity; yet it is this very activity that you want to observe. If you cannot effect the pause, you cannot observe; if you do effect it, there is nothing to observe.[170]

In this passage Comte introduces several important notions dominant in 19th century philosophy and science. He quite rightly criticizes the theory of the retinal picture as a source of our knowledge. The fact that a picture requires a set of eyes in order to be seen proves the incomprehensibility in the idea of the retinal picture as a model for our knowledge. On this point he distances himself from all the Keplerian and Lockist optical metaphors for

170 Auguste Comte, *The Positive Philosophy of Auguste Comte*, volume 1 (Kegan Paul, Trench, Trübner, & Co. Ltd. 1893), p. 9.

knowledge and understanding. But in general he shares the empiricist understanding in which the subjective merely has a confusing effect on *pure* observation. That is, he understands the fallacy in the camera obscura metaphor for our understanding, but at the same time he is drawn to the core idea that it entails. Comte does not deny that there is an internal reality of affects or feelings[171], but he claims that, due to the misconceptions of earlier metaphysical philosophy, the subject has not yet had proper, *scientific* access to it(self). Here the emphasis concerning knowledge is another than in Descartes' epistemology in which "this *me* – that is, the soul by which I am what I am – is completely distinct from the body: and is even easier to know than is the body; even if the body were not, the soul would not cease to be all that it is".[172] Again here occurs a generic philosophical pattern of a split in the concept of knowledge. Descartes claims that we know our soul, his dilemma is how to explain how we know the material extended world. Comte's problem is the opposite, how to extract observational and objective knowledge of the thinking and feeling subject. The challenge for this positivist approach is anthropology, the science of the nature of man. How can we gain knowledge of human phenomena, when our point of observation is from within that which is human? Or as Pamela H. Smith explicates this question, as a starting point for the 17th century ideal of a dispassionate observer: "How was the philosopher to escape the havoc wreaked by the passions when he relied so heavily upon the body and the senses and was himself immersed in the sensory world?"[173] It was out of this fear of the "distorting effects of desire"[174] that the idea of a dispassionate observer arouse. Comte specified that this problem is particularly pertinent when investigating human behavior. This will become the problem that positivism and the era of the new empiricism will see as its task to solve. Comte's requirement of a point of view beyond the human perspective is, however, problematic in exactly the same way as is the Cartesian rift between mind and body. They are both built on the same structure.

When Descartes states that he can know the self completely, that the self is accessible for the I in a transparent way, he makes an attempt to evade the so called *homunculus* fallacy.

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171 Auguste Comte, *System of Positive Polity,* first volume (Burnt Franklin 1973), p. 9.

172 René Descartes, *Discourse on Method, Optics, Geometry, and Meteorology* (Hackett Publishing Co. 2001), p. 28.

173 Pamela H. Smith, *The Body of the Artisan – Art and Experience in the Scientific Revolution* (The Univeristy of Chicago Press 2004), p. 226.

174 Ibid., p. 228.

That is, he understands that if the I perceives the self, and by 'perceive' we mean literally visual perception as the camera obscura model would have it, then there are already two perceiving instances, the I and the self. This would then again require a third and a fourth, etc., set of eyes, thus ending in an infinite regress[175]. By this Descartes does not deny that we *can* have knowledge through images, he just points out that images, the representable, is one form of knowledge among others and that knowledge of my own self does not adhere to this form of knowledge. He writes:

> But what causes many people to be persuaded that there is difficulty in knowing this [here he refers to difficulties of understanding the immaterial; God, the rules of geometry etc.], and even also in knowing what their souls are, is that they never raise their minds above sensible things and are so accustomed to consider nothing except by forming an image of it, which is a particular mode of thought for material things, that everything for which an image cannot be formed seems unintelligible to them.[176]

Descartes points out how the idea that everything, even the soul, could be represented by an image, stems from an empiricist reduction. It is this reduction that Comte presupposes when he ends up in the paradoxical question of how the self can know itself properly, as the perceiver and the perceived are the same. As if the only proper knowledge of the self in the end had to be something representable, an image. Descartes points out that all knowledge

175 Anthony Kenny acknowledges Descartes as one of the first philosophers who drew attention to the *homunculus* fallacy. In order to explain the context in which Descartes arrives at the fallacy, Kenny quotes Descartes "and when it [the picture on the retina] is thus transmitted to the inside of our head, the picture still retains some degree of its resemblance to the objects from which it originates". More importantly, Kenny shows that Descartes warns us, not to draw the wrong conclusions from the fact that there are pictures on the retina. To point this out Kenny brings in another quote by Descartes: "We must not think that it is by means of this resemblance that the picture makes us aware of the objects – as though we had another pair of eyes to see it, inside our brain". Anthony Kenny "The Homunculus Fallacy" in John Hyman (ed.), *Investigating Psychology, Sciences of the Mind after Wittgenstein* (Routledge 1991), p. 156. The Descartes quotes used by Kenny are taken from René Descartes, "Dioptrics", in *Philosophical Writings*, trans. and ed. E. Anscombe and P. T. Geach (Nelson 1954), p. 244 and 245-256.

176 René Descartes 2001, p. 31.

cannot have this form of an image (or scent, or sound).[177] Comte understands the *homunculus* fallacy, but he does not understand that he himself also invites this fallacy when supposing that the observational form of knowledge is the only *proper* knowledge. This error stems from the visual metaphor. When Comte talks of the impossibility of observing the self, because in this case the perceiver and the perceived would be the same faculty, he could have chosen not to accept this model of the self. But when he proceeds to take this (the problem of accessing the self objectively) to be a real problem and furthermore, builds up his epistemology and the whole science of anthropology on this dilemma, he reveals that he accepts the model. He really thinks that science has to find a way to access the subject from an objective viewpoint. However, what Comte gets wrong is that these two perspectives do not stand in contrast to one another. On the contrary, they consolidate the same solipsistic conception of the self. All discourse that understands knowledge and understanding as primarily in some way or another consisting of a relationship between object and subject, will ignore how we essentially know the world or what knowledge actually is for. That is, knowledge is something that exists because we share this world with other subjects, i.e it stems from relations between subjects. There is then nothing problematic about an intellect that observes passions. The only situation in which such a perspective would be impossible would be if we were to disconnect the presence of all other living beings in our experiential world. This lack of understanding of the intersubjective grounds of knowledge is what invites a fundamental shortcoming in positivist epistemology .[178]

Although Descartes properly could analyze the problem that arises from the empiricist reduction, he could not grasp in what way his own standpoint also consists of a reduction. Like Comte, Descartes is tempted to think that knowledge, the *proper* form of knowledge, is solely a business between the subject and the object. That is, both theoretical frameworks overlook *the social world* and that the possibility for knowledge stems from the fact that we share this world with other subjects. While Descartes tries to widen the epistemological

177 Ibid.

178 I will continue this discussion concerning intersubjectivity and knowledge throughout the second part of this thesis.

frame to also include knowledge beyond the senses, he still fails to make it wide enough. Catherine Wilson brings up this point in her reading of Friedrich von Schiller: "Schiller says, when a philosophical system is trying to exclude something essential, that thing will keep breaking in on it, ruining the effort and creating problems and inconsistencies".[179] Here Wilson and Schiller do not address the problems concerning the concept of image, but a similar tension that resides in, what we call rationalism, the tendency in the philosophy of Descartes and Leibniz, "to make matter unreal"[180]. However, what I think is important in Schiller's point is the structure of certain philosophical problems. My point is that what is sidestepped in both Descartes' and Comtes' accounts is not only, in one case the object, nature etc., and in the other case, the subject, attention, judgement, etc., but the relation between two subjects. Images are a way of communicating something between human beings. In this way we are not dealing with only subjects and objects, but also the other, the you, the second person (I will continue this discussion on communication in chapters 5 and 6).

My point here is not to explain the relation between the epistemologies of Descartes and Comte, but to point out a discrepancy that, despite Comte's attempt to rid positivism of metaphysics, inhabits both his own, and his predecessor's understanding of the thinking, conscious, observing subject. When Comte writes "as the stir of the emotions disturb the observing faculties more or less", he tangles himself up in a problem that he thinks he can solve by emphasizing the importance of scientific observation. He sets out from a paradox in which emotions constitute something that will soil the pure observation, taking this to be inevitable since the visual faculty is by necessity inhabited by these passions. This opens up for the requirement of a form of scientific observation that lies beyond the subject. Like Kepler, who talked about *pictures* as opposed to *images*, since he understood images to be distorted because they were a compound of the visual input and of that which reason adds on to this input, or like Bacon, who professed that "the *great* error of the senses" stems from the fact "that they set the outlines of things by the pattern of man"[181], Comte also conceives

179 Catherine Wilson, " Discourses of Vision in Seventeenth-Century Metaphysics", in David Michael Levin (ed.), *The Discursive Construction of Sight in the History of Philosophy* (The MIT Press 1997), p. 123.

180 Catherine Wilson 1997, p. 123.

181 Francis Bacon, *The New Organon* (Cambridge University Press 2002), p. 178.

of the effect of the subject as something that distorts observation.

But he also makes another point when he states that the intellect cannot observe itself, since the observer and the observed would then be the same. With no distance between the observer and the observed, observation is impossible. There can then be no observation without there being two different entities because sight requires distance. On the one hand, Comte sees the subjective as something that distorts pure observation, on the other hand he acknowledges that the subjective is an integral part in perception. Comte's assumptions are paradoxical since, if the subject by necessity influences observation, it is misleading to conceive of observation *as such* as either pure *or* distorted.[182] If 'purity' implies perception unconditioned by the subject, and if we agree that this is impossible, then there will be neither purity nor any corresponding distortion.[183] This would be a logical consequence of Comte's position. But he fails to see the paradox that lies in holding both that passions thwart observation and that the subject with her passions is inevitably entwined in observation of phenomena. He makes an attempt to address this by referring to a classical distinction between the passions and the intellect, as if they were two different entities, but this does not solve the confusion. Due to this line of thinking, he constructs an intriguing paradox by pointing out that the intellect cannot observe itself, since in observation the observer and the observed cannot constitute the same entity. In this specific context it rings true that "In order to observe, your intellect must pause from activity" since "If you cannot effect the pause, you

182 St. Augustine makes this point brilliantly, he writes: "How could a picture of a horse be truly a picture if the horse were not fable? How could there be a man's face in a glass, true as such, though not truly a man? So if a certain kind of falsity is necessary in order that there should be truth, why do we dread falsity and seek truth as a great boon?". St. Augustine, *The Soliloquies*, in Alexander Sesonske (ed.), *What is Art?, Aestheric Theory from Plato to Tolstoy* (Oxford University Press 1965), p. 96.

183 This point is made by Ernst Mach, he writes: "I enunciated this thought as follows: The expression "sense-illusion" proves that we are not fully conscious, or at least have not yet deemed it necessary to incorporate the fact into our ordinary language, *that the senses represent things neither wrongly nor correctly*. All that can be truly said of these sense-organs is, that, *under different circumstances they produce different sensations and perceptions*." Ernst Mach, *The Analysis of Sensations* (Dover Publications Inc. 1959), p. 10, n. 1. Note how rigidly Mach dismisses everything that is psychological in vision. Kepler renounced all non-optical factors that are involved in vision, as something that philosophers can speculate about. Mach goes one step further and claims that everything beyond the workings of light that give different images on different surfaces, is superfluous in an explanation of vision. In this statement he makes a peculiar kind of error. This kind of theory seems to pull out the rug beneath science. It disrupts all prerequisites for *meaning* in perception and divorces subjective vision from the realm of science of vision. He talks of *representation* that is neither wrong nor correct, but how could it then be representation? To represent something cannot be a completely ambiguous task. If representation does not aspire some form of correctness in any way, then it cannot be representation.

cannot observe; if you do effect it, there is nothing to observe". But of course this point only makes sense in a very specific circumstances. Only if the thing under observation is *the very same* intellect, like a camera that would try to photograph its own automatic process, does the point hold any ground. But even if we take this case at face value and admit that 'I cannot observe my self externally', this is not a *problem*, it is just stating what is not possible. In order for seeing to be possible, the viewer and the seen cannot constitute the same entity. Note how the *visual* metaphor is the source for confusion.

If we move away from the strictly visual discourse, it is evident that Comte's reasoning can be understood in a different, but maybe even more problematic way. His assumption that the intellect cannot "know" itself also carries existential undertones. From an example that builds on the problems that we might have understanding ourselves, due to the alleged impossibility of the intellectual faculty to observe its own functions externally, he makes an analogy to how science should conquer the problem of the involvement of the self in observation. In this sense, Comte establishes an ideal in which scientific, observational knowledge, even when we are concerned with our own selves, has priority over the subjective. However confused this beginning, the ethos of positivism that points out the self as the problem for scientific observation, will have vast consequences. For Comte the task of science is to erect an order and maintain that order, in an otherwise fragmented and chaotic natural world that includes the fragmented and chaotic psychology of the subject. He writes:

> The growth of humanity is primarily spontaneous; and the basis upon which all wise attempts to modify it should proceed, can only be furnished by an exact acquaintance with the natural process. We are, however, able to modify this process systematically; and the importance of this is extreme, since we can thereby greatly diminish the partial deviations, the disastrous delays, and the grave inconsistencies to which so complex growth would be liable were it entirely left to itself.184

184 Auguste Comte 1973, p. 6.

By "the growth of humanity", he refers to its thought, feelings, and actions. The task of science becomes then not only to discover or analyze these phenomena, but to control and unify them. He continues: "With this object in view the philosopher endeavors to co-ordinate the various elements of man's existence, so that it may be conceived theoretically as an integral whole. His synthesis can only be valid in so far as it is an exact and complete representation of the relations naturally existing."[185] Here is an apparent contradiction at play. It is one thing to describe or *re-present* an order, another thing to establish one. Essentially Comte advocates the establishing of a totalizing model that mimics an order given by nature.

Francis Galton, the father of psychometrics and eugenics, expressed a similar unease about the discrepancy between the actual *physiological* states in our brain and our knowledge of them. He writes: "We must be content to admit that our consciousness has a very inexact cognizance of the physiological battles in our brain"[186]. By this Galton expresses a view according to which the subject is too inattentive and weak to understand the objective conditions of its self. The misconception that he claims to be common for us is that we think of our consciousness as involving a free will. Galton's main argument in this particular essay is that a thorough systematic observation of the mind would leave us with the conviction that "man is little more than a conscious machine"[187], and that a mature perspective on one's self should reveal that humans are automata.[188] The obvious problem with both Comte's and Galton's constructed scientific view is that things do not add up. If we are but automata, why would there then be a need to unify, rationalize or control the chaotic subject? If the will is *not* free, why does it need to be controlled? Comte fails to see the tension here. He proceeds to establish a view on science as a regulatory institution that should be able to construct a point of observation that is external to the subjective. This idea is followed by the aim to establish a system. He writes: "We have now to proceed to the exposition of a system; that is, to the determination of the universal, or encyclopedic order which must regulate the

185 Ibid.

186 Francis Galton, "Free-Will—Observations and Inferences", *Mind*, Vol. 9, No. 35 (1884), p. 410.

187 Ibid., p. 412.

188 Ibid., p. 408.

different classes of natural phenomena"[189]. In this case "natural phenomena" also includes human actions and human psychology. Positivism is then not only a new, empiricist method for science. Comte also inaugurates a system of control of the self. In order to perceive the natural order as fixed, one's ways of observation must be fixed. In order to achieve this, the positivist must understand the workings of his consciousness objectively. This view is connected to a major change in the understanding of vision that can be said to mark the step into modernity. Jonathan Crary writes:

> The virtual instantaneity of optical transmission (whether intromission or extromission) was an unquestioned foundation of classical optics and theories of perception from Aristotle to Locke. And the simultaneity of the camera obscura image with its exterior object was not questioned. But as observation is increasingly tied to the body in the early nineteenth century, temporality and vision become inseparable. The shifting processes of one's own subjectivity experienced in time became synonymous with the act of seeing, dissolving the cartesian ideal of an observer completely focused on an object.[190]

It is also this understanding of the subject as shifting or unstable as opposed to the fixed container-like subject of Locke, that evoked new concerns about the accountability of the subject that I mentioned earlier. Crary describes how, from the perspective of 19th century science, the former philosophy with its camera obscura metaphor for understanding, naively conceived the relation between the observer and the observed as a stable state, in which vision signified the capability of the eyes to present the soul with a copy of the outer object. From Kant onward, this view was no longer viable. In the time of Comte, the mind could no longer be conceived as a container of readymade sensations, but an active force that organized the different fragmented experiences into a comprehensible order.[191] Comte seems

189 Auguste Comte 1893, p. 14.

190 Jonathan Crary 1992, p. 98.

191 Ibid. p. 100.

to understand the inevitable involvement of human judgement in observation that Kant had articulated. Comte writes: "In a word, every phenomenon supposes a spectator: since the word phenomenon implies a definitive relation between an object and a subject"[192]. In this sense we have no access to natural phenomena beyond the human ways of understanding them. Comte does not, however, seem to be able to grasp how this assumption stands in contrast to his own requirement of a form of scientific observation that grants an external view on human phenomena.

Despite its internal contradictions, or maybe even due to them, positivism came to have a vast impact on the overall epistemological framework during the 19th century. The shift in focus from an epistemology, constituted on an idea of a fixed natural order, to positivism based on an idea of nature as an assemblage of temporal and dynamic phenomena, is expressed in Comte's declaration: "the mind has given over the vain search after Absolute notions, the origin and destination of the universe, and the causes of phenomena, and applies itself to the study of their laws,—that is, their invariable relations of succession and resemblance"[193]. Only through unification of the practices of observation will this ordering be possible. In this shift, mathematics becomes "the most powerful instrument that the human mind can employ in the investigation of the laws of natural phenomena."[194] In this sense, mathematics is not part of the fabric of nature. It is not *the* order of nature, but an *instrument* that the intellect uses to establish an order in nature and society. This shift will, as I will show later, determine different uses of photography, because the shift in emphasis will also have consequences for the concept of the image. The go-between for positivism is not a readymade representation or a copy of external objects, but a logical and classificatory mathematical method that unifies observation. It is not then an image or even representable by images, since axioms and rules are not visible.

In one sense, there is nothing new at all in Comte's positivism. He continues, although reluctantly or even unwittingly, the metaphysical path that Descartes, Leibniz, and even Plato have set out before him. The result is a science that seeks to standardize by looking

192 Auguste Comte 1973, p. 356.

193 Auguste Comte 1893, p. 2.

194 Ibid., p. 26.

for common denominators.[195] The requirement of an external view is then not actually tied to the visual *per se*, not to the actual eye of the observer, but to the mind's eye that can supposedly categorize and rationalize the visual data. But, in a peculiar way, the visual record still has an important role in this venture. Visual data will become the raw material for this categorization.

The reason why I give so much space to scrutinizing the obscurities in Comte's views above is that I think they serve as an outline for the mentality within science and philosophy at the time of the invention of photography. During the first half of the 19th century, photography lands in the tension of this dialectic between the fixed objective and dynamic subjective views on vision. This tension creates a new kind of uncertainty concerning the status of the image. Beyond the more commonly acknowledged uses of photography – portraiture, journalism, art-photography etc., – the aspect of it as record is what initiates this technology to its age. It is not photography *per se* that evokes the ideal of an objective encyclopedic compartmentalization of the world. Rather it is its adaptability for a certain use, a standardization of the means of representation, that suits the positivistic ideology that requires an externalized view.

This point is important for the present work since, from the start, photography acquired its role as a record due to its proficiency in producing fixed visual representations. Later on it also proved to carry a proficiency due to which it was suited as an instrument in the venture of ordering and standardizing a form of representation. This proficiency for standardization was not primarily due to the photograph being a visual image, it was due to the fact that photography was a result of a somewhat unified, optical and chemical, automatic process. These two uses of photography correlate with the earlier epistemological model of the Enlightenment and with the positivist ethos. Photography granted the scientists both a means of making visual records, and a way of standardizing information. But, my main point is that as long as the fundamental role of the image, the role that it has in communicating something *between persons*, gets lost in the theories of the photograph as either a visual copy or

195 Let's bear in mind that at this stage perspectival depiction and the rationalization of the visual field are already finished projects. Comte and his contemporaries already have a standardized model of the visual field to work with.

a trace of an external object, or as *the* standard for visual recording, the theory of knowledge in relation to images will produce misconceptions.

Fixing the Image – The Indexical Relation

> I shall go further. I shall fix permanently these fugitive images![196]
> L. J. M. Daguerre

> How charming it would be if it were possible to cause these natural images to imprint themselves durably and remain fixed upon the paper.[197]
>
> Fox Talbot

> This is not one of my recent results but dates from last spring; since then I have been diverted from my researches by other matters. I shall resume them today, now that the country is in full splendour, and shall devote myself exclusively to copying views from nature.[198]
>
> Nicéphore Niépce

196 Helmut and Alison Gernsheim, *L.J.M Daguerre – The History of the Diorama and the Daguerrotype* (Dover Publications Inc. 1968), p. 48. Daguerre, who is commonly conceived to be the inventor of photography (although this is a quite inaccurate statement), was claimed to have uttered these words after attending a public lecture by Professor Jacques Charles. Charles is said to have been able to make profile portraits on silver chloride paper. This was an early attempt on making photographs, however, Charles portraits were unfixed. Daguerre seemed to have understood that there was an immense importance in completing this technique by figuring out how these images, made by natural light, could be permanently fixed.

197 Quote from Fox Talbot's *The Pencil of Nature* as quoted in Helmut and Alison Gernsheim 1968, p. 49. Fox Talbot, Daguerre's main contender for the title of primary inventor of photography, expressed his ambition to capture the image inside the camera obscura in the year 1833.

198 Niépce as quoted in Helmut and Alison Gernsheim 1968, p. 56. If anyone can rightfully be titled the true inventor of photography, it should have to be Nicéphore Niépce. The quote above is taken from a letter addressed to Daguerre in 1827. The correspondence between Niépce and Daguerre is maybe one of the most important factors that led to the invention of photography.

The idea of *species* constituted an understanding of knowledge as a fixed index[199]. Through *species* we receive impressions that are natural signs, signs that communicate how nature is constituted. In this sense the signs are essentially natural because they are created by the processes and the powers of nature. The same kind of idea is present during the invention of photography. Photography is conceived to carry a trace of the natural object, to be, due to its emergence from natural light, an image authored by nature. This understanding is still at the core of many prominent theories on photography. André Bazin, Susan Sontag and Roland Barthes have all pointed toward the indexical nature of photography as the aspect that defines it and supposedly makes it unique compared to other forms of depiction. I think this is correct if we take this point as a description or an articulation of the idea that gave photography its significance during its early years. However, I want to show that this idea was ridden with problems from the start. It is one thing to talk about the photographic process as a natural optical process. Of course this is undisputable in the sense that the workings of light permit photography to exist. Without the natural camera obscura effect, there would be no photography. But when this process is used in order to produce pictures that show the perceiver something or other, it is already part of a conditioning or a cultivation of a certain natural process. Consider the quote above by Fox Talbot: "How charming it would be if it were possible to cause these natural images to imprint themselves durably and remain fixed upon the paper". Talbot's concern is primarily the process of photography, he wishes he could improve it so that the images would stay fixed on the photographic paper. But the wording in the quote also echoes of Lockean epistemology: "Would the pictures coming into such a dark room but stay there, and lie so orderly as to be found upon occasion, it would very much resemble the understanding of a man, in reference to all objects of sight, and the ideas

199 The concept of index and its relation to photography originates from the semiotics of Charles Sanders Peirce. It carries the same problematic tension as does the concept of *species*. Mary-Ann Doane writes: "The index, as defined by Charles Sanders Peirce, occupies an uncomfortable position in the complex taxonomy of signs he elaborated in the latter half of the nineteenth century. […] On the one hand, the term seems to specify signs on the order of the trace – the footprint, the death mask, the photograph (where the object leaves its imprint on a light-sensitive surface). This type of index partakes because the sign resembles the object. On the other hand, Peirce emphasizes that the shifter in language – a category including pronouns such as "this", "now", "I", "here" – is an exemplary form of the index. In this case, the index partakes of the symbolic. In both these instances, the index is defined by its physical, material connection to its object." Mary-Ann Doane, "Indexicality: Trace and Sign", in *Differences*, volume 18:1 (Duke University Press 2007), p. 2.

of them."[200] The key concept in this comparison is "natural image". Talbot talks of natural images, as if images existed prior to the photographic process. The process becomes then simply a task of capturing the already existing image. The ambivalence of this statement is interesting, since it wrongly alludes to the process as simply one of capturing the image. But images do not exist there in order to be *captured*, they come about through a process, i.e. there is no picture before it is brought about through a series of optical and chemical processes. To call this process *natural* is pure rhetoric. If we look at the efforts involved in producing what would be called the first photographs, they surely did not occur naturally. If nature does not consist of a fixed given order, then the index of nature will always be a construction, not a copy of something fixed and already existing, but an attempt to construct a framework for the understanding of the dynamic and temporal natural occurrences. It is this shift in epistemology that is evident in Comte's writings on positivism and it will have recoil on the way that photography was used.

There were two challenges involved in the venture of making images in the camera obscura. Firstly one had to figure out how to get light to inscribe or imprint, not only project, an image on a surface. This was achieved as early as 1802 by Tom Wedgewood who accomplished an early form of the photographic process by using silver nitrate on white paper or white leather. The light-sensitive quality of silver nitrate, the fact that its monochromatic color-tone is altered by light, was known throughout the 18th century. Wedgewood used this knowledge to make primitive photographs by using glass-paintings. He exposed photosensitive paper infused with silver nitrate to light, and obstructed the light by placing the painted glass pane between the photographic paper and the light-source.[201] The shadow of the obscuring painted glass left a trace on the paper. The other significant obstacle was to get the image to stay fixed permanently on the surface. The impact of Wedgewood's early primitive photographic experiments was very modest because of the ephemeral nature of the images. As soon as they were exposed to light they

200 John Locke, *An Essay Concerning Human Understanding*. Alexander Campbell Fraser (ed.) (Oxford University Press 1894), p. 211-212.

201 Geoffrey Batchen, *Burning With Desire – The Conception of Photography* (MIT press 1997), p. 27-28.

decayed and quite soon the trace of light was dissolved. This was the problem that Niépce, Daguerre and Talbot tackled three decades later.

Among the above quoted inventors of photography, Fox Talbot's first attempts on fixating an image projected by light on prepared light sensitive paper, were simply a process of placing objects on the paper so that they would leave an imprint on the surface, so called *photograms*.[202] In this sense, photography was first achieved through actual contact between the photosensitive surface and the object. Not unlike Wedgewood's early attempts, Talbot's first experiments consisted of placing a piece of lace on the photographic paper and exposing both lace and paper to light (**image 3.1**). The only significant difference between Talbot's and Wedgewood's processes was that Talbot was able to fix the image on the paper. Geoffrey Batchen describes this process: "The image is physically caused by, is even directly touched by, the thing to which it will subsequently refer. This indexical type of relationship gives photography much of its distinction as a compelling mode of representation".[203] As I have mentioned earlier, this idea of an indexical relation between image and nature had a far-reaching history within philosophy. Another factor that relates to the previous chapters is that the tactile, causal process of photography corresponds to the classical paradigmatic theory of sense-perception as primarily tactile. The tactile theory of perception was based on the assumption that touch or contact lacks the element of interpretation, it is not a "reading". This idea is articulated by Susan Sontag. According to her photography is: "not only an image (as a painting is an image), an interpretation of the real; it is also a trace, something directly stenciled off the real, like a footprint or a death mask"[204].

Talbot understood the photogram as a form of depiction that sidestepped the artist, it was a "picture which makes itself".[205] In this context it is highly interesting that the first attempts on photography were based on actual contact between the light sensitive surface and object. Later on, the need of actual contact was overcome by Niépce and Daguerre, and it became possible to make pictures of distant objects, but the idea of the tactile connection

202 Lorraine Daston and Peter Galison, *Objectivity* (Zone Books 2010), p. 128.

203 Geoffrey Batchen, *William Henry Fox Talbot* (Phaidon 2008), p. 13.

204 Susan Sontag "Image-World", as quoted in Peter Geimer in "Image as Trace: Speculations about an Undead Paradigm" ", *Differences*, volume 18:1 (Duke University Press 2007), p. 7.

205 Fox Talbot as quoted in Geoffrey Batchen 2008, p. 13.

of object and picture lived on as an analogy in the discourse on photography. It corresponds to what can be called an indexical relationship in which the sign is naturally caused by the object, an actual trace of the object. In this sense, new metaphors appear that refer to the classical idea of *species*. But the same discrepancy that was inherent for the classical theories of sense perception is apparent in the discourse on photography as trace. Vision is not primarily tactile, but an optical sense that requires distance. Neither vision nor photography could then rightfully be described by the metaphors of footprint, fingerprint or death mask since neither the eye, nor the photograph are actually touched by the object in nature.[206] The photogram, an image that actually is created by a tactile contact, could perhaps more rightfully be described as an indexical trace of the object, but we do not typically give photograms a specific epistemic value (perhaps because in this case the relation between the original and the copy is so obvious). Then the reason why photography received its specific epistemic status cannot be dependent on this issue. I will return to this point later, and show how the idea of photography as a tool for science actually depended on its ability to capture views that the eye could *not* see. It did not gain its epistemic value, because of its ability to copy what we see, but because of its ability to establish a picture of something unseen. In this sense, the idea of trace or index prevailed. Photography seemed to bring us views that were alien, and at the same time supposedly *natural*. Here a breach between what we *can see* and how nature supposedly *looks* starts to occur.

206 This point is made by Peter Geimer, "Image as Trace: Speculations about an Undead Paradigm", in *Differences*, volume 18:1 (Duke University Press 2007), p. 8-9.

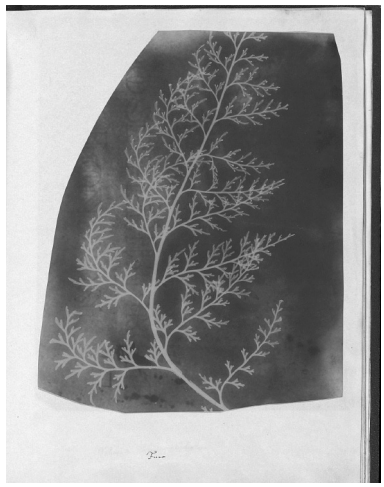

Image 3.1, William Henry Fox Talbot: *Wrack*, Photogenic drawing, 1839. [207]

In between the experiments of Wedgewood and Talbot, across the English Channel, two French scientists tried to complete the same technique of photographic depiction. In June 1827 Nicéphore Niépce was moderately successful in capturing the view from his studio window on a pewter plate coated with a light-sensitive bitumen solution, in a camera obscura. The result was a barely recognizable view of houses, rooftops and a tree against a horizon. (**image 3.2**) Niépce called his technique heliography, a concept that again refers to an inscription, a trace of light. This was a result of a long period of experimentation. Already in 1816, Niépce had made his first experiments with paper soaked in silver chloride.[208] During the same time another inventor and stage designer Louis Daguerre had made similar experiments. Daguerre and Niépce started a correspondence and eventually a partnership, but due to Niépce's death in 1833, Daguerre continued his work on his own. One important change that Daguerre made was to use iodized silver plates instead of the bitumen-coated

207 Image taken from <http://www.metmuseum.org/collection/the-collection-online/search/282756?rpp=30&pg=1&ft=Talbot+Fox&pos=3>

208 Geoffrey Batchen 2008, p. 33.

plates that Niépce had used. This reduced the exposure-time, from the eight hours that it took for Niépce's pewter plate to be exposed in 1827, to six minutes in 1839 (**image 3.3**).[209]

Image 3.2, Joseph Nicéphore Niépce, Oil-treated bitumen, 1826 or 1827[210]

Image 3.3, Louis Daguerre, *Boulevard du Temple*, Daguerreotype, 1838 or 1839[211]

209 Suren Lalvani, *Photography, Vision, and the Production of Modern Bodies* (State University of New York Press 1996), p. 15.

210 Image taken from <http://commons.wikimedia.org/wiki/File:Niepce_1826.jpg.>

211 Image taken from <http://commons.wikimedia.org/wiki/File:France_bulvar_1838-39_by_Daguerre_L.jpg>

Up to the point when Daguerre started to get close to completing the invention of photography, he had dedicated his work to perfecting different techniques of *trompe l'oeil* depiction. For him photography contained a greater goal. It was a way of bringing the techniques of realistic representation from the realm of art into the realm of science. The diorama, the camera obscura pictures and the perspectivist painting had served successfully as techniques of deceiving the human eye into perceiving the two dimensional surface, not as a surface, but as a window, or an opening. What the pioneers of photography actually wanted to achieve was something else. A very simple, but at the same time revolutionary feat: to fixate the images caused by natural light inside the camera obscura. Instead of making drawings or paintings that would *appear* to be views of nature, the pioneers wanted to make visual records of nature by the means of the workings of light. After perfecting the photographic process, Daguerre describes his (and Niépce's) invention not only as an image, but as a process that grants nature a way of reproducing herself. He writes: "the DAGUERROTYPE is not merely an instrument which serves to draw nature; on the contrary it is a chemical and physical process which gives her power to reproduce herself."[212] When uttering words like these, Daguerre must have had some understanding of their recoil on certain scientific ideals. But perhaps not an understanding of the inherent problem with this kind of metaphors. These kinds of expressions point at a way of transcending the image's fate of being *merely* an image, a manmade representation of nature. Even primitive recordings of natural light on metal plates or prepared light-sensitive papers, were considered to perform something completely different than realistic painting, engraving, linotype etc. This idea is also at the core of André Bazin's ontology of photography, he writes:

> The photographic image is the object itself, the object freed from the conditions of time and space that govern it. No matter how fuzzy, distorted, or discoloured, no matter how lacking in documentary value the image may be, it shares, by virtue of the very process of its becoming, the being of the model of which it is the reproduction; It *is* the model.[213]

212 Louis Jacques Mandé Daguerre in *Classical Essays on Photography*, edited by Alan Trachtenberg (Leete's Island Books 1980), p. 13.

213 André Bazin 1997, p. 14.There is an ongoing discussion about how this passage should be interpreted. One thing that complicates this issue is variations in different translations. For a discussion on this see Tom Gunning 2007, p. 32 and n. 4.

Bazin takes this idea of an image transcending its status as image to its extreme. But, as I said earlier, the description is not all that far of the mark as a description of the attitudes that the inventors of photography actually had. Right from the start, photography gains a reputation as *the* realistic medium, before others.

As in the case of perspectivist painting coinciding with the new direction within natural philosophy, the photographic apparatus similarly shared its place in history with the new direction of positivist philosophy. As a consequence of its professed dissociation from metaphysics, the scientific attitude of the 1830's paid attention to describing the visual, instead of advancing interpretations. Scientists influenced by positivism believed they needed pure records of the visual to sidestep human judgment, earlier theories and subjective interpretations. The automatic and mechanized way of depicting was seen as the preferred method for scientific ordering and classification. This practice was not solely connected to photography. It came about in connection with earlier methods of depiction, such as tracing and wood-engraving. As Lorraine Daston and Peter Galison point out, while photography did not give rise to the new classificatory epistemology of science, it did fit the needs of this approach. In this way photography and positivism should be seen as two separate developments with strong ties.[214] Daston and Galison proceed to define three reasons for why photography fit the preconditions of objectivist science. Firstly, the reproducibility of the photograph, the possibility of making identical copies of pictures, fit a standardization of the ways of observing. Secondly, the machine was considered to be more attentive, more honest than the human agent. The camera was conceived to be a superior observer in comparison to the easily distracted human eye. And thirdly, the machine seemed to offer an image uncontaminated by interpretation, a picture with an indexical relation to the natural world.[215]

However, the originators of the many inventions required to complete the technique of photography were not exclusively influenced by positivism. The photograph and its way of capturing nature by the means of the workings of natural light also corresponded with romantic sensibilities. As early as 1840, the Finnish landscape painter Magnus von Wright

214 Lorraine Daston and Peter Galison 2010, p. 138.
215 Ibid., p. 139.

noted in his diary his amazement, after he for the first time saw a daguerreotype of a view in Paris, exhibited in a gallery in Helsinki. He writes: "this was thus a copy made by nature of itself"[216]. What this example reveals is the rapid speed with which the photograph was spread, even to the peripheral town of Helsinki, then the Western fringe of the Russian empire. It was only in the summer of 1839 that Daguerre had made his invention public and during this time the first exhibitions of daguerrotypes were held in Paris.[217] Furthermore it also exemplifies how the rhetoric that was connected to photography followed with the invention. The utterance "a copy made by nature of itself", when it is picked apart, seems to refer to two quite different ideas. In one sense it means an image, the actual photograph, conceived as a natural sign, a trace of nature. But it also refers to the actual process, nature's ability to create images of herself, by herself.

From Trace to Encyclopedic Order

As I mentioned earlier, the idea of photography as a tool for science actually depended on its ability to capture views that the eye could not see. Photography seemed to bring us views that were alien, and at the same time supposedly *natural*. The gap between what we *can see* and how nature supposedly *looks* seemed to indicate that the natural world is not properly accessible through sense perception. To articulate this point I want to bring in another thread in the history of photography from the later half of the 19th century, in which photography is established as a common tool in scientific experiments.

Beside the obstacles of successfully fixating the projection of light upon the photographic paper there was one more issue that could be described as fixing the image in time. The qualities of the film and the shutter-speed determined what could be photographed. Photography of moving objects required faster exposure-times and faster shutters. Therefore speed and temporality entailed another obstacle for the technology of the camera and film. The early

216 My translation, Magnus von Wright, *Konstnärsbröderna von Wrights dagböcker 2, Magnus von Wright, Dagbok 1835-1840*. (Svenska litteratursällskapet i Finland 1997), p. 428.

217 Helmut and Alison Gernsheim 1968, p. 95-96.

photographs required very long exposure. From the 1860's onward there occurred a rapid progress in perfecting faster, more light-sensitive film and faster shutters for cameras. This made photography of moving objects possible. Donald Evans points out how the technology of high speed photography also brought something new into our visual realm. He writes: "Figures were now frozen by the camera in apparently inconceivable positions quite alien to our customary manner of seeing with the naked eye."[218] High speed photography was able to present us views that could not be seen by the human eye. It indicated that the instantaneous snapshot of the world, the ideal of Locke, when finally realized in high-speed photography, actually looked nothing like our subjective psychological visual realm. It also meant that the "machinic speeds"[219] that high speed shutters together with high speed film could achieve showed how temporality, the freezing of a moment by limiting the recording of light during different intervals, played a part in how things look. This was a factor that the Lockean visual theory had completely ignored. Time and temporality cannot, without friction, be represented in an image. A snapshot, how it looks and what it reveals, is dependent on the exposure time in relation to the quality of film, lenses, the apparatus and the development process, printing, etc. In other words, there is no given standard for how things look: also photography is a result of processes of standardization, which are in turn dependent on the different particular requirements made by different uses of depiction.

If the emphasis is put on how our psychological subjective vision actually works it seems apparent that with the advent of high-speed photography, the Lockean static camera obscura model of perception had played out its role. The snapshot captures the kinds of views the camera obscura model *should* offer, and when what it offers is revealed to look nothing like continuous, dynamic, temporal subjective vision, the model evidently reveals its shortcomings. But another aspect of the new technology that still kept an inkling of the original empiricist notions alive was the fact that the mechanical process of the camera granted, in some cases, views that revealed facts about natural phenomena not perceivable by the naked human eye. On this level, the alien images given by high-speed photography

218 Donald Evans 1978, p. 229.

219 Jonathan Crary, *Suspension of Perception – Attention, Spectacle, and Modern Culture* (MIT Press 2001), p. 142.

seemed to correlate with the earlier epistemological doctrine of the Enlightenment that claimed that the subjects' involvement in vision thwarted pure perception. This view was supported by the epistemological status that photography had achieved through its supposed indexical relation to the objective world. This mismatch between photography as a visual index of the external objective world and our psychological way of seeing the world complicated things further. Or, more correctly, the misguided interpretation of this as a *mismatch* kept the troublesome theory of a non-anthropomorphic view afloat. In this context, high-speed photography seemed fit to serve as a model for the neutral, unbiased, and objective view upon nature, or even *the* view of nature. But again, what is forgotten is the fact that in order for the photograph to tell us anything it had to be viewed by someone. Only through somebody seeing it, can it reveal anything about nature; the photograph becomes true through a subject.

One of the key figures in this development was the French physiologist, engineer, and inventor Étienne-Jules Marey, also known as one of the inventors of cinematography. His interest in high speed photography and chronophotography, the assembly of photographs into one single representation of the different sequences in movement, derived from his interest in medicine, physiology and the natural sciences as a whole. In the spirit of Comte, Marey saw the history of science as deterministic progress. In 1866 Marey wrote:

> Science has two obstacles that block its advance […] first the defective capacity of our senses for discovering truths, and then the insufficiency of language for expressing and transmitting those we have acquired. The aim of scientific methods is to remove these obstacles.[220]

Marey was occupied with what Marta Braun describes as the ephemeral: "the lawlike relations between observable magnitudes that cannot be experienced through the senses but are established by observation and experimentation"[221]. If these statements are to be

220 E. J. Marey as quoted in Marta Braun, *Picturing Time – The Work of Etienne-Jules Marey (1830-1904)*, (The University of Chicago Press 1992), p. 12-13.

221 Marta Braun 1992, p. 13.

taken at face value they disqualify both sense perception and human language as bases for our knowledge. Instead Marey, like Comte, believes in scientific methods, observation and experimentation as the paths to true knowledge. But the very obvious conceptual problem here is that there cannot be observation without sense-perception. This paradox is again a result of a confused epistemological theory, but to show at least how Marey could come to such a conclusion I want to bring up some examples of his work.

Marey believed in a special kind of universality. When the basic natural laws were established by science, he assumed that the same patterns can be detected in widely different phenomena. This meant a thoroughly mechanistic world view in which physiology is based on the same principles as physics and chemistry. Earlier views in which the human body was conceived as a static machine driven by a metaphysical vital force was now overtaken by a doctrine that held that bodies, animate as well as inanimate, were inhabited by energy governed by the laws of electricity, light and heat.[222] The old philosophical debate concerning the categorical difference between animate and inanimate bodies was in this way surmounted. For this scientific doctrine, the movement of a body, organic or inorganic, dead or alive, was governed by the same principles of energy. The reduction of the psychological into the physiological that the likes of Comte and in particular, Francis Galton advocated, was highly influential for Marey's experiments.

One of Marey's key interests was the study of movement. Movement, because he believed it to be an expression of energy; and energy was linked to the pivotal principle of 19th century science – the first law of thermodynamics – stating that energy never vanishes but simply changes form. This was a natural law that seemed to determine the whole of nature. The appeal that Marey found in the study of movement was based on movements' dependence on energy. While we can see movement, we cannot see the energy that makes things move. By visual observation, recording and mathematical translation, Marey thought he could extract facts about energy. Something invisible was believed to become graspable by this translation.[223] In this sense, visual recordings of movement were

222 Marta Braun 1992, p. 14.

223 Ibid., p. 13-15.

translated into mathematical and quantifiable data. In the spirit of Bacon and Kepler, Marey searched for visual aids to interpret nature. In this case the visual aids were not there to aid sense perception, like the telescope or the microscope, but instead they made the translation of phenomena into mathematical axioms possible. In other words, this was not a case of "seeing better". It was a case of using machines, graphs and measuring equipment as aids for translating the visual into a formal language of mathematics, i.e. to translate something visual to something non-visual. The point of these observations was not to produce static images or pictures. Rather it was the assemblage of data that was derived from different mechanic recording machines, the recording process and the scientific method, that became the go-between between mind and matter.

Marey's first inventions were quite simple devices, like his first graphic instrument the sphygmograph. It was a pulse writer that was applied to the wrist, like a wristwatch. It consisted of a lever that was resting on the pulse point on the wrist and connected to a stylus. In addition there was a clockwork mechanism that moved a paper blackened by smoke, under the stylus. The apparatus produced a drawn graph that correlated with the rate and regularity of the heart's pulse (**image 3.4)**. What made this tool extremely important and successful for cardiology was its recording capacity. The process of measuring the heart beat had earlier been dependent on the touch of the physicist. The physicist felt the pulse of his patient by touching the pulse point on the wrist with his fingers and then calculating the rate by looking at a watch. The sphygmograf sidestepped all dependence on direct sense perception. It made possible a translation of the information to permanent, graphic representations that could be viewed by one or several scientists at the same time. These records could be compared to other records of the same standard. In this way the invention, quite modest at first glance, had a wide applicability. Furthermore, it fit the ideals of a doctrine that saw objectifying of an earlier subjective sensuous form of observation as its task.[224]

224 Marta Braun 1992, p. 18-19.

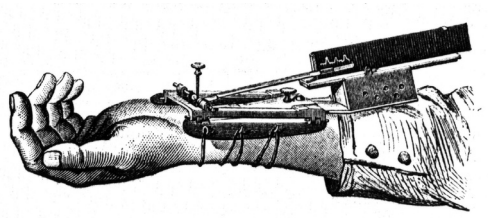

Image 3.4, Marey's sphygmograph[225]

Another, perhaps more eccentric, interest of Marey's was the study of the movement of the wings of birds and insects. His motivation for these kinds of studies was his belief that, if one could understand the muscles, motions, and aerodynamics of the wings of a flying animal, perhaps this information would amount to an understanding of how to reproduce this mechanically. The study of flight was aimed at "making visible the mysteries of nature" so that perhaps "humans could imitate and reproduce them"[226].

A detail worth mentioning is that Marey, although he probably caused some amount of stress to the animals in his experiments, was opposed to vivisection. This was not only a moral concern, it also constituted a difference in methodological approach. Marey held that the dissection and study of dead matter fundamentally altered the observed phenomena. For him vivisection only revealed the static perceivable facts that were already available for human perception.[227] In the same way, but for different reasons than the earlier naturalists, Marey understood subjective human vision as presenting science with mere appearances, whereas the objective recording method gave us facts.[228] The facts, in the sense that Marey talks about them, are not "given" in perception. They stem from the systematic form of representation that the automatic recording machines are conditioned to establish.

Based on these kinds of experiment Marey moved on to using the camera to record data. He continued his work on recording the movement of birds and other animals by

225 Image taken from <http://commons.wikimedia.org/wiki/File:Marey_Sphygmograph.jpg>

226 Marta Braun 1992, p. 35.

227 Ibid., p. 38.

228 Ibid., p. 30.

photographing the different sequences in the movement of bodies with high-speed cameras. Initially it was not the prospect of getting access to the visual *per se* that attracted Marey towards photography. On the contrary, he had worked under the assumption that sense perception somehow had to be sidestepped in order for the scientist to get in touch with the true fabric of nature. In this sense the epistemic status of the visual world was ambiguous for Marey. But when the high-speed camera offered another, alien, but yet visual world, it corresponded to his scientific doctrine that was skeptical towards the senses. From being conceived to be an image of nature, photography, the way in which Marey used it, became a recording device that helped translate natural phenomena into quantifiable, standardized data. Here the photograph is not indexical in the sense that it was before. It is not a trace of nature, a natural sign. It is part of a man made index, a standardized way of presenting data. Here the meaning of 'index' has shifted. From signifying a natural trace, it has become an archive of systematized data, an encyclopedic, man-made world order.

Recording Life

One example that became paramount for the supposed mismatch between subjective vision and scientific objective observation derived from Eadweard Muybridge and Marey's experiments with photographic recording of the movement of the legs of horses during the 1870's. In a letter to the editor of *La Nature*, Gaston Tissandier, Marey expresses his hopes for what the photographic image can bring to the natural sciences. He writes:

> And then what beautiful zoetropes he will be able to give us: in them we will see all imaginable animals in their true paces, it will be animated zoology. As for artists, it is a revolution, since they will be provided with the true attitudes of movement, those positions of the body in unstable balance for which no model can *pose*. You see, my dear friend, my enthusiasm is boundless.[229]

229 E. J. Marey as quoted in Marta Braun 1992, p. 47.

In this letter Marey refers to the artist and inventor Eadweard Muybridge who, like Marey, was a pioneer of experiments of photographing moving objects. They had similar goals but slightly different techniques. They both attempted to record movement, which also required that they figure out how to represent temporality in photographic pictures. Muybridge solved this by making series of photographs that captured different sequences of the movement of a horse. The result was then a series of different pictures where each picture was a frozen moment in the sequel of a horse in gallop (**image 3.5**).[230] Marey established another technique in which the moments were captured on one photographic negative, so the same negative had several exposures with the different sequences of the movement of the galloping horse (**image 3.6**).[231] The extraordinary thing that Muybridge's horse images revealed was that they discredited earlier conventions within painting. In naturalistic paintings a horse in gallop was usually depicted differently compared to Muybridge's photographs. The differences were quite minute details concerned with the postures of the legs in gallop.

However this became a big issue due to the supposed epistemic superiority of photography that these kinds of examples seemed to reveal. Muybridge writes: "So it is with the galloping horse; we have become so accustomed to see it in art that it has imperceptibly dominated our understanding, and we think the *representation to be unimpeachable*, until we throw all our preconceived impressions on one side, and seek *the truth by independent observation from nature herself*."[232] In this case the horse image seems to indicate that there actually exists a visual realm that is alien to our anthropomorphic understanding of it.

230 Marta Braun 1992, p. 52. This procedure is described in 1881 in the Paris based newspaper *Le Globe* (quoted in Braun 1992), as follows: "[...] Before this arrangement of apparatus ranged along like canons, 24 in number, the animal passes along on a track, beyond which is a white wall which furnishes an appropriate background for the photography. At each step, the animal breaks a thread, which brings an instrument into play, so that at each stage of its passage no matter how rapid, there remains to us an image.
231 Mary Ann Doane, *The Emergence of Cinematic Time, Modernity, Contingency, the Archive* (Harvard University Press 2002), p.49.
232 (Emphasis by Muybridge) Muybridge as quoted in Donald Evans 1978, p. 230.

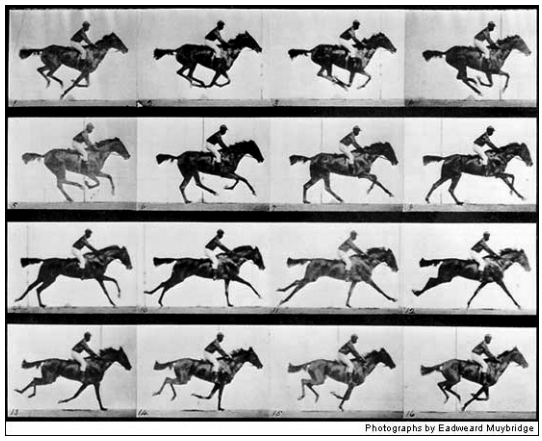

Image 3.5, Eadweard Muybridge, *The Horse in Motion*, Chronophotography, 1878[233]

Image 3.6, Étienne-Jules Marey, *Arab Horse Gallup*, Gelatin silver print, 1887 [234]

Another more refined example that evoked the idea of the photographs superiority in relation to painting and other forms of depiction, was Ernst Mach's[235] 1880's photograph of a bullet in flight (**image 3.7**). The image not only shows the bullet frozen in time, it also

233 Image taken from <http://commons.wikimedia.org/wiki/File:The_Horse_in_Motion.jpg>

234 Image taken from <http://commons.wikimedia.org/wiki/File:%C3%89tienne-Jules_Marey_-_Arab_Horse_Gallup_-_Google_Art_Project.jpg?uselang=en-gb>

235 To be precise the original photographic plates where taken by Mach's collaborator Peter Salcher. Christoph Hoffmann, "Representing Difference: Ernst Mach and Peter Salcher's Ballistic-photographic Experiments", *Endeavour*, volume 33, No. 1, 2009, p. 18.

reveals that at such speeds (supersonic speed of 520 meters per second)[236] the bullet will cause shockwaves in front of it. Mach's picture seems to show that the physical world is unfamiliar to us, and that the go-between of photography will introduce us to this alien world of natural phenomena.[237]

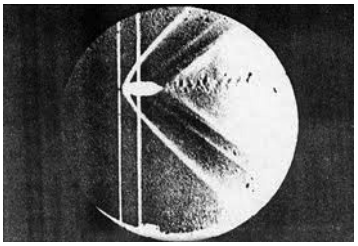

Image 3.7, Ernst Mach, *Photography of bow shock waves around a brass bullet*, Schlieren photography, 1888[238]

Now one could think that perhaps photography eradicates all ways of looking at things, that it shows how something looks *despite our ways of seeing*, that the shockwaves are in the picture, not because conventions of representation, pre-conceptions or earlier knowledge would require them to be there, but because photography *records* natural phenomena. It is something like this that Mach's, Muybridge's and Marey's photographs seem to tell us. And this assumption is what makes photography the superior methodology of the times. But suppose we turn around the question and ask: 'Why does Mach's bullet image reveal the shockwave?' It is not enough to say that it does so because it is a photograph, because not any photograph would reveal this. If we examine the process behind the bullet-photograph closely the role of the record becomes clearer. Mach did not discover shock-waves solely because of this photograph. The important fact that often is forgotten when one points at this case as an argument for the objective role of photography is that Mach, during the time

236 Jonathan Crary 2001, p. 144

237 Ibid., 142.

238 Image taken from <http://commons.wikimedia.org/wiki/File:Supersonic_Bullet.jpg>

of the shot, was not clear about if what he saw in the picture, was what he had expected. The image, by itself, had a very vague epistemological status. Later on it became an illustration of, and even the proof for sound-waves, but at the moment of the shot and for some time after that, it was an enigmatic image for Mach. Christoph Hoffman writes:

> But the reproductions buried in the Mach archive, although just 9 mm in diameter, do make one thing abundantly clear. So dark, hazy and abstract are these miniature images that there is no simple way they could have led Mach to his 'expected result'.
>
> In addition, the text of Mach's notice provide further evidence that he did not yet fully understand the phenomena captured in the photographs. For according to the title of his message, it is clear he thought he had photographed a 'mass of air' but by the time it came to the formal publication in 1887, Mach and Salcher wrote not of 'mass of air' but of 'kind of stationary sound wave' or a 'stationary flow of air.
> […] Initially, Mach was not even able to distinguish between the top and the bottom of the photographs because he knew neither the position of the plates in the camera nor the bullet's orientation.[239]

Evidently the photograph did not primarily have an epistemic role in Mach's research, but it did grant a certain advantage, since: "photography allowed the phenomena in question to be recorded."[240] It was the "persistence of impression"[241] in photography that was of importance, photography's capability of fixing an ephemeral moment, under highly specialized experimental circumstances, and, photography's proficiency for the standardization of visual information. Hoffmann continues: "the photographically fixed image of air around the travelling bullet could be studied while the observer was at rest. Moreover, several images could be easily compared to each other. […] In this way, it was possible to achieve a stable setup, stable production of the phenomena and stable examination of the photograph."[242]

239 Christoph Hoffmann 2009, p. 18, 20.

240 Ibid.,p. 18.

241 Ibid.

242 Christoph Hoffmann 2009, p. 19.

For Mach it was this photograph, among a set of other photographs from the same experiment that was able to capture the shockwave, due to specific experimental and technological circumstances; just any photograph or camera would not have performed the task. In this way, we cannot say that this photograph would eradicate all ways of seeing, since it is conditioned in a certain way and this conditioning enabled the capturing of the shockwaves on a photographic plate. This observation was not possible because of the absence of a human way of seeing, but because of a conditioning and a cultivation of a certain human way of fixating, standardizing and rationalizing the practice of visual recording. This conditioning presupposes assumptions, theories and knowledge of the phenomena beforehand. This does not mean that the photograph always gives us an image that is preconceived. Through a certain use of photography the phenomena can reveal other visual qualities than those that were expected. This possibility gives the record an advantage. Here it is important to understand the reciprocity at play. In order for nature to reveal its secrets, *our* ways of seeing have to be conditioned to do so.

Here the correct emphasis is crucial: the photograph does not eradicate all ways of seeing, but prioritizes or allows us to focus on *a* way of seeing. The important point here is to articulate what the photograph actually does in this context. My claim is that it simply does what images usually do: it cultivates *a way* of seeing. It stresses a certain aspect more significantly than others. It is true that, in this example, the visual information on record corresponds to a fact. The image does not create the shock-wave, the wave is there regardless of the representation. The shockwave is then a part of nature, not something added on to nature in the process of producing the photograph. But in order to get the camera to record this phenomenon, the technological/chemical process has to be carefully manipulated to do so.

On the epistemological level we have to agree that shockwaves exist and horse-legs are jackknifed in the way that high-speed photographs indicate, whether we see this or not with our bare eyes. But this does not prove the ambiguity of the epistemological status of subjective vision, since these photographs do not contradict what I or anybody else actually can see. What they contradict is not the visual data of subjective vision, but earlier conceptions, theories and knowledge. The fact that we cannot discern bullets in flight or shockwaves with our eyes, if it is considered to be a shortcoming, is not an epistemic shortcoming. What would

make it an *epistemic* shortcoming, a deficiency in our knowledge, is if these photographs contradict or change our previous understanding of things. In this case the contradiction does not stand between subjective vision and objective visual data, but between Mach's, and previous scientists, preconceptions and what the visual data reveals. *What it reveals*, is in this case not simply a copy of the exterior phenomena – shockwaves – since a mere copy would not reveal anything. As Donald Evans points out: "However accurate the copy it is only understood if what it is a copy of is itself understood"[243]. In this way the record cannot and should not help us surpass our subjective actions of interpretation, reading, judgement and attention. On the contrary, the record requires a subject that can interpret it, since it does not by itself show what place it occupies in the visual world. In the Mach case the specific photograph was a result of a comparison between a whole array of pictures: "It was not a single spectacular picture that – simply by looking at it – provided the central insight, but rather the laborious process of discerning and comparing minutes from about 70 or 80 very tiny recorded images."[244]

When we look into the meaning of phenomena, we ask questions that go beyond the dichotomy of truth and falsity. Only when there is a tension between, as in this case, what the photograph reveals and what Mach earlier had seen in other representations, the question concerning truth and falsity, reality and appearance will arise. Truths or the need to assess what is true and false rise from tensions. If we interpret the examples of Mach's bullet-photograph and Muybridge's horse photographs in the generic empiricist way, the examples indicate that the tension resides between the subject and the object. But the tension can only constitute a tension *within* a subject or a community of subjects. For something to be knowledge is for it to be included in a realm of questions and answers about reality. As long as the fact that horse-legs are jackknifed in a certain way under the horse in gallop, or the fact that projectiles with a supersonic velocity produce shockwaves, are not brought into our human realm of knowledge they cannot constitute any knowledge. It is only when these facts are brought into our system of knowledge by our attention, into the world as we know it, that they *become* truths. Truths

243 Donald Evans 1978, p. 220.

244 Christoph Hoffmann 2009, p. 18.

are related to the *questions* we pose to the world, not copies of a world as it exists by itself. *In this sense* representations or even visual records are never neutral. It is not the neutrality or objectivity of Mach's bullet photograph that makes it significant, but its function as evidence in relation to one understanding of hydrodynamics as opposed to another (understanding of hydrodynamics). The facts are then facts because of their relation to an understanding, or as Nietzsche would have it "It is only *through* thought that there is *untruth*."[245]

Conclusion: Cultivation of the Visual Field

In this chapter I have dealt with two pivotal ideas concerning the concept of photography. The first one is the idea of the photograph as trace, the idea of an image as a natural sign. The second one is the idea of photography as a tool in the assemblage of data or photography as *the natural* standard for visual recording in the venture of erecting a scientific encyclopedic world order. My worry with both these understandings is that they, in a problematic way, point towards nature as a force that constitutes the visible world, beyond or without the attention, judgement and experience of the perceiving subject. In this sense they share the problems of the camera obscura model for perception. Jonathan Crary notes how the analogy between the camera obscura and the eye is finally and devastatingly confronted by Kant's Copernican revolution within epistemology. He quotes Kant: "our representations of things, as they are given, does not conform to these things as they are in themselves, but that these objects as appearances conform to our mode of representation."[246] The image is in this Kantian sense not a copy that reproduces the qualities of the outer object. Rather the image brings the natural into an anthropomorphic order. It is hard to articulate this point, because Kant's formulation of it is not unproblematic, but at least it disqualifies rigorously all attempts to make sense of representations as "copies made by nature" or processes that give nature the power "to reproduce herself".

245 Friedrich Nietzsche In Ruth F. Chadwick (ed.)1992 ,volume 1, p. 87.

246 Immanuel Kant as quoted in Jonathan Crary 1992, p. 69-70.

What I want to articulate with the help of Crary's analysis is not primarily a historical point, but more accurately a point about the paradox at hand. The idea of photography as index (and in this context 'index' refers both to the concept of natural sign and to the concept of the natural encyclopedic order) stands in contrast to the idea of photography as a *process* that translates the dynamic temporal phenomena of nature into an anthropomorphic order, into a system of signs. On the first understanding, the photograph is a copy of the visual field, an index, or even a tactile trace. In the second case, it is reorganization of the visual world into, not a copy, but *a cultivation of the visual field*. The latter meaning recognizes the inevitable status of the image. In the image, nature is brought into culture: attention and judgment are focused on certain aspects of reality. The idea that photography, as opposed to other images, has a special indexical power to reproduce the visual world is at the core of the problem. Since images and, along with them, photographs do not copy ready-made views of nature, but rather construct these views, these views do not exist before they become photographs or paintings, engravings, films etc. It is not nature, but the human mind and attention, the human eye and the human hand that gives images this power.

To make this point clearer let us consider a thought experiment that is presented in Oscar Wilde's essay *The Decay of Lying*. In a polemical remark, Wilde writes about impressionist painting:

> Where, if not from the impressionists, do we get those wonderful brown fogs that come creeping down our streets, blurring the gas-lamps and changing the houses into monstrous shadows? […] Things are because we see them, and what we see, and how we see it, depends on the Arts that have influenced us. To look at a thing is very different from seeing a thing. […] There may have been fogs for centuries in London. I dare say there were. But no one saw them, and so we do not know anything about them. They did not exist till Art had invented them.[247]

247 Oscar Wilde, *The Writings of Oscar Wilde* edited by Isobel Murray (Oxford University Press 1989), p. 232-233.

This can be read as the antithesis of the idea the natural sign. If we, for a moment, sidestep the obvious consciously embraced paradox in Wilde's quote – the fact that he refers to art as a way of creating natural phenomena – there is still something that rings true in this idea of how art influences our ways of seeing. The impressionist turn in painting meant the cultivation of attention on the qualities of light. The impressionists tried to paint the qualities of light in a more accurate way than the academic painters of the time had done. We could, without a stretch, call this practice a *recording* of light. Not that light would inscribe itself on the canvas like it does in photography. In this case, "recording" does not refer to mechanical process, but to heightened awareness of, or concentrated attention to, certain aspects of the visual field. It brings out the meaning of recording as a task. Not as the indexical copying of appearances in the world, but as a cultivation of the visual. What the Oscar Wilde quote highlights is that this way of cultivating some aspects of the visual field revealed things that had slipped from the earlier painters' attention. The point is not whether the late 19th century city dwellers actually had seen fog or not. It is not an factual question of whether the fog was there or not. The point is to articulate how the visual is, by necessity, entwined with our attention, on what is articulated, foregrounded and forgotten in our visual field. Of how depiction and its conventions are a cultivation of different ways of attending to the visual world.

If some form of depiction actually were to 'stand closer to nature' than others, in an absolute sense, it would require there to exist a given image *in* nature. When we admit that this is not the case, we also admit that there is no given *natural* standard for depiction. All forms of depiction stand at the same starting line. Here it is also important to add that different forms of depiction may stand close to nature in different ways. In a certain context we can acknowledge that photography indeed is closer to nature than painting, since it stems from an automatic process. In another context the black and white photographs of the 19th century did not tell us much about colours in nature. So, if the right colour was taken to be a criterion for realism, photographs had no naturalistic merit at all. In this context, we can say that impressionist painting stood closer to nature, as the impressionists worked out a superior technique in order to capture the temporality of light. When we admit that there is no given standard, no absolute likeness, but rather different preconceived ideas of what it is for an image to be a good likeness, we also admit that there can be no form of depiction that stands

out as a pure record among mere images. As my colleague Hugo Strandberg has articulated this point: "The problem is not that one takes one perspective as foundational and not the other; the problem is to believe that there is a foundational perspective."[248]

In order to find an alternative way of understanding these questions, I propose a slightly different interpretation of the concept of visual record. The fact that the photograph evokes ideas of a natural sign can also be connected to the way in which it feeds on our desire to see reality with uncontaminated, innocent eyes. One expression of this desire can be found in Bazin's thoughts on photography. Bazin writes:

> Only the impassive lens, stripping its object of all those ways of seeing it, those piled-up preconceptions, that spiritual dust and grime with which my eyes have covered it, is able to present it in all its virginal purity to my attention and consequently to my love. By the power of photography, the natural image of a world that we neither know nor can see, nature at last does more than imitate art: she imitates the artist.[249]

Here Bazin, if we read him correctly, makes a very important statement. Photography evokes in him an experience of seeing something for the first time, without any of his knowledge, preconceptions and psychological baggage. Now we cannot deprive Bazin, or anybody else of having this kind of relationship with photography. This is a role that photography sometimes has within a culture. But the simple reason for this is that we have *given* photography this role. It does not carry this role by itself. The actual appeal of the scientific view is then perhaps not scientific at all, but rather existential: a need to transcend dogmatism, opinions, judgement, in order to reawaken us to an interest in the world of perception. When the actual world starts to appear thoroughly conditioned and designed by human mind and human hand, perhaps a need to reestablish a kind of wonder towards the objects in the world is

248 Hugo Strandberg, *On "The Freedom of Will"* (Unpublished). This working paper was presented at the research seminar at the Department of Philosophy, Åbo Akademi University, 12 of September 2011.

249 André Bazin, *What is Cinema?* (University of California Press 1997), p. 15.

awakened. Stanley Cavell describes this as an attempt to: "free the object from me, to give new ground for its *autonomy*".[250] I think this is a sensible understanding of the context in which the concept of record can find its home. In this sense the record, be it a painting, an engraving or a photograph, has a distinct place within the world of images, since it signifies an external view.

What can we then say about the meaning of the concept of visual record? What is present in the views that I have scrutinized in this chapter as well as the former chapters is a certain need to establish an external view on nature and the human being. Due to its alien appeal, high speed photography grants a view that fits the characteristics of a non-human, external view upon nature and man. This externality should not be confused with something beyond the human. On the contrary it is at the core of the existential, very human desire to understand the world beyond what we have made of it. It stands for the hope of an understanding beyond a fixed and indexical order. I think it is something like this that Bazin and the early inventors of photography find attractive in the new medium. But this should be understood exactly as a countercurrent to the rationalization and standardization, the encyclopedic ordering of the world that gave momentum to the invention of photography.

250 Stanley Cavell, *The World Viewed* (Harvard University Press 1979), p. 108.

PART II:
Towards a Common Sense

Introduction to Part II

One realization that has pushed me to write this thesis is born out of occasions when rationality and objectivity, some of the most basic concepts of Western philosophy, stand in the way for our understanding of the world. It is this voice of reason that sometimes becomes monolithic, it leaves out emotion, engagement and adversity, and therefore everything that is important for an understanding. This monolithic voice also drowns all other voices, all conflicting views, and alternative interpretations. It is this comfortable detachment provided by rationality that makes it such an attractive attribute. What I have described in the first part of this thesis is an evolution in which the concept of image was developed into a tool for this kind of rationality, due to the distance and detachment that the image presumably grants the viewer. This was done due to the belief that our passions, our subjective experience and the conflicting voices of different ideologies and sentimentalities stand in the way of an objective, visual and rational understanding of the world. The image and especially the photograph were designed to become carriers of a rational monolithic voice, through a long development in science, philosophy and arts.

In the second part I will continue to show how this rationalization and the ideal of objectivity, obscures our understanding of how images work and of our relationship with reality. The realistic image carries a power to make something present for me[251] and because of this ability it is also able to show me a world that is not known to me, that is beyond my preconceptions and expectations. Here I am faced with the uncanny status of the image. How is it able to make something present for me? The answer that I will outline to this question is that it does so through aligning my views with the views of other people. The realistic image is able to engage me in a negotiation concerning what my relation to this world actually is. In this sense it does not only make objects in the world present for me it reengages me, it makes me more present in this world.

As I have shown, by the end of the 19th century it was evident that the notion of visual record contained an inherent tension. On the one hand, the visual record was a building

251 Stanley Cavell, *The World Viewed* (Harvard University Press 1979), p. 20.

block in the rationalization of the visual field, the compartmentalization of the world into an encyclopedic indexical visual order. The meaning of the index was to fix knowledge. It stood as an answer book for supposedly all things and all phenomena in order to ensure that we see and know the same thing when we observe them. This aspect of the visual record was related to the domestication of the natural world that the ideas of the Enlightenment entailed. On the other hand, the visual record was a concept that pointed away from the conditioned and readily interpreted visual world toward the ephemeral nature as it exists within itself. This idea of the unconditioned natural world was another consequence of the Enlightenment. This problematic dialectic between the rationalized visual order and an image beyond human conditioning will play various roles in the following chapters. I will continue by focusing on the concepts of visual record, photography, film and the documentary. And I will continue to show how this tension between a rationalized anthropomorphic visual order and an ephemeral and contingent natural world, created by the idea of an image as a neutral record, will reveal itself in discourses on the documentary image and realism, from the beginning of the 20th century to the present. However, I will not continue with a genealogical approach. The reason for dividing this thesis into two parts is for me to be able to change gear.

In the following chapters I will concentrate on contemporary questions concerning the philosophy of the documentary image, vision, knowledge, the self and *the other*. I will continue with the conceptual analysis that I started in part One, but from now on the focus is not on chronology or history of ideas, but on the dynamics and the interactions of the concepts in our contemporary understanding. I am not aiming for a comprehensive theory on documentary images, because I do not treat the documentary as a formal or epistemological category, but an attitude, a way of behaving in the world and attending to the world. In asking philosophical questions concerning the actions involved in seeing, depicting and viewing images, I position the discussion concerning the documentary in a context of moral philosophy. I claim that the tension between a rationalized and predetermined visual order and an ephemeral and unconditioned natural world is something that is required for our knowledge of the world. It is not a paradoxical relation, but a necessary dynamic in the process of knowledge. In extension this process of knowledge is

dependent on other dynamics between thought and perception, rationality and attention, and most importantly, between my views and another person's views.

The aim of this change of perspective is to reorganize the playing field. It is easy to claim that I hope to liberate the concepts of knowledge, vision, image, self and other, from the clutches of the dialectics between empiricism and rationalism, since it is quite easy to scrutinize and pinpoint where these theories go wrong. But this scrutiny is useless unless an alternative understanding can be offered. Philosophers, myself included, are tempted to play the role of the umpire that steps into the middle of an argument and decides which side was right and which side was wrong. This temptation often leads to bad philosophy. My aim is to present another alternative to the polarized discussion, but this will include stepping in and out of the earlier discussions, because empiricism has not got everything wrong, nor has rationalism (nor even positivism). There is a sense in which both theories describe a part of the process of acquiring knowledge quite correctly, but the proper step would be to continue by taking further steps to include other descriptions of other parts of the process of knowledge and reconcile them with discussions of aesthetics and ethics. This is something that I try to do, but the result will not be a new theory of knowledge, vision and self. Rather, I would describe it as a change of emphasis and a change of focus. These attempts are bound to produce only small pieces of an evolving and self-transforming puzzle.

In chapters 4, 5 and 6 I discuss the communicative role of images. With "communication" I do not mean that a certain content is communicated from me to another person via a mediating image, but that we *share* a certain view in looking at a picture, communicating is like taking "communion". In this way the image caters to intersubjectivity. This will lead us to a revised understanding of image, vision and understanding, in which knowledge, even the knowledge that resides in documentary images, is born out of dialogue and intersubjectivity. I claim that the traditional epistemological philosophy is forgetful not only, in one case (empiricism), concerning subjectivity, attention and judgement, and in the other case (rationalism), concerning objectivity, observation and neutrality, but of the relations between two subjects. This discussion is a result of my readings of pivotal work by Friedrich Nietzsche, Maurice Merleau-Ponty, Hannah Arendt, Theodor Adorno and Ludwig

Wittgenstein. Their accounts of image, vision, knowledge and the self will help along my shift of perspective in the epistemology of the image, from a fixed dialectic of subject and object, to a dynamic relation of intersubjectivity. And, as I will show, the concepts of visual record and documentary image have a specific role to play in this change of perspective. Within traditional philosophy, the idea of the visual record has served as a model for a go-between in the empiricist notion of a pure unbiased relation between subject and object as a basis for true knowledge. As an alternative to this model, I will show how the visual record serves as an aid in the sticky relations between subject and subject.

When I see an image that I trust as a real depiction of the realities of contemporary life, I also approve that that image depicts reality for another viewer of that image. The image stands in this case as trustworthy go-between, between my view and the other person's view. What I want to make clear here is that realism consists of this relation of trust; this is the moral aspect of depiction that grants the image veracity. I do not claim that this aspect of communication solely adheres to what we call the documentary. The documentary is a sub-category of realism and because of this, the element of trust is also an essential building stone for the documentary.

In chapter 4 I will pick up the discussion from the end of part one. I will discuss examples of documentary depiction, focusing on how the documentary can be understood as an image that points toward the ephemeral and the contingent. It makes way for the human desire to understand the world beyond what we have made of it. The role of documentary images that I want to highlight here is the way in which they stand in contrast to our predetermined ways of seeing, how they resist and challenge the rationalization and standardization of the image world, an encyclopedic ordering of the world. In this discussion I will argue that the documentary is not primarily a form of representation. Instead I propose that it is an art of attention. The task of the documentary film-camera is not primarily to make an account of every verifiable fact in the world rather it is to help us in focusing our attention on that which is relevant in our visual field. As expressed by Cavell: "A camera is an opening in a box; that is the best emblem of the fact that a camera holding on an object is holding the rest of the world away. The camera has been praised for extending the senses; it may, as the world goes, deserve more praise for confining them,

leaving room for thought."[252]

An underlying narrative in this chapter deals with *novel* knowledge. How is it possible for us to understand something that we have never seen before? How can an image show me the never-before-seen? What happens when we encounter something never-before-seen? These questions are problematic in the classical epistemological discourse. The positivistic theory of knowledge makes the direction in the process of knowledge one-sided. Positivism claims that the process of knowledge is human projection on the natural world, i.e. knowledge is domestication. The blind side in this understanding is that it cannot account for instances of wonder. There are occasions in which we encounter things we do not know. To say that in these cases we just project a meaning on the unknown does not make sense. Our encounters with the unknown do not lead to knowledge, if we solely domesticate that unknown through our projections. Quite the contrary, projections only repeat what we already know. I claim that it is these kinds of instances of wonder that our knowledge requires in order to keep our understanding vigilant and fresh.

My starting point in chapter 5 is that to attend to something or to describe something is neither an act of domestication nor an act of neutral observation. In order for us to understand a world or a being that is unknown to us, we need to engage with them, we need to attend to them. When we honestly involve ourselves in the process of engagement and attention we will encounter many different views and voices. Instead of treating this situation as a problem to be resolved by unifying all these different views and voices into a fixed representation (like the positivists do), I claim that the subject can and ought to be able to maintain several, occasionally conflicting views, and that this dialogue is helpful for our moral judgement. In accepting that there sometimes exists a tension between my perception and what the world reveals to me, between my perception and my thinking, and between my view and the views of others, I remain engaged and attentive in this world. It is such an attitude and behaviour that I ascribe to the action of producing documentary images.

In chapter 6 I tackle iconoclasm. In philosophy, iconoclasm is in a sense the standard position. From Plato onward, philosophy has dealt with images as inherently untrustworthy.

252 Stanley Cavell, *The World Viewed* (Harvard University Press 1979), p. 24.

Instead of seeing images as a possibility to gain knowledge of the world, iconoclasm claims that they obstruct our understanding of the world. I turn this argument on its head by showing that our distrust in the world is something that stems out of our trust or distrust toward our historical situation and other people. Distrusting images stems from a more general disbelief in what is communicated to us. And, on the other hand, in trusting images we trust each other and are able to share each other's views. Images that we grant a status of veracity are moral building blocks in an effort to reach a common understanding, what I call *a common sense*.

In order to sum up this idea of the image as a common sense, consider this quote by Norwegian philosopher Jakob Meløe:

> I was once a school teacher on one of the outer islands, with the children coming from several of a cluster of islands. When we had drawing lessons […] the boys would draw one thing, boats, boats cutting the waves, boats fishing, boats at anchor, etc. They would criticize each other's drawings and be very knowledgeable about the design of a boat, and of each of its parts. 'The wheelhouse is too far aft', Why is there no mizzen mast?', etc. […] In drawing boats and criticizing each other's drawings, the boys taught themselves and each other to become better observers of boats.[253]

What the acts of drawing, showing and viewing establish here is something that could be called a common sense. The practice of depiction is a way of aligning different views with each other. This process does not entail observing, viewing or seeing alone, it also requires discussion, argumentation and even disputes. The common goal of this exercise is to establish a view upon the world that can be trusted by everybody in the community. Here the disputes involved are not attempts to distance the viewers from each other, but attempts to arrive at a visual knowledge that everybody in the community can trust. This is not the same thing as a monolithic view that obscures all other views, a common view has to be able to maintain many looks and voices.

253 Jakob Meløe, "The Two Landscapes of Northern Norway", in Inquiry, vol. 31, 1988, p. 389.

4. On Seeing the not-before-seen

> The picture is *there*; and I do not dispute its *correctness*. But *what* is its application?[254]
>
> Ludwig Wittgenstein

In this chapter I examine the role of attention as a defining aspect of visual recording, photography and the documentary image. When we pay attention to how the world looks, it might sometimes surprise us. It might perhaps show us that we are too set in our ways of seeing and that the world can reveal things unknown. This is, I claim, the task in which the documentary image can guide us. In order to arrive at this conclusion I will start by explaining how the image adheres to knowledge, without falling back on the generic epistemological framework that I dealt with in the first part. I will continue my discussion on Nietzsche's revision of the concept of knowledge (a discussion that I started in chapter 2). And I proceed with the reading of Wittgenstein's and Merleau-Ponty's philosophy of perception, in which the role of attention becomes paramount. Two examples will serve as a backdrop for this discussion. The ending scene from Werner Herzog's film *Echoes from a Sombre Empire*[255] will function as an example of the reciprocal dynamics of knowledge that Nietzsche advocates. The second example is Alfred Stieglitz's classical photograph *The Steerage* that helps us understand the role of attention in documentary photography.

We do things with images. Images gain, as Wittgenstein points out in the quote above, their meanings *in relation* to different actions and practices. In this sense the meaning of an image is in "the becoming", its significance is put into play in the specific practice and use in which it plays a part. Despite the stubborn attempts within philosophy to establish a form of image as a view from nowhere, visual records, photography and documentary

254 Ludwig Wittgenstein, *Philosophical Investigations*, *Revised German-English Edition* (Blackwell 1998), §424, p. 126e.
255 *Echos aus einem düsteren Reich*, France 1990.

images are also included in our different practices with images. This acknowledgement demands a change in emphasis concerning the documentary. We have to move, from the epistemological framework that entails the mimetic copying of the visual world, the likeness between representation and object, toward a relational framework that acknowledges the production, the actions involved in making images, and the uses and practices involved in viewing, interpreting and utilizing images. When we grant that the term "documentary" is also defined by the uses of an image, by the actions involved in making the image, we enter an ethical realm, insofar as ethics and moral philosophy are fundamentally concerned with how we act.

I will expand on this idea of the morality of realism in the chapters to come. Towards the end of this thesis the apparent moral questions concerning our relationships with images will become more focused. The important distinction lies in emphasizing the images' relation to action and engagement in the world, rather than their epistemological, mimetic and neutral re-presenting of the world. In her dissertation *Soul of the Documentary* Ilona Hongisto makes a related distinction as she writes:

> Writing as a system of expression is not representative of a reality – it has to do with expressing a reality that is yet to come. Paraphrasing Deleuze and Guattari, documentary filmmaking would thus be less *about* the real than an operation in the real. A new materialist conceptualization of the documentary suggests that the documentary is not separate from the material plane of the real – and thus operative on a plane of significance – but partakes in the processes in which the real takes form.[256]

Instead of the epistemological framework that consists of mimesis, likeness and representation, Hongisto highlights the action, the process and the partaking in the world that the production of images entails. This is what I, under the influence of Wittgenstein,

256 Ilona Hongisto, *Soul of the Documentary* (University of Turku press 2011), p. 14.

call the *use* of the image. The *realness* that the term documentary stands for is in this sense to be understood as an achievement that is the result of engagement with the world, not through an objective distancing (neutrality) from the world. Contrary to an understanding of the language of images as a form of representation, the emphasis in Hongisto's reading of Deleuze's, Guattari's, and in my reading of Nietzsche's philosophy of knowledge and Wittgenstein's philosophy of language, is on the way in which meanings are *in the becoming* through processes of their use.

However, it is important not to make this into a question of "either/or". Written language, and perhaps more poignantly images, do aim at fixating their object, they do make use of representation, but here it is important to understand what we mean by representation. It is not possible for an image to signify something *solely* through re-presenting this something. In this context a *mere* representation of an object would simply be a copy of this object, one more of the same kind. The role of language is obviously not to make copies of objects. A written word does not resemble the object that it represents. Perhaps we could instead say that we use words and images as "stand-ins" for objects. Instead of the actual object we have a word or an image. But this understanding of what representation means does not explain how words and images become meaningful, how they latch on to reality. The question concerning how words and images become meaningful is not a question about representation. When we express something we do something with words or images, we use them to signify, and *how* we use them will determine their meaning. Ludwig Wittgenstein points out: "Every sign *by itself* seems dead. *What* gives it life?—In use it is *alive*. Is life breathed into it there?—Or is the *use* its life?"[257] Influenced by Wittgenstein, Alva Noë continues along the same lines, when he writes:

> The question what our words mean is not something settled before we put language to use. It is not antecedent to the application of language to the problems that interest us. Shaping meaning, clarifying what we are talking about, fixing subject matter, this is just one of the things we use language to do. Meanings are not fixed by practice-independent

257 Ludwig Wittgenstein 1998, §432, p. 128e.

> relations between words and things. Nor do we need to step outside of language—as it were to call a "time out"—in order to address questions of reference and meaning that may arise. As if that were possible!258

As Noë points out, primarily, language does not grant us knowledge through paring up the right object with the correct word, image, concept or thought. A word, an image or sign, *becomes* significant through its use. In this sense words and images as systems of expression are not primarily "*representative* of a reality"[259] their meaning lies in the way they establish a reality in the becoming.

As I have shown earlier, Western philosophy has invested heavily in the idea of knowledge as something representational, but this theoretical framework entails philosophical problems. In a sense this epistemological framework, or the aesthetics of mimesis that follows from it, cannot deal with the uncertainty and the relational aspect that the element of *action* brings into the equation. "Knowing", Nietzsche writes: "means: 'to place one's self in relation with something', to feel one's self conditioned by something and one's self conditioning it – under all circumstances, then, it is a process of *making stable or fixed, of defining, of making conditions conscious* (not a process of *sounding* things, creatures or objects 'in-themselves')".[260] In this sense, there is no knowledge without participation and engagement in the world. The making of an image is by necessity already a way of conditioning something in the world *and*, what might be easily forgotten, a result of permitting oneself to be conditioned by that something.[261] It is in this process, as a part of an action, that signs become significant. Words

258 Alva Noë, *Varieties of Presence* (Harvard University Press 2012) p. 40.

259 Ilona Hongisto 2011, p. 14.

260 Friedrich Nietzsche, "The Thing-in-Itself and Appearance, and The Metaphysical Need." In Ruth F. Chadwick (ed.), *Immanuel Kant Critical Assessments* (Routledge 1992), volume 1, p. 81.

261 Perception and the action of seeing are then a reciprocal process. Merleau-Ponty exemplifies this by describing the experience of touching honey, he writes: "Indeed our experience contains numerous qualities that would be almost devoid of meaning if considered separately from the reactions they provoke in our bodies. This is the case with the quality of being honeyed. Honey is a slow-moving liquid; while it undoubtedly has a certain consistency and allows itself to be grasped. It soon creeps slyly from the fingers and returns to where it started from. It comes apart as soon as it has been given a particular shape and, what is more, it reverses the roles by grasping the hands of whoever would take hold of it. The living exploring, hand which thought it could master this thing instead discovers that it is embroiled in a sticky external object. […] Honey is a particular way the world has of acting on me and my body." Maurice Merleau-Ponty, *The World of Perception* (Routledge 2005), p. 60-62.

and images are results of us partaking in the world, and in this sense they are not solely representative of reality, they are our ways of acting within that reality.

The Reading Image

One example of the documentary's reconciliation of creative transformation of perception and visual recording that made a significant impact on me, is the ending of Werner Herzog's film *Echoes from a Sombre Empire*. The film follows journalist Michael Goldsmith in the Central African Republic. Goldsmith had earlier spent time in the region during the rule of notorious dictator Jean-Bédel Bokassa. The idea with the film is to track down memories and historical facts about the Bokassa regime with Goldsmith as a guide. The film ends in a rundown zoo in the Central African Republic. One of the animals in the zoo that catches Herzog's attention is a monkey addicted to nicotine. It is not only the actual scene that fascinates me, but also what Herzog tells us about the scene and what his commentary tells us about documentary depiction. In the interview book *Herzog on Herzog,* he writes:

> In the decrepit zoo we found one of the saddest things I have ever seen: a monkey addicted to cigarettes thanks to the drunken soldiers who had taught it to smoke. Michael Goldsmith looks at the ape and says something like, 'I can't take this any longer' and tells me I should turn the camera off. I answer back from behind the camera, 'Michael, I think this is one of the shots I should hold.' He replies, 'Only if you promise this will be the last shot of the film.' While this dialogue and my *use* [my emphasis] of the animal was a completely scripted invention, the nicotine-addicted monkey itself was not. There was something momentous and mysterious about the creature, and filming it in the way I did brought the film to a deeper level of truth, even if I did not stick entirely to the facts. To call *Echoes from a Sombre Empire* a 'documentary' is like saying that Warhol's painting of Campbell's soup cans is a document about tomato soup.[262]

262 Werner Herzog and Paul Cronin (ed.), *Herzog on Herzog* (Faber and Faber 2002), p. 242.

The quote above describes the actions that are involved in making documentary images. Herzog has to make an effort in order to portray what he sees as momentous with the smoking monkey. It is through these efforts that the scene is made to address me. When I see the smoking monkey in a rundown zoo in Herzog's film, I have no similar earlier image or understanding to fall back on. The film sequence takes me to a place and presents me with a situation that I could not imagine. It is not clear to me what this image means. But it does mean something because it feels like something, it has an impact on me, it is unnerving, provocative, it makes me uncomfortable and sad, it *reads* me, it puts me in place, precisely because it shows something unknown to me. It tells me something new and because of this it is able to engage me. These reactions that I have concerning the scene are hard to articulate, but there is one common feature in them that needs to be analyzed further. It becomes evident that the practice of seeing images is not only a relation in which I stand before an image and interpret it. The image does some work as well. When I write; "the image reads me", I indicate that the direction that we often presuppose when we talk about interpretation, a one-sided relation in which the subject interprets the image, is turned around, the image interprets me. The scene with the smoking monkey tells me something about myself that I perhaps did not know from before. It reveals something of the world regardless of my projections and interpretations.

In the essay *What Photography Calls Thinking*, Stanley Cavell explores the way in which photographs evoke uneasiness in us due to their ability to show us the unexpected, that which we do not know how it should be understood. He writes:

> To say that photographs lie implies that they might tell the truth; but the beauty of their nature is exactly to say nothing, neither lie or not to. […] I believe the motto [photographs lie] serves to cover an impressive range of anxieties centered on, or symptomatized by, our sense of *how little we know about what our relation to reality is, our complicity in it* [my emphasis]; that we do not know what to feel about those events, that we do not understand the specific transformative powers of the camera,

> what I have called its original violence; that we cannot anticipate what it will know of us – or show us. […] It may help to say that by wording my intuition in the form "what the text knows of me" I do not first of all suppose this to denote anything personal.[263]

Based on Herzog's commentary, the smoking monkey seems to evoke exactly this kind of ambivalent reaction in him during their encounter. It reminds Herzog of "how little we know about our relation to reality" and "our complicity in it" at the same time. The encounter changes Herzog's perception about the film. The monkey and the sad fact that it has picked up the habit of smoking, changes something within Herzog; it reads him and informs him about something concerning himself. Although Herzog constructs the scene and heavily influences what we see and what we hear, he is still drawn to the monkey exactly because it is beyond his interpretations and inventions. When Herzog talks about the scene in the interview book, he reveals that it was scripted through and through. The commentary in the scene that seems spontaneous and casual is predetermined and so is the editing with close-up shots of the monkeys hand and the Schubert soundtrack that is added on to the scene. But there is something that is not scripted or created. The smoking monkey is there to be seen and it tells us something that goes beyond Herzog's deliberate and scripted interventions. Herzog himself is reluctant towards calling this film a documentary. His reluctance here is to be understood against the backdrop of a certain tradition within documentary film. He speaks of *cinema vérité*[264] as the "accountant's truth" and continues: "Through invention, through

263 Stanley Cavell, "What Photography Calls Thinking" in William Rothman (ed.), *Cavell on Film* (State of New York Press 2005), p. 116-117.

264 What Herzog refers to here is perhaps a bit confusing since cinema verité is in itself a term that is often used confusedly. Herzog's use of the term is one example of this confusion. In order to understand Herzog's polemic remark Bill Nichols explanation of what he calls the observational mode of documentary film is helpful. Nichols writes: "The observational mode stresses the nonintervention of the filmmaker. Such films cede "control" over the events that occur in front of the camera more than any other mode. Rather than constructing a temporal framework, or rhythm, from the process of editing as in Night Mail or Listen to Britain, observational films rely on editing to enhance the impression of lived or real time. In its purest form, voice-over commentary, music external to the observed scene, intertitles, reenactments, and even interviews are completely eschewed. [Erik] Barnouw summarizes the mode helpfully when he distinguishes direct cinema (observational filmmaking) from Rouch's style of cinema verité." Bill Nichols, Representing Reality (Indiana University Press1991), p. 38. The confusion concerning cinema verité has in this sense to do with a discourse between different movements within documentary cinema. Diane Scheinman explains how cinema verité, a style

imagination, through fabrication, I become more truthful than the little bureaucrats"[265]. This statement expresses how the truth of the documentary is achieved through intervention, rather than dispassionate observation.

I believe Herzog is on to something when he makes this distinction. But I do not see this as a split between two traditions within documentary film, but rather like Cavell, as a tension within the documentary image itself. Through the interventions, through editing and dramatization the scene draws our attention to the element that is there independently of any manufacturing. The question concerning what is there prior to Herzog's intervention and what is there in the scene because of it arises. He understands that the line between the discovered and the invented is blurred, therefore he makes it into his method to actively emphasize the distinction between scripted and unscripted, for example by adding an apparently dramatic soundtrack to a scene that does not seem dramatized from the start. These interventions are put into use in order for the un-scripted features in the encounter to become more apparent. The intentional play with the differences between the scripted and un-scripted makes the difference more apparent, it permits the un-scripted to stand out. I do not agree when Herzog says that his film is not a documentary. On the contrary, the scene and his comments about the scene capture something that is at the core of the documentary. To capture or tease out that which is out there despite our preconceptions is, in my view, a thoroughly documentaristic attitude toward depiction. What is to be gained by this kind of strategy is hopefully new perspectives and knowledge. When the ephemeral – the world as it is despite the directors' intervention – is *made* conspicuous, it engages us to revise and revive our attention and our conceptions. It is this documentary practice that I want to harbour.

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of documentary filmmaking invented by French filmmaker Jean Rouch, actually came about as a criticism of the idea of "neutral" documentation. In his filmmaking Rouch acknowledges that the camera's presence entails a transformation of any given situation. In this sense Rouch also acknowledged that the camera is never neutral, its presence always has an influence on the subjects in the scene. Scheinman describes the context in which the term cinema verité gained it's significance, she writes: "Stylistically, the film [Jean Rouch's, Chronique d'un été, France 1960] was inspired by the ideas of Russian filmmaker Dziga Vertov who, in the 1920s, wrote about kino pravda (film truth), suggesting that the camera recorded life and therefore led to a 'cinema of truth'. Rouch in contrast, felt the camera provoked the behaviour of those in front of the lens, resulting in a 'truth of cinema'." Diane Scheinman, "The Dialogic Imagination of Jean Rouch: Covert Conversations in Les Maîtres Fous", in Barry Keith Grant and Jeanette Sloniowsky (eds.), Documenting the Documentary: Close Readings of Documentary Film and Video. (Wayne State University press 1993), p. 194.

265 Werner Herzog and Paul Cronin (ed.) 2002, p. 240.

In my view, and I think Herzog would agree with me on this, the documentary image builds upon an idea that emphasizes our engagement in actively re-establishing our ways of seeing and knowing, beyond our fixed and predetermined knowledge. The smoking monkey in *Echoes from a Sombre Empire*, does exactly this. The scene shows me something I have not seen and tells me something I did not know. Although I know that the scene is scripted, that it is made possible through the interventions, the editing and the manipulation that Herzog does when he makes the scene, it is still able to show me something beyond the manufactured. This could be understood as a paradox. If we think of the essence of the documentary as a kind of mold in which more intervention means less neutrality (less realism) and less intervention means more neutrality (more realism), it will be hard to comprehend what goes on in the example with the smoking monkey. This is what the example actually tells us: there is little room for *neutrality* in this discussion. Herzog's interventions are not neutral; they are fabrications, even deceptions. As for the smoking monkey, it is not a figment of Herzog's mind, but neither is it a neutral object. It is not neutral exactly because it acts upon the viewer. For Herzog it is bewildering to encounter the monkey, and the presence of this bewilderment engages my perception of the scene. Or, to make this point stronger: precisely because I get the sense that this certain element of the scene cannot be made up, it appeals to me and engages me. The smoking monkey does not address me in a neutral way; if it were neutral it would not address me at all. *Neutrality* does not fit in as a concept to describe what makes this scene documentary, rather I suggest that this documentary appeal of the scene has to do with a change in direction between the subject and object/interpreter and the interpreted. Suddenly the gaze is turned on Herzog, and through him on us. This reminder of the reciprocity in our ways of knowing is significant for the concept of realism and the documentary. Here we arrive at a genuine difficulty when we try to understand what the term "documentary" stands for. My proposition is that it stands for images that bring out the contingent and ephemeral, the world as it is independent of our preconceptions. Here we are at the core of this difficulty, since the world never is "independent of our preconceptions". Our conceptions give form to the world, and yet, without our gaze it is not formless. This is the point where our concept of knowledge starts to invite the difficult questions: how should we describe the processes of knowledge and perception?

Knowledge as Domestication and Knowledge as Wonder

The difficulty concerning the concept of "the documentary" that I describe above is linked to a more specific problem concerning the concept of knowledge within philosophy that builds upon juxtaposition between fixed knowledge and an ephemeral contingent visual world. Nietzsche describes this juxtaposition when he writes:

> The nature of our psychology is determined by the fact (1) That *communication* is necessary, and that for communication to be possible something must be stable, simplified and capable of being stated precisely (above all, in the so-called *identical* case). In order that it may be communicable, it must be felt as something *adjusted*, as *recognizable*. The material of the senses, arranged by the senses, reduced to coarse leading features, made similar to other things, and classified with its like. Thus: the indefiniteness and the chaos of sense-impressions are, as it were, *made logical*. (2) The *phenomenal* world is the adjusted world which *we believe to be real*. Its 'reality' lies in the constant return of similar, familiar and related things, in their *rationalized character* and in the belief that we are here able to reckon and determine. (3) The opposite of this phenomenal world is not 'the real world', but the amorphous and unadjustable world of the chaos of sensations – that is to say, *another kind* of phenomenal world, a world which to us is 'unknowable'.[266]

The view that Nietzsche describes here is in a nutshell the bases for an empiricist understanding of the concept of knowledge. Or, to be more precise, what Nietzsche describes here is the dialectic between empiricism and rationalism or their modern counterparts realism and idealism. There is something in this duality that builds upon the juxtaposition between the fixed or adjusted world and the chaotic world of sensations, that leads us astray according to Nietzsche. If we think of knowledge as a product of domestication, then the *real* world, the world as it is prior to our conceptions of it, becomes essentially an un-intelligible world

266 Friedrich Nietzsche in Ruth F. Chadwick (ed.) 1992, p. 85-86.

of chaos. That is, if we think that domestication is, and this is the key here, *the only* way to knowledge, then this understanding presupposes that the real phenomenal world of "the material of the senses" is in itself un-intelligible. In the passage above Nietzsche points at the flaw in this positivistic understanding. In order for us to surpass this misunderstanding we have to acknowledge that there are other ways through which we acquire knowledge, or more precisely, that knowledge is a more complicated process than simply domestication. We have to understand that the direction between the subject and the object can be turned around, that "the other" also acts upon us.[267]

Standardization, rationalization and fixating are certain ways through which we require knowledge. In making things knowledgeable we do organize and rationalize our sense impressions into categories, we create order in the ephemeral world of sensations. The practice of making images has, as I have pointed out throughout the first part of this thesis, often had this role of organizing sense impressions into a unified fixed picture. A film can for example describe the change of the seasons from winter to spring by reducing this event into a two hour assemblage of sounds and images. A film is in this sense a reduction by necessity since it rearranges sense impressions into a reductive formalization of the actual event.[268] This is one way to understand how knowledge comes about. In this sense knowledge is a way of domesticating the chaotic world of phenomena and experience, of making it into an anthropomorphic order, through interpretation, rationalization and representation. However this is not, as Nietzsche points out, the only way through which we have knowledge and it is not a very fruitful theory to start with, since it produces a very narrow understanding of both, what we call knowledge and what we call sense-experience. In this dialectics of empiricism-rationalism our knowledge becomes a process of transformation in which the real always has to be transformed into something else, the object has to be transformed into ideas. Sartre describes this as a process like digestion, when he writes: "We have all believed that the spidery mind trapped things in its web, covered them with white spit and slowly swallowed them, reducing them to its own substance. What is a table, a rock, a house? A certain assemblage of

267 Friedrich Nietzsche in Ruth F. Chadwick (ed.) 1992, p. 86.

268 Compare, Stanley Cavell, The World Viewed (Harvard University Press 1979), p. 24.

"contents of consciousness", a class of such contents".[269] Both Nietzsche and Sartre reveal a certain temptation to understand knowledge as domestication, whereas this is just one aspect of how we require knowledge. And if it were the only way to describe how knowledge comes about, it would mean that the real would always be a result of how we construct an order through domestication, that knowledge would always be "what we have made of the world".

Wonder, re-assessment and engagement are another set of ways by means of which we acquire knowledge. The difference here, compared to knowledge as a form of domestication, is that I cannot intentionally choose to experience wonder. It is something that happens to me, not something that I intentionally can put into play or construct. I cannot choose to be surprised or astonished. When it happens it is as if the world tells me something. In such instances I can react as if the world were chaotic, I can feel that the world does not make sense. But I can also see these instances as openings towards revising my ideas. Wonder can change the way in which I think and what I know. In this sense the ideas cannot be changed by ideas alone. Sense-perception stands in this way as an opponent to my thinking. What I want to indicate here is that without these kinds of experiences of wonder it would be hard to understand the proper role of knowledge. These categories of fixing the world (domestication) and permitting oneself to be conditioned by the world (wonder) complement each other. There is no conflict or actual paradox between fixating and re-assessing *per se*, as the juxtaposition between realism and idealism would have it, they are both important aspects of knowledge.

This is one important starting-point when we are concerned with the puzzling character of the term "documentary". We have to understand that it does not adhere to any clear-cut division between images that are fabricated and images that are neutral reflections of what is in front of the camera at any given time. As I mentioned in the first chapter of this thesis: "the image is not only the producer of our experience, our concepts, our language, it is at the same time a product of our conceptualization." This reciprocity is often forgotten. The scene from *Echoes from a Sombre Empire* does not hide the fact that it is dramatized, that it

269 Jean-Paul Sartre, "Intentionality a Fundamental Idea of Husserl's Phenomenology", in Dermot Moran and Timothy Mooney (eds.), The Phenomenology Reader (Routledge 2002), p. 382.

is an intervention in the real world that guides our way of understanding the subject of the smoking monkey. It is through Herzog's arrangement of the shot, his actions and his use of the smoking monkey in it, that the non-scripted, unconditioned features in the scene are captured. It is these contingent and ephemeral features that are unnerving, that make us uneasy, because they conflict with our predetermined understanding of the world. This is neither achieved through neutrality nor through domestication, but through engagement: the reciprocity that the encounter with the other demands.[270]

The Art of Attention

So far I have shown that the clear cut dichotomy of knowledge as discovery or invention does not take us all the way, we have to start looking for alternative descriptions of the process of perception and knowledge in order to understand our life with images. One fundamental aspect of visual perception that does not follow the grammar of the dichotomy discovery/ invention is the concept of attention. To attend to something is to focus ones attention. It is not a process of neutral observation, neither is it a process of domestication. To attend to something requires "an attitude to one's natural and social environment and to other people and other things that does not compel this otherness to be under one's own will."[271] In order to explain this faculty, I will analyse an example from the early years of art photography.

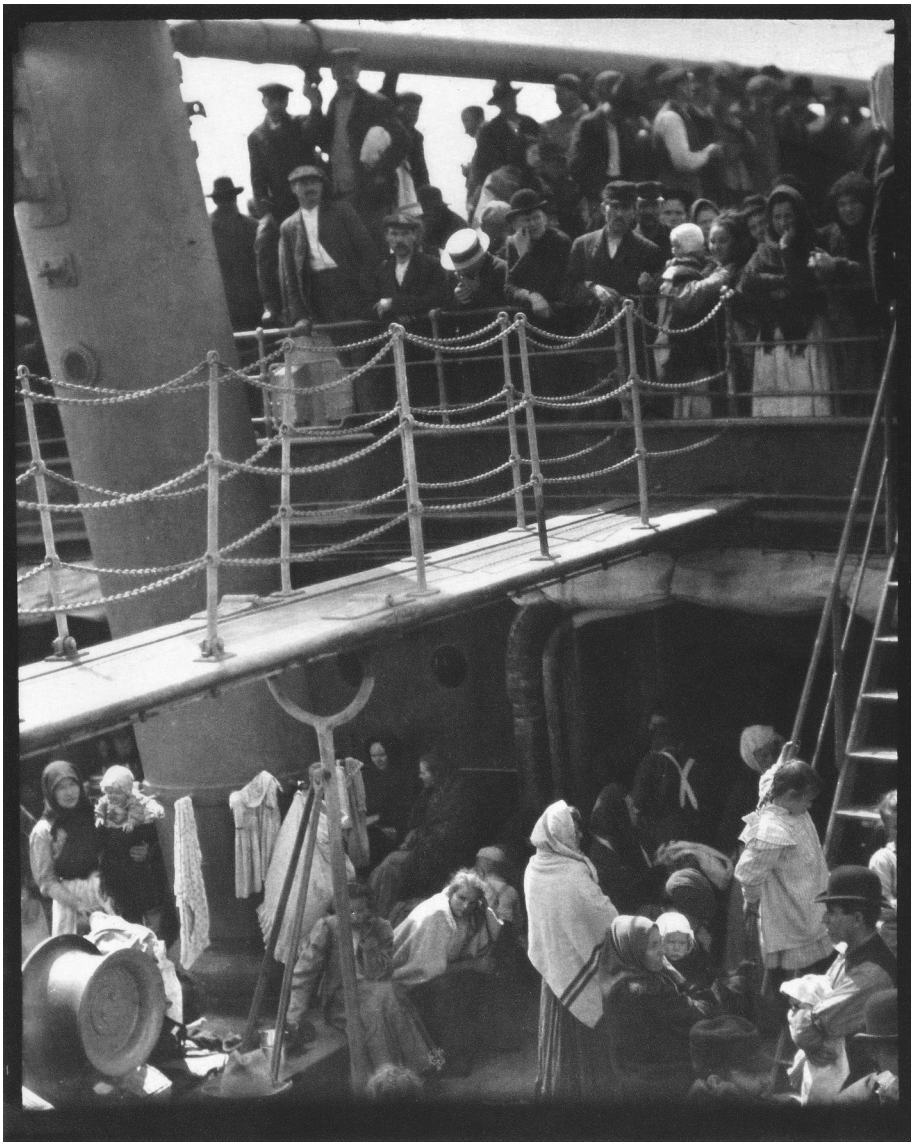
Alfred Stieglitz's photograph *The Steerage* **(image 4.1)** is significant in a historical context, since he writes and photographs in a period during which photography is still

270 This aspect of the documentary image is close to the notion of performative documentary that has become important within documentary film theory. Stella Bruzzi introduces this concept in her book *New Documentary*. Bruzzi shows how the realization that the presence of the film-camera always, in one way or another, alters the situation which is filmed, has put in question earlier understandings of the authenticity and objectivity of documentary film. Bruzzi also makes an important distinction between a classical tradition of realism within documentary film that hides the performance and actions of the author, and a (new) documentary practice that make the performative aspects, actions and processes of production, known to the viewer. Stella Bruzzi, New Documentary (Routledge 2006), p. 185-187. I will discuss the moral implications of this distinction in the next chapter. However, I do not see this performativity as a quality that stands behind a certain category of documentary films, rather it is an aspect within each and every image. To some extent every image is a result of the actions of its author.

271 Hauke Brunkhorst, *Adorno and Critical Theory*. (University of Wales Press 1999), p. 62.

considered to be something less than art. His efforts and intentions with this picture were part of a struggle to make photography into a proper art form, to enable it to transcend mere copying of the natural world and express emotion, judgment and understanding. Stieglitz took the picture when he was travelling in Europe on a ship in 1907 and was highly conscious of the class-based division between first and second class passengers. His feeling manifested itself urgently in a certain view, Stieglitz writes: "Could I photograph what I felt, looking and looking and still looking? I saw shapes related to each other. I saw a picture of shapes and underlying that the feeling I had about life."[272] In the picture we see the two decks of the steamship *SS Kaiser Wilhelm II*. The lower deck, referred to as "the steerage" at the time, is mostly occupied by women and children who are scattered around the space with their clothes and belongings spread around them. On the upper deck we mostly see properly dressed men who are occupied with watching the seascape. Some of them gaze down at the lower deck. The composition of the picture is refined. It captures the structure of the ship, as if it was the two decks of the ship by which the division between the different social classes was put into play. This division is emphasized by the gangplank that divides the pictorial space.

272 Stieglitz as quoted in Donald Evans, "Photographs and Primitive Signs", *Aristotelian Society Proceedings 1978/79*, New Series – Vol. LXXIX (The Compton Press 1977), p. 233.



Alfred Stieglitz: *The Steerage*, Photogravure, 1907[273]

273 Image taken from <http://www.metmuseum.org/collection/the-collection-online/search/267836?rpp=30&pg=1&ft=Stieglitz&pos=2>

According to his account, in fact written long after the photograph was taken – this extract from his notebooks was published in 1942[274] – Stieglitz not only wanted to mediate *what* he saw, what objects, shapes, etc. he encountered, but *how* he saw, how the view revealed something about his experience of life. He writes:

> On the upper deck, looking over the railing, there was a young man with a straw hat. The shape of the hat was round. He was watching the men, the women and children on the lower steerage deck. Only men were on the upper deck. The whole scene fascinated me. *I longed to escape from my surroundings and join these people. . . . I saw shapes related to each other. I saw a picture of shapes and underlying that the feeling I had about life. And as I was deciding, should I try to put down this seemingly new vision that held me – people, the common people, the feeling of ship and ocean and sky and the feeling of release that I was away from the mob called the rich – Rembrandt came to my mind and I wondered would he have felt as I was feeling.*[275]

The emphasis in Stieglitz's comment is interesting. He describes a situation where he encountered something ephemeral, something that he needed to capture, since he felt that he saw something never-before-depicted. At the same time, the scene awoke something familiar within him. It showed him something he felt that he already knew. It is obvious, for example, that he knew that there were two economically defined classes of passengers on the boat when he bought first class tickets for himself and his wife. The novelty of the view is something different from new factual knowledge. The view evokes an experience in him: the understanding of a difference between the life-worlds of the two classes. What he already knew (that there are first- and second class passengers) gains a more fundamental meaning through the focus of attention *in* his perception. Here, attention reveals itself to be a faculty that does not transform the optical view, but it focuses perception and enables

274 Allan Sekula, "On the Invention of Photographic Meaning" in *Thinking Photography*, Victor Burgin (ed.), London: Macmillan Education 1987, p. 98.

275 Alfred Stieglitz, quoted in Allan Sekula 1987, p. 98-99.

it to perceive the meaningful features within that view. Merleau-Ponty writes: "Since in attention I experience an elucidation of the object, the perceived object must already contain the intelligible structure which it reveals"[276] and "attention, then, creates nothing, and it is a natural miracle"[277]. The novelty that is inherent to the concept of attention has then two distinct meanings. Not-before-seen views are prone to awaken our attention, as I pointed out in the case of Herzog's scene with the smoking monkey. But attention is not an act that depends on new visual information. It establishes a new focus both within a novel and a familiar visual field.

What Stieglitz felt when he discovered the structural division that the first and second class deck signifies on the ship was a reaction on a certain social structure that was manifested in the architectural (visual) qualities of the ship, but the feeling was also a reaction on his own position among the first class travelers. The view told him something, not only about ships, social class and maritime life, but about himself, how he felt and what he was thinking. He describes this view as a "*seemingly* [my emphasis] new vision that held me". The newness of the view is manifested in the way Stieglitz feels ("the feeling of release"). In this way the novelty in the scene does not consist of a new fact within the world, he does not learn that social classes exist due to his encounter with the view. More precisely, this is an occasion of seeing something in a new light, a changing and/or focusing of *attention*.

The way in which Stieglitz understands the world is awakened by the actual visual view. He sees what he already knows in a different light. But it is not his understanding of class that is projected onto the visual view. It is the visual view that revitalizes his thinking concerning class. The view tells him how he feels about something he is already familiar with. In this sense, through attention, the view, a meaningful visual assemblage, already exists before him before it is captured by the camera. He writes:

> I had but one plate holder with one unexposed plate. Would I get what I saw, what I felt? Finally I released the shutter. My heart thumping, I had never heard my heart thump before. Had I gotten my picture?

276 Maurice Merleau-Ponty, *Phenomenology of Perception* (Routledge 2007), p. 31.
277 Ibid., p. 30.

> I knew if I had, another milestone in photography would have been reached, related to the milestone of my 'Car Horses' made in 1892, and my 'Hand of Man' made in 1902, which had opened up a new era of photography, of seeing. In a sense it would go beyond them, for *here would be a picture based on related shapes and on the deepest human feeling, a step in my own evolution, a spontaneous discovery.*[278]

He encounters something familiar, perhaps too familiar to catch his attention, and in this way documentary photography aids him in re-establishing or re-evaluating phenomena constantly in front of his eyes. The documentary image works in this way like philosophy; it helps Stieglitz understand what he already knows in a different light. The documentary image does this primarily by cultivating his visual perception. By "cultivating" I do not refer to a form of domestication (transforming something natural into something cultural, perception into thinking). In documentary depiction features are not primarily transformed or reproduced, they are attended to.

We perhaps usually suppose that what is seen in a picture is there due to the intentions of the artist.[279] But on another level, we have to acknowledge that attention is not a faculty that is completely ruled by our intentions and our will, attention is not primarily a domesticating faculty. Merleau-Ponty writes: "Since 'bemerken' or taking notice is not an efficient cause of the ideas which this act arouses, it is the same in all acts of attention, just as the searchlight's beam is the same whatever landscape be illuminated. Attention is therefore a general and *unconditioned* [my emphasis] power in the sense that at any moment it can be applied indifferently to any content of consciousness."[280] In the same spirit Alva Nöe writes on the attentive aspect of perception: "Perceptual experiences are ways of coming into contact with the world, not ways of building up or constructing representations of ways things are or

278 Alfred Stieglitz, quoted in Sekula 1987, p. 98-99.

279 I think this is a very common idea within aesthetics. For example Roger Scruton builds the whole of his theory of photography on the idea that photography, in contrast to painting, does not carry the intentions of the artist, since it comes about through an automatic causal process. For a brief description of Scrutons theory see for example, Mikael Pettersson, *Seeing What Is Not There – Essays on Pictures and Photographs* (Stockholm University 2011), p. 37-38.

280 Maurice Merleau-Ponty, 2007, p. 31.

might be. Perception is, in this sense, a nonintentional relation to the world."[281] As with the visual realm, the photograph does not yield to our intentions, through and through.

Wittgenstein writes about this discrepancy: "Seeing an aspect and imagining are subject to the will. There is such an order as 'Imagine *this*'; and also 'Now see the figure like *this*'; but not: 'Now see this leaf green'."[282] The distinction here is important. It has the same dynamics as my earlier discussion about knowledge, as both a way of fixing the object in the world (domestication: see it *like* this), and a result of permitting oneself to be conditioned by the world (wonder: the leaf *is* green despite my intentions). Perception corresponds with thought in different ways, it sometimes provokes us to reassess how we think, but ordinarily it confirms what we think, there is a complex dynamic here. In the case of Stieglitz photograph, I can point out to you that in order for you to understand what Stieglitz meant with this picture – what his thoughts and intentions were – you have to pay attention to the composition. Look at the structural divide between the two decks and the differences in the appearances of the people on the upper and the lower deck. This suggestion might help you understand what the picture means. If you consider my suggestion, it might help you comprehend, not only the picture, but also the mindset of Stieglitz, his place in his contemporary world, and more generally, what kind of experience it was to be on a ship in 1907. This situation in which I guide you in understanding Stieglitz intentions with the photograph, is however not the same, and in a sense not even similar to, the occasion in which Stieglitz is faced with the view over the steerage. In the original setting thought is awakened by the attention in Stieglitz' perception. When I guide you in your interpretation of the photograph the direction of the process is the opposite: I hope to awaken your attention through thought.

Merleau-Ponty makes a similar distinction when he writes: "The real has to be described, not constructed or formed. Which means that I cannot put perception into the same category as the syntheses represented by judgements, acts or predications."[283] I would disagree with Merleau-Ponty here on the last few words, since "to describe" is also an *act*. But let's put this

281 Alva Noë 2012, p. 73.

282 Ludwig Wittgenstein 1998, p. 213e.

283 Maurice Merleau-Ponty 2007, p. xi.

aside for a moment and consider what describing means. Describing is not necessarily the same act as representing, since representation means literally that I construct something in the likeness of something else, whereas, for example saying "that leaf is green" or "on the upper deck, looking over the railing, there was a young man with a straw hat. The shape of the hat was round. He was watching the men, the women and children on the lower steerage deck." are not ways of re-construing that something. The statements *point at* the greenness of the leaf or at the shape of the straw hat. The same can be said about photographic depiction in general. Roland Barthes highlights this function of photography when he compares it with the Sanskrit concept *tat*, he writes: "*tat* means *that* in Sanskrit and suggests the gesture of the child pointing his finger at something and saying; *that, there it is, lo!* but says nothing else; a photograph cannot be transformed (spoken) philosophically, it is the weightless, transparent envelope."[284] In this understanding of photographic depiction, the photograph is a kind of picture that is designed to point at the objects in the world. The photograph does not re-create or re-construct. The way in which it shows me the world is not through copying or reproducing the objects in the world, it is not a model or an ersatz for the real object, but a description that points at the qualities of the objects in the world, it attends to the world. It is this attentive quality of photography that accommodates documentary depiction.

In this way description and documentation differs from a more common understanding of how art functions. Donald Evans writes: "In art the natural objects which serve as correspondences are replaced by manufactured ones. We create rather than select correlates to our inner experience."[285] If we stick to Stieglitz' own account of how *The Steerage* came about, this is not the case. Stieglitz does not create the objects that correlate with his experience, he discovers them and attends to them. The experience is not inner, it is not an event happening inside of Stieglitz that domesticates or defines the outer view, the experience is in the view. The meaning of the picture is established through an event in the world, an encounter in the world. *The Steerage* gains its importance from the situation in which it belongs.

This being said, I still want to point out that the distinctions that I have established throughout this chapter between intention and attention, knowledge as domestication and

284 Roland Barthes, *Camera Lucida –Reflections on Photography* (Hill and Wang 1981), p. 5.

285 Donald Evans 1977, p. 236.

knowledge as wonder, the epistemological and representational framework for knowledge and a relational and moral understanding of knowledge, are not to be understood as clear-cut categories. The aim of the discussion above is to underline some different aspects that are at play when we try to understand the concepts of knowledge, perception, attention, image and the documentary. These aspects do overlap, but it is important that we acknowledge the diversity of these issues and in order to do that we have to understand the similarities as well as the differences between certain concepts.

To bring in one more fundamental difference in order to exemplify what I mean here, let us look at the distinction between thought and perception ones more. There are tendencies within philosophy that tempt us to make a clear distinction between these two concepts, to describe this distinction very bluntly, we could say that thought is usually understood as something inner, whereas perception is, or at least adheres to something external. Much of what I have tried to explain above could be understood within this dialectic. And this is not a completely incomprehensible way of trying to make sense of our faculties of thinking and perceiving. But at the same time, when we make this distinction into something definitive, we will encounter problems. Nietzsche can be said to invite this kind of philosophical problem, when he writes: "There would be nothing which could be called knowledge if thought did not first so *recreate* the world into 'things' which are in its own image. It is only *through* thought that there is *untruth*."[286] This is a view in which knowledge is conceived as domestication (and, as I pointed out earlier Nietzsche himself criticizes this view in other passages). What the Stieglitz example shows is that there is something misguided in this conception of knowledge. To be precise, Nietzsche actually misunderstands the role of thinking here, since he understands thinking as a way of reproducing the outer object into an inner ersatz, an image, of the object. As if perception always had to be translated or transformed into thinking in order to grant us knowledge. But we have perception, and it is not a form of thinking, it does not always need to become thinking in order to grant us understanding. Nietzsche invites the metaphor of the "inner image" to describe what thoughts are. But thoughts are not necessarily images. With this, I do not want to deny that thoughts might consist of images. I can imagine things and

286 Friedrich Nietzsche In Ruth F. Chadwick (ed.) 1992, p. 87.

have representations in my mind and so forth, but the concept of inner image is significantly different from the concept of external image (I will return to this discussion in chapter 6). My point is that thoughts are not recreations or reproductions of sense-perception, because thought and perception are not straightforwardly compatible faculties. A picture cannot represent a thought; if it could, it would become superfluous. Wittgenstein notes: "one cannot follow one's own mental images with attention."[287] We can for example not trace the outlines in our mental representations or move further away or closer to a mental representation, as we can do when we are dealing with perception and "external" images. Attention, the act of attending to something, is an action in which one is turned toward the world. Visual attention requires a spatial world of space and time, i.e. a *visual world*. No photograph carries everything that the photographer or the viewer *thinks* about the photograph. The photograph does not carry all the sentiments that we project on to it. Our thought does not carry all the visual information that is in a photograph. Our thoughts do not need to carry the visual information, since we have perception guided by our attention and external images to perform this task. The discrepancy here is not primarily *due to a conflict* between objective fact and subjective judgment (although this example fits this description as well), it stems from *the difference* in the actions of perception (as attention) and thought (as rationalization).

This is a big topic in philosophy[288] and I can barely scrape the surface of this discussion here. But, as I have pointed out in the earlier chapters, this difference is not a clear-cut

287 Ludwig Wittgenstein, *Zettel*, edited by G.E.M Anscombe and G.H. von Wright (Basil Blackwell 1967), § 81, p. 16e.

288 If we look into the origins of how perception became conceived as a form of thought, this development can be traced to the philosophy of Descartes. Daniel Heller-Roazen, writes: "Within a few years, the classical doctrine of sensation was to be famously contested by the thinker who has been regarded, more often than any other, as ushering in the modern age in philosophy. Starting with the *Regulae ad directionem ingenii*, which are thought to have been composed before 1628, Descartes asserted that the indubitable foundation of all knowledge could lie nowhere other than in the representative activity of the rational being, which he called, with a term at once old and new, *cogitation*, "thought" [Reference: Descartes, Ouvres, vol 10, pp. 359-62, ed Charles Adam and Paul Tannery (Paris: Vrin 1996)]. He would later explain that such a "cogitation" could not be opposed to perception as the "intellection" of the medieval doctors had been distinguished, at least in principle, from "sensation." The reason was that perception, for Descartes, was in every sense an act of the representing, conscious and thinking "I"; for him every human sensation was, in other words, an act of cogitation. "By the term 'thought' [*cogitationis nomine*]," the philosopher would thus explain in the ninth principle of the first part of his *Principia philosophiae,* "I understand everything which we are conscious of as happening within us, isofar as we have consciousness of it […]." in the second set of *Replies* he was even more explicit. Speaking of the expression *cogitation*, he declared: "I use this term to include everything that is within us in such a way that we are immediately conscious of it. Thus all operations of the will, the intellect, the imagination, and the senses are thoughts"." Daniel Heller-Roazen, *The inner Touch – Archaeology of a Sensation* (Zone Books 2009). P. 165.

epistemological difference, as the main dialectical movements in philosophy have described it. Neither thought nor perception have any pre-given, context-independent priority as a means of knowing. This, however, does not mean that perception and thinking would be interchangeable.

In our common experience of vision, we are not usually surprised by how the world looks, it does not clash with our thought. But when we pay attention to how the world looks, it might sometimes surprise us. It might perhaps show that we are too set in our ways of seeing and that the world can reveal things unknown. What I have tried to highlight in this chapter is how the documentary image can guide us in this visual task. In images we encounter *novel visions* because they correspond both with thought and vision, they inhabit the tension in-between. Also the visual record, the photograph and the documentary image should be placed on the axis of this tension. When we want to understand what makes these forms of depiction specific and meaningful, it is helpful to acknowledge that they inhabit the part of the axis that is closer to vision, and further from thought, without abolishing the tension.

5. The Other, the Image and the Self in the Documentary

> Pluralism – the incommensurability and, at times, incompatibility of objective ends – is *not* relativism, nor, *a fortiori*, subjectivism, nor the allegedly unbridgeable differences of emotional attitude on which some modern positivists, emotivists, existentialists, nationalists and, indeed, relativistic sociologists and anthropologists found their accounts.[289]
>
> Isaiah Berlin

> … the agent is awash with many images, many excitements, merging fears and fantasies that dissolve into one another. To sort things out to a point at which they seem like an assembly of definite and identifiable voices is already an achievement.[290]
>
> Bernard Williams

One important function of art is that it transforms our perception. When art transforms the way in which I perceive, then it is of utmost importance that this change is not put into play by force, indoctrination, oppression or domestication. In his *Aesthetic Theory*, Adorno emphasizes this function of art when he writes: "Judgment itself undergoes metamorphosis in the artwork. Artworks are, as synthesis, analogous to judgment"[291]. If we lose track of the way in which an image can influence our judgement, our skill to determine and negotiate how our perception can or should be transformed, then the image becomes a tool

289 Isaiah Berlin, "Alleged Relativism in Eighteenth-century European Thought", in *The Crooked Timber of Humanity* (John Murray 1990), p. 87.

290 Bernard Williams, *Truth and Thruthfulness* (Princeton University Press 2002), p. 195.

291 Theodor Adorno, *Aesthetic Theory* (Continuum 2004), p. 163.

of power and domestication. The process through which an image becomes something that guides my perceptions in a lived life, that includes both my view on the external world and my self-understanding (my "internal" world), has to be a process in which I, my "self", has to be informed of what is at stake in this potential transformation of my perception. When we speak of "the documentary" it is important to understand that also the documentary image is part of this moral dynamic. What makes us sometimes forget this aspect is that the concept of the documentary often alludes to neutrality and transparency. It is designed, sometimes malignantly, to display the world as it is, as if we would view the world through a transparent window instead of a transforming machine, a technology that is designed to alter our perceptions. By technology, I do not solely here refer to the technologies of film, the camera and photography. The concept of image that I have scrutinized throughout this thesis, is a result of an intricate development, the image is by itself already a tool that entails the framing, fixating, transforming and cultivating of our perception.

In this chapter, I will continue to explore how the documentary image is based on the tension between visual registration and our conceptions. I will base my discussion on the body of work of filmmaker and scholar Trinh T. Minh-ha, whose contributions consist in *maintaining* this tension, in order to make this tension the focus of discussion. This tension is the dynamics of the process through which art is able to revise our perception. By refraining from giving an explanation to every single visual sign, Minh-ha strives to construct a documentary cinema that lets otherness prevail. What is specifically interesting for my project is how Minh-ha helps us acknowledge how questions about documentary representations of the other always also are connected to questions about the self, about the portrayer's or the viewer's openness towards what lies beyond one's own conceptions.

In the previous chapter I emphasized the reciprocity that knowledge requires. Furthermore, I pointed out how Nietzsche's focusing on knowledge as becoming, on the uncertainty that action brings to epistemology, should be seen as a healthy revision of the classical theory frame. This aspect of uncertainty needs to be examines more closely. The aspect of uncertainty in Minh-ha's work in film and theory is comparable to the revision of the concept of *mimesis* in Theodor Adorno's aesthetic theory. In brief, for Adorno, mimesis consists of a moral understanding in which the subject embraces the otherness

of the other, i.e. an understanding of a morality in which one refrains from *projecting*[292] one's personal will and concerns on the other. This movement acknowledges that the other is understandable without domestication. We do not have to transform the other so that she fits our own frames of reference, in order to understand her. As a matter of fact we *cannot* understand the other through domestication. If we want to understand the other, we should refrain from domesticating her, since through domestication the other becomes something that she was not from the start. In this sense the transformative power of the image *seemingly* poses a problem for the understanding of the other. The documentary, because of its presupposed neutrality, introduces itself as a remedy for this problem. But this neutrality is in this case the wrong remedy. In his thinking Adorno explores a non-domesticating form of knowing the other, without falling back on the problematic notion of neutrality. In this moral philosophy, which has its origins in Kant's aesthetics and has influenced thinkers like Friedrich Nietzsche, Emmanuel Lévinas and Hannah Arendt, the moral is entwined with the epistemological (and the aesthetic).

In order for me to understand the other I have to comprehend how the other understands herself. My knowledge has to be able to stretch itself beyond the personal, beyond my projections and achieve what Hannah Arendt calls a *common* sense (and what Adorno calls "the transsubjective"[293]), through which we look upon the world, the same world as the other looks upon.[294] Michael D. Jackson writes: "In Hannah Arendt's view, judgement presupposes our belonging to a world that is shared by many. Unlike pure reason, judging does not consist in a silent Platonic dialogue between me and myself, but springs from and anticipates the presence of others."[295] This *hybrid* or *extended* concept of knowledge builds then upon, in Adorno's words, "an attitude towards reality distinct from the fixated antithesis of subject and object"[296]. In this sense Adorno's redefinition of the concept of mimesis and Arendt's

292 Our psychological tendency to project grants the camera a domesticating power, a power that adheres to the conception of knowledge as domestication.

293 Theodor Adorno 2004, p. 146.

294 Hannah Arendt, *Between Past and Future* (Penguin Books 2006), p. 219.

295 Michael D. Jackson, "Where Thought Belongs: An Anthropological Critique of the Project of Philosophy", in *Anthropological Theory*, Vol 9 (3), 2009, p. 237.

296 Theodor Adorno 2004, p. 145.

redefinition of Kantian aesthetics are a redefinition of the concepts of subjectivity, objectivity and knowledge (I will return to the discussion on Arendt's idea of the common sense in chapter 6). With this development in philosophy, the moral questions concerning the notion of the documentary that have established themselves as a counterweight to the predominantly *purely* epistemological theoretical discussion on representation are highlighted. Although neither Lévinas (whom I will return to later in this chapter), Adorno or Arendt directly address the subject of documentary film, their redefinition of epistemology serves well as a backdrop when discussing the specifically moral questions concerning documentary depiction. The documentary, when it works properly, does not domesticate the other, neither does it depict neutrally, how should we then describe what the documentary does?

Mimesis: Attending to the Other

As I showed in the preceding chapter, the expression of documentary film gains its significance in relation to the non-scripted ephemeral material which it mediates. Without directly discussing film, Adorno investigates the moral dimension of this practice of attending to the natural and social world without domesticating it. Hauke Brunkhorst describes Adorno's notion of mimesis as follows:

> [Mimesis] means an attitude to one's natural and social environment and to other people and other things that does not compel this otherness to be under one's own will. Mimesis in the sense Adorno is using the word here means to do justice to the otherness of the other, and to react adequately to the latter's own aptitudes and concerns. 'False projection' conversely means the projection of an image that does not fit with the otherness of the other, one's own egocentric image of the world. False projection makes everything its own image.[297]

297 Hauke Brunkhorst, *Adorno and Critical Theory*. (University of Wales Press 1999), p. 62.

The documentary easily lends itself to an exploitative attitude in which the director projects collective conceptions or subjective, personal views on the world. In this way the documentary becomes a projection, it fails in adhering to the other, and produces an image from preconceptions. On the other hand the notion of the documentary alludes to an attitude in which the author is sensitive towards features, gestures and material traces that cannot be constructed or directed, i.e. the documentary is, in its non-domesticating form, concerned with that which is beyond personal and collective *projections*. The camera can reveal things that the author of the image did not intend to reveal.[298] The material traces – gestures, expressions and features that end up on the record, with or without the intention of the author – are by no means neutral. They bear witness to a world outside the conceptions of the author. These traces are highly relevant, but their meaning is neither transparent nor fixated. They are emergent in the images, awaiting the attention of the viewer. The ambiguity of the recording opens up a possibility for new ways of making sense of our experience. This way of attending to the world that I relate to the visual record, is essentially what Theodor Adorno calls "mimetic comportment"[299].

Instead of seeing mimesis as a relation of likeness in which the artwork stands as a go-between between subject and object, Adorno advocates an understanding of mimesis as something beyond the *fixed* relation of subject-object. He advocates the Nietzschean idea of becoming and applies it to aesthetics.[300] For Adorno mimesis is a way in which human judgement and works of art *behave*, and behavior is not a fixed relation, but a dynamic process that enables the artwork to communicate. In emphasizing that which is in the becoming in the artwork, Adorno paves way for an aesthetics that include the processes of production. He writes:

> The aesthetic force of production is the same as that of productive labor and has the same teleology; and what may be called aesthetic relations of production – all that in which the productive force is embedded and

298 See Stanley Cavell, "What Photography Calls Thinking" in William Rothman (ed.), *Cavell on Film* (State of New York Press 2005), p. 131.

299 Theodor Adorno 2004, p. 145.

300 Ibid., p. 3.

> in which it is active – are sedimentations of imprintings of social relations of production. Art's double character as both autonomous and *fait social* is incessantly reproduced on the level of its autonomy.[301]

I relate this statement to what I have said so far about *the use* of the image. Here Adorno reminds us of the social and material aspects of depiction that often are hidden away in a certain realistic tradition. In the context of documentary film, what Adorno calls relations of production, can be understood as certain features of recording. The acknowledgement of the process involved in the making of art, points at the medium itself and the technique that is used. Film as a medium, the different technical operations, the apparatus and the different stages of production – pre-production, shooting and editing – provide certain conditions for depiction. Furthermore, the social event of making a documentary film, the element that the presence of the camera inevitably brings into a social situation, will also condition the resulting film-recording. These elements will, in one way or another, be present as traces in the resulting recording. In acknowledging these material and social aspects, Adorno expresses a certain understanding of the morality of depiction. This involves an ethics where the portrayer refrains from erasing the different material and social traces that reveal the mediating purpose of depiction.

According to Adorno the artwork mediates by participating in the historical world, it does not communicate an image of something beyond its boundaries.[302] When the director preserves or even highlights the material and social traces in the film recording, traces that bear witness of a world beyond the projections, intentions or conceptions of the author, he/she accepts that the cinematic space, just like the social and historical world, is not completely controllable or manoeuvrable. If we want to find a proper significance for the concept of the documentary it becomes clear in this context since the forte of the documentary film-movement has throughout its history been that it has been able to capture the contingent

301 Theodor Adorno 2004, p. 6.

302 Amresh Sinha, "Adorno on Mimesis in Aesthetic Theory". In Briel, Holger and Kramer, Andreas (eds.), *In Practice: Adorno, Critical Theory and Cultural Studies* (Lang 2000), p. 158.

features, the event as they unfold in front of the camera. The documentary thrives from the uncertainty that this unfolding brings to the resulting image.

The documentary feature of depiction that I describe above is hard to acknowledge, since it goes against the grain of a classical definition of the image as a way of fixating the perceived world. Here Adorno's redefinition of the concept of mimesis becomes helpful. Contrary to the Aristotelian line of thought, the aesthetics of Adorno is not based on a relation of likeness between the representation and the object that is represented.[303] In his reading of Adorno and Lacoue-Labarthe, Martin Jay notes that there is something contradictory or nonsensical in the notion of mimesis of Aristotle. The concept splits up: on the one hand mimesis refers to the imitation of nature, a duplication that is based on the idea of the sufficiency of nature. Another meaning of mimesis is the substitution (recreation, simulation) of nature, this entails a change or a refinement of that which already exists, a domestication and cultivation of nature. In the first case we can speak of reproduction and in the second case of production – *transformation*.[304] Adorno's running argument is that *Art* as we understand the concept, cannot be said to fit into the categorization that the Aristotelian concept of *mimesis* entails. The paradox in the classical mimetic understanding of art is revealed in the question; "how can making bring to appearance what is not the result of making; how can what according to its own concept is not true nevertheless be true?"[305]. That is, if the making of an artefact entails copying the natural object – making one more object that is *like* the natural object – then the difference between these two objects still remains due to the fact that the first object is natural and the second, produced object, is manufactured. If we see nature as the source of truthfulness (empiricism), art will always then be a distortion of that natural truth. If we on the other hand stick to the idea that art, by definition, is domestication of the natural (positivism), and that art's truthfulness lies in what we *add* to the natural, in how we transform it, then another question announces itself: how can art refer to the natural – the world as it exists despite our involvement in it – if we always, in order to understand it, have

303 Martin Jay, "Mimesis and Mimetology: Adorno and Lacoue-Labarthe" in Huhn, Tom and Lambert Zuidervaart (eds.) *The Semblance of Subjectivity* (The MIT Press 1997), p. 32-33, 37.

304 Martin Jay in Huhn, Tom and Lambert Zuidervaart (eds.) 1997, p. 39.

305 Theodor Adorno 2004, p.141.

to transform it into something else? Adorno sees the meaning of art to reside in the fact that it is able to transcend this paradox. He writes:

> Artworks are alive in that they speak in a fashion that is denied to natural objects and the subjects who make them. They speak by virtue of the communication of everything particular to them. Thus they come into contrast with the arbitrariness of what simply exists. Yet it is precisely as artifacts, as products of social labour, that they also communicate with the empirical experience that they reject and from which they draw their content.[306]

The point here is simply that the natural/artificial divide does not apply to art in a straightforward way. An aesthetics that is based upon the mimetical reference to the external object makes us forget that we are viewing a picture: "One paints a painting, not what it represents"[307]. In this sense there is nothing natural in art, art is by definition not nature, but at the same time arts subject matter is the natural and material world, and furthermore art is made of materials from the natural world, in this sense the artwork is embedded in our natural and historical world. As Adorno points out, realistic depiction has since the middle of the 19th century, under the influence of the positivistic scientific paradigm, aspired to erase all traces of production in the actual picture.[308] The picture is always something material and a result of production, of *manufacture*, despite the attempts of the realistic tradition to conceal these traces of labour in the picture. In this way realism should be held accountable for the concealment of the mediating task of the picture. What happens in this concealment is that we as viewers are not invited to remind ourselves of the event of the production of the picture, which inherently is part of the event that is being recorded. In this way in classical realist production of images, not only are the technical processes involved in,

306 Theodor Adorno 2004, p. 5.

307 Here Adorno paraphrases Schoenberg. Theodor Adorno, 2004, p. 5.

308 Ibid., p. 135.

for example, the shooting of a film concealed, but all the different social and mediating aspects of documentation are also left off screen. In this realist method, the moral aspects of depiction are easily lost.

The moral question is *not* primarily concerned with *what* art communicates, but with *how* it communicates, with how it reveals its relation to the world. My claim is that this is the moral standard by which we as viewers accept it as a true representation (and we as viewers are corruptible). Adorno sees the potential of art in its ability to express the otherness of the other in a way that brings forward that which is beyond our personal projections *and* collective culturally determined ideology[309]. This redefinition of the questions concerning art's *likeness* with the world is a starting point in clarifying the moral questions of documentary depiction.

The Many Makers of the Film

What I have established so far is that the classical mimetic understanding of representation is not sufficient when we want to grasp the moral aspects of depiction instead I propose that we have to recognize that our images as well as our perceptions are results of a negotiation, of a hybrid or extended form of knowledge. Many voices are part of this negotiation process. This is not a discussion between me and an image and an image and the world, but a field of tension between many distinguishable voices, perceptions and images. There are several subjects involved; the author, the subject in the film, and the viewer. In this chapter I will concentrate primarily on the role of the author, but it is important to note that the three different categories overlap. The boundary between the subject in the film, the author and the viewer is not a stable one. All these subjects are usually required in order to produce a film, they are all in their own ways *makers* of the film.

Laura U. Marks points out how the relation between the observer and the observed is not necessarily a one sided affair, although the documentary film conventionally

309 Theodor Adorno 2004, p. 5.

maintains such a hierarchy.[310] In her book *The Skin of the Film*, Marks examines alternative documentary strategies that aim at abolishing the hierarchical and exploitative tendencies within documentary film. When a film reflects upon its means of production, for example by showing the different obstacles and problems that filmmakers were faced with during the production, the viewer also gets a sense of "the films that could have been"[311]. With the help of such reflective strategies, as viewers we are reminded that the film is never a recording of a clearly defined or readymade situation, but a result of different choices, obstacles and possibilities. The camera not only records an event, it also creates an event. In his insightful article *Professional Vision*, Charles Goodwin investigated what he calls "coding schemes" (what I refer to later as conventions of documentary film language) in documentary recordings, he writes: "However the definitiveness provided by the coding scheme typically erases from subsequent documentation the cognitive and perceptual uncertainties that the students are grappling with, as well as the work practices within which they are embedded."[312] The reflective strategies within documentary film that Marks describe aim precisely at making the "cognitive and perceptual uncertainties" conspicuous, in order to shatter the illusion of a *definitive* or transparent representation of a readymade event.

When we understand how the subject-object dichotomy is put into play in documentary film and furthermore that this divide is something that is conventionally maintained, we also understand that there are alternatives to this hierarchical divide. In the next part I will look primarily at Trinh T. Minh-ha's understanding of the role of the subject, in a documentary film theory that is predominantly fixated on the notion of objectivity. Minh-ha is regarded as a pioneer of the experimental documentary film movement of the mid 80's. What was common for this movement was that the filmmakers often worked with a minimal budget and that they were from multicultural backgrounds. Like the postcolonial movement within cultural theory, it aimed at deconstructing the dominating film language in order

310 Laura U. Marks, *The Skin of the Film: Intercultural Cinema, Embodiment, and the Senses* (Duke University Press 2000), p. 192-193.

311 Ibid., p. 65.

312 Here Goodwin writes about certain schemes and practices that are used in making archeological maps. The point he makes is applicable to the practice of documentation in general. Charles Goodwin, "Professional Vision", in *American Anthroplogist*, 96 (3), 1994, p. 612. <http://www.sscnet.ucla.edu/clic/cgoodwin/94prof_vis.pdf>

to give room for new expressions and narratives that circled around the problems of living in-between two or several cultural identities.[313] The so called intercultural film movement reacted against a double form of colonialism; partly against the discourse of the dominating culture and partly against the conception of a shared homogenous minority culture.[314] This did not mean a privileging of the subjective on the expense of the objective. It was an attempt to redefine this dichotomy.

Here, it is important to note that Minh-ha and the intercultural film-movement is part of a long legacy of critical voices within documentary and experimental film. There is an interface between the intercultural film movement of the 80's and 90's and a former critical tradition within the anthropological documentary film. Diane Scheinman regards, among others, Jean Rouch's film *Les Mâitres Fous*[315] as an early example of a critical questioning of the anthropological film tradition in which the perspectives of Western scientists always define the culture explored.[316] In the same way as Bakhtin regards Dostoyevsky as an example of dialectic authorship in which several voices and dialects are given room without being subjugated by the narrator's voice, Rouch has, according to Scheinman, questioned the privilege of the anthropologist to speak on behalf of others.[317] For Rouch, the presence of the camera was never neutral. Rouch acknowledged the way in which the camera transforms a situation, he understood that the documentary film set is a social event that is not the same as the situation would be without the presence of the camera and the venture of recording an event. Instead of maintaining the power hierarchy between observer and observed, that usually is present in traditional anthropological film, Rouch tried to create a space for several voices or perspectives in his films, without a clear hierarchy, i. e. without singling out a privileged voice. In this way Rouch wanted to create a shared anthropology, with several observers and several objects of observation – the question 'who is examining whom?' was

313 Laura U. Marks 2000, p. 2-5.

314 Ibid., p. 65.

315 *Les Mâitres Fous*, France 1954.

316 Diane Scheinman, "The Dialogic Imagination of Jean Rouch: Covert Conversations in Les Maîtres Fous", in Barry Keith Grant and Jeanette Sloniowsky (eds.), *Documenting the Documentary: Close Readings of Documentary Film and Video*. Wayne State University Press 1998, p. 188.

317 Diane Scheinman, in Barry Keith Grant and Jeanette Sloniowsky (eds.), 1998, p. 202.

problematized. These strategies aim at accomplishing a reflective form of documentary film.

During the 1960's Rouch pointed out that by this time there had not been one single sub-Saharan African full-length feature film produced (i. e., a film produced and directed etc. by Africans, in an African language). 65 years after the birth of film, the production of filmic representations of Africa was still solely a privilege for Westerners.[318] Despite the obvious cultural differences between Rouch as a Frenchman and his African subjects, Rouch saw it as his task to make films that Africans accepted as representations of themselves. He describes how he arranged screenings of his films for the people who were the subjects of the film. Through their reactions he could interpret whether he had succeeded.[319] For him a successful film was capable of showing *the particularity of a certain event*. He understood that this was achievable when he set aside generic conventions of film and anthropological theories and became present in the actual event, with the help of the film camera.[320] For Rouch the success of an anthropologic documentary was directly dependent on the anthropologist's openness before a certain group of people and his/her participation in a certain situation. He writes: "Knowledge is no longer a stolen secret, devoured in the Western temples of knowledge; it is the result of an endless quest where anthropologists and those whom they study meet on a path that some of us now call "shared anthropology"".[321]

Another comparable example here is Claude Lanzmann's film *Shoah*[322]. It is an attempt to describe the holocaust through several different perspectives and narratives – that which somebody has seen and the way in which somebody saw, and the tension between these. Lanzmann does not see it as his task to investigate the actual historical events or factual

318 Jean Rouch, *Ciné-Ethnography*. University of Minnesota Press 2003, p. 47.

319 Elisabeth Edwards makes a very interesting observation concerning the photographs that were taken during the first anthropological expedition that used a camera for motion pictures – the Cambridge expedition to the Torres Strait in 1898. This early expedition already included the practice of showing their photographs to the locals as a part of their anthropological fieldwork. So the method of Rouch was preceded by earlier anthropological expeditions. Edwards writes about the expedition: "This encompasses not only the making of photographs but the *considered showing* of photographs, not as ephemeral illustration, but as central to the Expedition's positioning of itself with the Islanders during fieldwork and with the scientific community on its return." Elizabeth Edwards, "Performing science: still photography and the Torres Strait Expedition", in Anita Herle and Sandra Rouse (eds.): *Cambridge and the Torres Strait – Centenary Essays on the 1898 Anthropological Expedition* (Cambridge University Press 1998), p. 106.

320 Jean Rouch 2003, p. 99-100.

321 Ibid., p. 101.

322 *Shoah*, France 1985.

history. Instead he wants to show how distinctions, for example between the expressions "train" and "special train", can express considerable gaps between different experiences. These differences in the details bear witness to the positions and experiences of the different subjects in the film.[323] For Lanzmann the documentary is not a registration of a certain event, since the past cannot be authentically present in the film except through traces and the traces of traces that certain details reveal.[324] What Rouch, Lanzmann and Minh-ha, among others within a certain documentary film-movement bring to the table is comparable to the redefinition of epistemology that starts with Kant and is later picked up by Nietzsche, Levinas, Arendt and Adorno. These movements aim at redefining a problematic positivistic understanding of knowledge.

When this positivistic observational mode is put into play in anthropological documentation it invites a domesticating and rationalizing scientific gaze that disregards the self-understanding and the concerns of the other. Consider the following quote by Charles Hercules Read from the article *Photography for Anthropologists*, by M. V. Portman that was published in 1896:

> The best plan seems to be to devote as much time as possible to the photographic camera, or to making careful drawings. By these means the traveler is dealing with facts about which there can be no question, and the record thus obtained may be elucidated by subsequent inquirers on the same spot, while the timid answers of natives to questions propounded through the medium of a native interpreter can be but rarely relied upon, and are more apt to produce confusion than to be a benefit to comparative anthropology.[325]

323 Ilona Reiners, *Taiteen Muisti* (The Memory of Art). Tutkijaliitto 2001, p. 216-217.

324 Ibid., p. 211.

325 Charles Hercules Read as quoted in M. V. Portman, "Photography for Anthropologists". In The Journal of the Anthropological Institute of Great Britain and Ireland, vol. 25, 1896, p. 76.

The quote above exemplifies the positivistic and classical form of the documentary, an observational mode that is put into play in order to unify all perceptions of the other so that an compartmentalized, categorical and fixating language of representation is achieved. This is understandable, because, as I have pointed out in chapter 3, science requires a form that orders our perceptions into a rationalized encyclopedic order. But the quote above also speaks of how the observational mode of positivism, when it is turned on another human being, caters to something else, something sinister. In this quote the visual record serves as the reliable source, while the oral testimonies of the natives (who are the subjects of the anthropological research) are considered unreliable. The photographic picture is regarded as not being prone to the same potential distortions and misunderstandings as the answers of the natives in their native languages. Read, who was among other things elected as President for the Anthropological Institute of Britain and Ireland in 1899, expresses a near xenophobic attitude disguised as a scientifically sound method. When the object of examination is another human being this logo- and ocularcentric attitude and the trust in the camera becomes a moral problem. The natives are described by the means of a technological and visual language that is foreign to them. The anthropologist uses a means of expression that the subjects of the inquiry do not master themselves. In this way the hierarchy between subject and object/observer and observed is established.

This is the tendency that Rouch criticizes within anthropology. In the hands of a positivist anthropologist the camera becomes a tool of domestication and colonization. As Claude Lévi-Strauss puts it: "Anthropology is not a dispassionate science like astronomy, which springs from the contemplation of things at a distance."[326] Rouch takes this idea one radical step further by showing that the whole premise of positivist science – that there is a clear boundary between the observer (passionate or dispassionate) and the observed – is eradicated when our discipline is anthropology.

If we now object and think that this hierarchy between observer and observed is necessarily established by the presence and use of the camera, that making a documentary

326 Claude Levi-Strauss, "Anthropology: Its Achievements and Future", in *Current Anthropology*, Vol. 7, No 2 (April 1966), p. 126.

by definition means to domesticate – to make an incomprehensible, *other* world, into a rationalized, ordered and fixed image – we condone these kinds of documentary practices. My aim in what follows is to show that this is not necessary. When we want to understand how the documentary image shows us the world, we have to understand that it does not necessarily strive toward neutrality or transparency. Neither does it necessarily show us the world through domesticating it. The dichotomy of knowledge through neutral observation *or* rationalization and domestication, although this is the generic model for how philosophy describes the dynamics of knowledge, does not apply here. This is one further reason for why it is important to find an understanding of the visual record and the documentary that provides an alternative role for this kind of image. I will continue by investigating the reflective documentary strategies, as forms that permit us to attend to the other.

Trinh T. Minh-ha: Toward a Hybrid Point of View

> A conversation of 'us' with 'us' about 'them' is a conversation in which 'them' is silenced. [...] Anthropology is finally better defined as 'gossip' (we speak together about others) than as 'conversation' (we discuss a question).[327]
>
> I do not intend to speak about
> Just speak near by[328]

Trinh T. Minh-ha's first film *Reassemblage*[329] came about after Minh-ha had lived in Senegal for 3 years, teaching music at the Institut National des Arts in Dakar.[330] Her aim with the film was to show what her experiences in Senegal had taught her, without falling back on an

327 Trinh T. Minh-ha, *Woman, Native, Other*. Indiana University Press 1989, p. 67-68.

328 Line from the manuscript for the film *Reassemblage*, in Trinh T. Minh-ha, *Framer Framed*. Routledge 1992, p. 96.

329 *Reassemblage,* Senegal 1982.

330 Trinh T. Minh-ha 1992, p. 112.

anthropological tendency to define a culture as a unified objective entity. She describes this aim: "What seems most important to me was to expose the transformations that occurred with the attempt to materialize on film and between the frames the impossible experience of "what" constituted Senegalese cultures."[331] By *exposing* "the attempt" of transforming experience into film, Minh-ha criticizes the way in which filmmakers presuppose that they have to present us with a readymade picture of, for example Senegalese culture. She is not critical of the transformative qualities of film *per se*, but she is wary of how this transformation easily turns into a question of power.

The film begins with the line: "Scarcely twenty years were enough to make two billion people define themselves as underdeveloped."[332] During the mid-80's, this was a common Western perspective on Africa. Africa was consequently presented as the underdeveloped continent in news-broadcasts, reportages and documentary films. What Minh-ha points out is that this projection on a whole continent, also affects the Africans' image of themselves. The representation of Africa as the underdeveloped continent becomes a tool of power that transforms. This is the outset of the film, but it is hard to describe the rest of it as a narrative with a definite end. The structure of the film is fragmented and non-narrative. The film proceeds with different scenes of village life, we see people in their daily practices, in work and leisure, we see spaces and details of landscape and architecture, in this sense it consists of the same elements as an traditional anthropological documentary film, but these elements are not parts of a unifying picture or a coherent narrative. The sum of the scenes are more like the opposite, like a deconstruction of a positivist anthropological documentary film. The deconstruction reaches even the synchronicity of sound and image that is common for most cinematic representations. We do not hear the sound of the actual film-recording that we see, but different recorded sound-fragments (Minh-ha's poetic commentary, sound-recordings of background noise, dialogues in local tongues), as if recorded sounds and recorded images were disjoined.

331 Ibid., p. 113.
332 Ibid., p. 96.

Already the title *Reassemblage* (reassembly) suggests that the film will reorganize something, in this case our pre-conceptions of Africa, but also our pre-conceptions of documentary film-language. *Reassemblage* is an attempt to make a documentary from a perspective from which the author refrains from defining the meaning of what is seen. She made several conscious choices in order to break the domesticating conventions of documentary film. She wrote the manuscript during the shooting and editing of the film (i.e. not before, but during and after the recording of the material). Her intention was not to depict the preconceived, to make her preconceptions into recorded images. Here is an aspect that I believe is crucial for the concept of the documentary. How things unfold in a lived-life cannot be predetermined. The strength of the documentary relies partly on this ability to present us with the uncertainty of what the outcome will be in a situation where the camera records an ongoing, non-scripted, event. In this sense it becomes problematic to talk about Minh-has "intentions" in the case of *Reassemblage*, since the concept of intention is used ordinarily to mean a presupposition. In Minh-has case the chronology of intention-manuscript-recording-editing-film, is not linear. The process involves uncertainty, the acceptance of not knowing what will come next. Instead of accepting and reproducing predetermined definitions of the alien culture, the question 'how should this be represented?', is made visible in the actual film. The film aims at enabling the viewer to reflect upon different ways of seeing an alien culture – if something is alien it is absurd to argue that one knows how it should be represented, or as Phil Hutchinson puts it: "Before one imagines that one understands a culture better than its inhabitants do, one ought to be confident that one understands it at least as well as its inhabitants do".[333] In this way the film is part of a negotiation about how the life in a village in Senegal could be represented, it is not the end product of such a negotiation.

In order to achieve this uncertainty, Minh-ha uses several unconventional filmic solutions. She arranges sequences so that they consist of several shots of a Senegalese woman, taken from different perspectives. One perspective concentrates on her breasts, another on her skin, a third on her eyes etc. In this contrasting of different looks the viewer is encouraged to reflect upon

333 Phil Hutchinson, Rupert Read and Wes Sharrock, *There Is No Such Thing as a Social Science: In Defence of Peter Winch*. Ashgate 2008, p. 131.

different possible ways of seeing a person. This is not about choosing one correct look, but an affirmation of the many different looks of the subject. In the film she also uses several takes of the same shot. The viewer sees a repetition of the same shot with slight variations. We do not only see the perfect shot, but also the incomplete and halting ones. In addition she uses intentionally jerky panning shots, where the irregular movement of the camera reminds us that we are looking through a rectangular screen – a frame. These methods could be seen as technical shortcomings, but the use of unconventional methods have a context. The jerky panning shot is a trace of the bodily movement of Minh-ha (what she calls "body writing"[334]) – it reminds us of the embodied presence of the author, the framer is framed. The same idea lies behind the use of several takes of the same shot. She writes: "Its [the camera's] erratic and unassuming moves materialize those of the filming subject caught in a situation of trial, where the desire to capture on celluloid grows in a state of non-knowingness and with the understanding that no reality can be "captured" without trans-forming."[335]. By refraining from picking out, or emphasizing one shot of a scene, Minh-ha turns our attention to the number of possibilities that film, even documentary film, can utilize in order to contest the streamlined ideal of film language that conceals the bodily presence of the author from the attention of the viewer. These techniques are used to make visible the 'filming subject' among the other subjects, in the film. Moore importantly, they are used in order to make conspicuous the transformative power of film, the potential it carries in transforming our perceptions.

In an interview with Tina Spangler, Minh-ha describes her filmmaking as a process where method and technique are politicized. The choice of camera objective, choices in the editing process or the choice of camera angle are all aspects of the machinery that affect how something is depicted. In her work Minh-ha reveals how to work within a certain predetermined visual language without reflecting upon how this language determines the expression, potentially results in the reproduction of certain collective conceptions. The breach with convention is therefore a strategy that aims at gaining thorough knowledge of the implications (moral, political) of these conventions. Scott MacDonald points out in

334 Trinh T. Minh-ha 1992, p. 115.

335 Ibid., p. 115.

an Interview with Minh-ha: "The subject stays in its world and you try to figure out what your relationship to it is. It's exactly the opposite of "taking a position": it's seeing what different positions reveal".[336] That is, it is not being unconventional for the sake of abolishing convention, but an attempt to deconstruct the conventions in order to distinguish what these rules, systems and structures entail. Here it is crucial to understand these implications correctly. Charles Goodwin writes: "It is not possible to work in some abstract world where the constitution of knowledge through a politics of representation has been magically overcome."[337] By deconstructing the conventions of film-language, Minh-ha does not try to step outside the politics of representation, she rather tries to find another position in relation to the conventions of film language, in this way she is still speaking within that same language. Abstraction or transcending will only result in formlessness, in incomprehensibility, and admittedly this is a risk for Minh-ha, but if we try to distinguish the forte of her practices, it resides in the attempt to make the common features of documentary-film language visible in the film, in order to scrutinize them. In this case breaking a convention within film-language is an act in relation to that convention, this act is *a way* (among others) of applying the rule, working against the grain of the rule. This is the way I believe that Minh-ha's project should be understood. To work against the grain of a certain rule, but still be clear about that one acts in relation to *that* rule, makes the rule in question conspicuous.

What is tangible in *Reassemblage* is how different looks bear witness to certain conceptions of, in this case, Africa. With the aid of the camera Minh-ha examines her own and consequently also others' conceptions of Africa. She does not position herself above the viewer by representing a fixed perspective. On the other hand she does not accept any given perspective. When she manages to reveal a certain perspective towards the other, she tries to clarify what this perspective can mean by reflecting upon both affirmative and critical readings of the picture. One of the audio tracks in *Reassemblage* includes Minh-ha's poetic commentary. On the track she reflects upon the choice of different objects in the sequences and the different camera perspectives. In some cases she puts a certain perspective in question – in a comment on the audio track she scrutinizes a sequence in the film. This sequence

336 Ibid., p. 115.

337 Charles Goodwin 1994, p. 607.

consists of a series of shots of women's breasts. In the voice-over she tries to figure out what impulses made her react, particularly on the breasts; "Filming in Africa means for many of us, colourful images, naked breast women, exotic dances and fearful rites. The unusual".[338] This comment could be understood as a self-critical note. She is surprised by the fact that even she herself possesses an exoticizing look. Here she strays from the conventional path of the documentary in which the viewer is excluded from taking part in the different choices and questions that the author tussles with. By being honest about that which is alien to her, she creates a critical space for the viewer. This is the space that enables or even encourages the viewer to use her own judgement in accepting or discarding the film as a *real* representation.

Minh-ha notes in a voice-over in the film: "One of the villagers is telling a story, another is playing music on his improvised lute, the ethnologist is sleeping next to his switched-on cassette recorder. He thinks he excludes personal values. He tries to believe so but how can he be a Fulani [the name that the natives use to signify their own people]? That's objectivity".[339] Neutrality in this context is not the opposite of domestication as some positivistically inclined anthropologists and scientists in general seem to believe, it is an integral part of the domesticating power of the record. Neutrality is one domesticating strategy among others, but it becomes a rhetoric force, when its *modus operandi* is to hide the power of transformation that it carries. The ethnologist that sleeps next to his switched-on cassette recorder seems oblivious to the fact that by recording a story told by the natives, he transforms it, he takes it from its original context. This is not an act of taking something from a certain context and making it neutral, it is taking something from a context of a culture, a lived life experience, and putting it into another context, the context of an anthropological record. Whether this leads to domestication, whether this act is immoral or not, differs for every case, it depends on what the record is used for and on how it is used, what it is made to signify. However, the failure to acknowledge the transformation that is at play poses a problem within itself. Simply put film, even documentary film, is always a kind of transformation or reassembly, film is not even conventionally a mimetic (in the Aristotelian sense) art-form because it reorganizes time, sound and image.

338 Trinh T. Minh-ha 1992, p. 98.

339 Ibid., p. 103.

The Colonializing View

Minh-ha does not solely criticize a certain convention within documentary film. What is at stake here is literally a moral difference. Behind her choices lies an awareness of the power and politics of representation. As Michael Azar points out in his book *Frihet, jämlikhet, brodermord* (Liberty, Equality, Fratricide) about France's colonial rule in Algeria, colonialism is dependent on the concept of representation. He writes:

> A fundamental meaning of the word colonialism or colonization is particularly organization, or arrangement (from lat. *Colere*, which means to cultivate or to design), with Valéry's terms we can speak about France (he speaks actually about Europe) as a "large factory; a factory in its actual significance, a transforming machine" that transforms other territories, social organizations and expressions into representations of France.[340]

The logic of a certain mimetic understanding of representation – to transform the natural into something cultural – is used in the project of colonialism: to transform the other into a representation that fits the domestic frame of reference. Colonialism is in this sense entwined with certain conventions within positivist anthropologic documentation. The anthropologist is interested in the exotic, the alien, in examining a culture without ever acknowledging it as an equal to one's own culture. If it were considered as equal to the "own" culture, then domestication would not be required. In her essay *The Crisis in Culture: Its Social and Political Significance*, Hannah Arendt acknowledges the concept of "culture" as *another* derivative of *colere*, she points out that for the Romans *colere* meant: "to cultivate, to dwell, to take care, to tend and preserve – and it relates primarily to the intercourse of man with nature in the sense of cultivating and tending nature until it becomes fit for human habitation. As such, it indicates an attitude of loving care and stands in sharp contrast to all efforts to subjugate

340 Michael Azar, *Frihet, jämlikhet, brodermord: Revolution och kolonialism hos Albert Camus och Frantz Fanon* (Liberty, Equality and Fratricide: Revolution and Colonialism in Albert Camus and Frantz Fanon). Symposion 2001, p 38. My translation.

nature to the domination of man."[341] The difference that is important here is that of on the one hand, "nature" conceived as alien, something that needs to be domesticated and colonized in order to be known *and*, on the other hand, "nature" as something that we share, that we tend to as the realm that is the home to us all. We could say that anthropology has historically moved between these two definitions of "nature", from positivism to what can be called shared anthropology.[342] But there is something within the concept of anthropology itself that gravitates toward the exploitative relation. This becomes clear in a certain use of the words ethnography and anthropology. In line with Lévi-Strauss and Minh-ha we could ask; 'why is a certain scientific perspective void of reciprocity?'. Levi-Strauss writes: "When it is practiced by members of the culture which it endeavours to study, anthropology loses its specific nature and becomes rather akin to archaeology, history, and philology. For anthropology is the science of culture as seen from the outside."[343]

If Anthropology is 'the science of nature of man' and it distinguishes itself from the practices of history and philology, then the concept of "nature", refers to something that is external to the anthropologist. What ends, other than a will to control by defining, can such a division serve? Colonialism entails a power structure in which everything is defined,

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341 Hannah Arendt, "The Crisis in Culture: Its Social and Political Significance", in *Between Past and Future*. Penguin Books 2006, p. 208.

342 Consider the following statement by Bronislaw Malinowski, as an illustration of this ambiguity: "Our considerations thus indicate that the goal of ethnographic field-work must be approached through three avenues:

1. *The organization of the tribe, and the anatomy of its culture* must be recorded in firm, clear outline. The method of *concrete, statistical documentation* is the means through which such an outline has to be given.

2. Within this frame, the *Imponderabilia of actual life*, and the *type of behavior* have to be filled in. They have to be collected through minute, detailed observations, in the form of some sort of ethnographic diary, made possible by close contact with native life.

3. A collection of ethnographic statements, characteristic narratives, typical utterances, items of folk-lore and magical formulate has to be as a *corpus inscriptionum*, as documents of native mentality.

These three lines of approach lead to the final goal, of which an Ethnographer should never lose sight. This goal is, briefly, to grasp the native's point of view, his relation to life, to realize *his* vision of *his* world. We have to study man, and we must study what concerns him most intimately, that is, the hold which life has on him. In each culture, the values are slightly different; people aspire after different aims, follow different impulses, yearn after a different form of happiness. In each culture, we find different institutions in which man pursues his life-interest, different customs by which he satisfies his aspirations, different codes of law and morality which reward his virtues or punish his defections. To study the institutions, customs, and codes or to study the behavior and mentality without the subjective desire of feeling by what these people live, of realizing the substance of their happiness – is, in my opinion, to miss the greatest reward which we can hope to obtain from the study of man." Bronislaw Malinowski, *Argonauts of the Western Pacific – An Account of Native Enterprise and Adventure in the Archipelagoes of Melanesian New Guinea* (Routledge & Kegan Paul Ltd. 1950), p. 24-25.

343 Claude Levi-Strauss, "Anthropology: Its Achievements and Future", in *Current Anthropology*, Vol. 7, No 2 (April 1966), p. 126.

within the frames of reference of the dominant culture. In order for colonialism to succeed it has to be made clear what (or who) should be defined as alien. This classification is dependent of a conception of identity where every divergence poses a problem.[344] Representations of the third world are in a way also representations of what we see as primitive, chaotic and exotic. In this way they are also self-images of the first world – an attempt to find oneself through the other. The problem here is that in alienating the other, we eradicate our uncertainties concerning the self. In denying our uncertainties we project them on the other, a classical psychological dynamic at play. These uncertainties can not be resolved by defining or fixating a factual and definable identity (as nationalists do).

The unifying and fixating tendency of positivism that has given us the camera, relates, in my view, to an unwillingness to accept the many voices, the hybridity of the self. Here hybridity should be understood as the opposite to the fixed, the unified or predetermined. When we understand that the concept of " the other" resists categorization and fixation, we are also reminded of the fact that our selves rarely show themselves as fixed or unified. This is where the moral and the epistemological become contrary to one other. As Lévinas points out in an interview with Philippe Nemo, "the other" stands beyond the definable, it does not consist of fixed qualities or discursive knowledge. He writes:

> The face is significant, and signification without context. I mean that the Other, in the rectitude of his face, is not a character within a context. Ordinarily one is a "character": a professor at the Sorbonne, a Supreme Court justice, son of so-and-so, everything that is in one's passport, the manner of dressing, of presenting oneself. And all signification in the usual sense of the term is relative to such a context: the meaning of something is in its relation to another thing. Here, to the contrary, the face is meaning all by itself. You are you. In this sense one can say that the face is not "seen". It cannot become a content, which your thought would embrace; it is uncontainable, it leads you beyond. It is in this that the signification of the face makes it escape from being, as a correlate of a knowing. Vision, to the contrary, is a search for adequation; it is what par excellence absorbs being. But the relation of the face is straightaway ethical.[345]

344 Compare, Trinh T. Minh-ha, *When the Moon Waxes Red – Representation, Gender and Cultural Politics*. Routledge 1991, p. 73.

345 Emmanuel Levinas, *Ethics and Infinity*. Duquesne University Press 1985, p.86-87.

This passage can be interpreted as a disassociation from depiction, and consequently, in line with the iconoclastic tradition that condemns both representations and sense perception. But when we read the passage carefully it becomes clear that it deals with the temptation of *giving* a significance to every visual sign, in order to gain control over the visual. This desire to domesticate the visual in order to fixate it, is what Minh-ha reacts against in her texts and films. In *Reassemblage* the narrator calls this "the habit of imposing a meaning on every single sign".[346] Her strategy is to pay attention to something without *imposing* meanings on the visual, without fixating its meaning. This reflexive method reveals that the material creates a tension in relation to personal conceptions. The difference that it is important to notice here is two different ways to deal with this tension:

> 1: To domesticate the other so that it becomes a fixed content, an object of knowledge for the subject, and thus to dissolve the tension.
>
> 2: To preserve the tension, and allow hybridity in depiction.

When does transformation become domestication? To answer this question we need to keep in mind the different possibilities given by these two strategies. The first one in which the tension is dissolved is prone to result in domestication. The second one correlates with the tension between thinking and perceiving that I outlined in chapter 4. In acknowledging the different forces at play within ourselves, we also invite, and are less hesitant to accept, the uncertainties that the addressing by others brings in to the picture.

In *Reassemblage*, Minh-ha reveals the (social/material) traces of the process that has produced the expression, in order to preserve the otherness of the object in the film. Minh-ha's way of speaking close by, instead of speaking about and Lévinas' notion of the subtle human face, point towards the challenge in capturing the specific, the particular or the non-reproducible – the recording of the facial expressions and the gestures of the body. It is

346 Trinh T. Minh-ha 1992, p. 96.

this feature that Minh-ha tries to revitalize by going against the grain of a more and more streamlined and fixed documentary form.

The I of the Documentary and the Hybridity of the Self

We inherently possess different voices and different ways of seeing. Film is for Minh a means of exploring these voices and gazes. In this way there is an element of autobiography in her films. They explore what her gazes reveal about her social self.[347] Minh-ha compares film with poetry where the self is not personified. She writes:

> It's amusing that the feedback I often get from my relatives or close friends of my book of poems tends to be something like: "We are far from suspecting that you could be what you are in your poetry!" For them all the feelings and situations depicted in poetry are *Personally* true. They immediately associate you with the "I" who speaks your poetry and assume it's "real", which is not wrong, but it is not accurate either. In poetical language, there is no "I" that just stands for *myself*. The "I" is there; it has to be there as the site where all other "I's" can enter and cut across one another.[348]

Similarly, the camera-perspective is not only the perspective of a given author, it is also the perspective through which every viewer of the film is invited to see the world. In this sense the perspective of the camera does not determine how we should view something, we do not see with the eyes of the author of the film, but through the gaze of the camera. In this way the recording cannot by itself be biographical. It cannot imitate the psychological mood or the world view of the author. In his essay *"Getting to know you …"* Bill Nichols points out the discrepancy between seeing something in the light of this or that (having a view or an image

347 Trinh T. Minh-ha 1992, p. 114, 117 and 119.
348 Ibid., p. 121-122.

of something) and the fact that something looks like this or that. According to Nichols, theories and world views are implicit in what we see. "Seeing" involves our experience, conception, memory, and judgement. How I see something reveals something about who I am. But a picture cannot carry with it a theory of how it is to be viewed, a concept cannot be illustrated.[349] The perspective of the camera is special since it both enables us to see an image and at the same time it invites us to consider this image as if it would be a part of our phenomenal world, a perception. The camera is able to present us with something that could be characterized as a "common sense".[350] We know that the camera is supposed to present a perspective that can be accepted as a perception, not only for me, but for many viewers. Hannah Arendt writes:

> The ability to see things not only from one's own point of view but in the perspective of all those who happen to be present […] The difference between this judging insight and speculative thought lies in that the former has its roots in what we usually call common sense, which the latter constantly transcends. Common sense […] discloses to us the nature of the world insofar as it is a common world; we owe to it the fact that our strictly private and "subjective" five senses and their sensory data can adjust themselves to a nonsubjective and "objective" world which we have in common and share with others. Judging is one, if not the most, important activity in which this sharing-the-world-with-others comes to pass.[351]

Note how Arendt redefines the subjective-objective dichotomy. Objectivity in this Kantian sense, does not stand in contrast to judgement, but to the personal, to our "private feelings"[352].

349 Bill Nichols, "'Getting to know you . . .': Knowledge, Power and the Body", in Renov, Michael (ed.) *Theorizing Documentary*. Routledge 1993, p. 181.

350 Adorno makes similar statements about art in general. He writes: "Art judges exclusively by abstaining from judgment: this is the defense of naturalism", and "Expression approaches the transsubjective; it is the form of knowledge that – having preceded the polarity of subject and object – does not recognize this polarity as definitive.", Theodor Adorno 2004, p. 164 and 146.

351 Hannah Arendt 2006, p. 218.

352 Ibid., p. 219.

By "judgement" Arendt refers to the ability to use one's senses as if they were common to everyone present. This idea is important because it reveals in which sense the discussion about the author's role in documentary film gets misunderstood if we conceive "objective" to mean a neutral view without judgement. We can conclude that the perspective of the camera is neither a view from nowhere, nor is it somebody's subjective, i.e. personal, perception of the world. The idea of a subjective outlook gives room for an extreme relativism where all utterances and expressions are true in the same sense. In this way, subjectivism is based on the same structure and it poses the same dilemma as the positivist notion of a view from nowhere, as it promotes the visual to something that exists *per se*, without a subject with her judgement, her self and her corporeal body. Judgement is, in this Arendtian sense, the faculty that either succeeds or fails to accommodate a common understanding of the world. In this way a common understanding requires the reflexive capacity of judgement: hybridity.

Hybridity does not entail a classical form of moral relativism. Accepting the fact that the self consists of several different voices, looks and perspectives does not necessarily undermine its accountability. On the contrary, in the contrasting of looks and perspectives, the urgency of the moral questions become clearer. Taneli Kukkonen writes:

> The dialogue is inter- as well as intrapersonal: by recognizing the tug and pull of various forces within ourselves, we become better able to appreciate the way in which such forces are at work in the outside world and *vice versa*. The point of artistic endeavour, in particular, is to afford souls insight into themselves and each other.[353]

The "tug and pull" within ourselves is what moral concerns essentially are about. There is no answer-book that we can consult in order to decide which force we should go with in these kinds of situations. In this way there is no image or identity that can function as a moral backbone for us, the judgement we need in order to make decisions has to reside in ourselves. The image's transformative power aids us in cultivating this faculty.

353 Taneli Kukkonen, "Truth in the Making, Or, can we mean what we say?", in *Finnish Art Review* 3, 2005, p. 8-12.

6. Sharing a View

If one wants to talk about 'priority' at all here, I should regard it as less misleading to say that men's understanding of each other is more fundamental than (and in that sense prior to) their understanding of the world.[354]

Peter Winch

"Lars von Trier describes his films as a walk with a friend in an unfamiliar forest: 'if one has somebody to walk hand in hand with, one willingly sees what one has never seen before'".[355]

Lars von Trier

354 Peter Winch, *Ethics and Action* (Routledge & Kegan Paul 1972), p. 3.

355 Nils Thorsen and Lars von Trier as quoted in Philip Teir, "Den sista konstnären" (the last artist), *Hufvudstadsbladet*, 2 July 2013, p. 18.

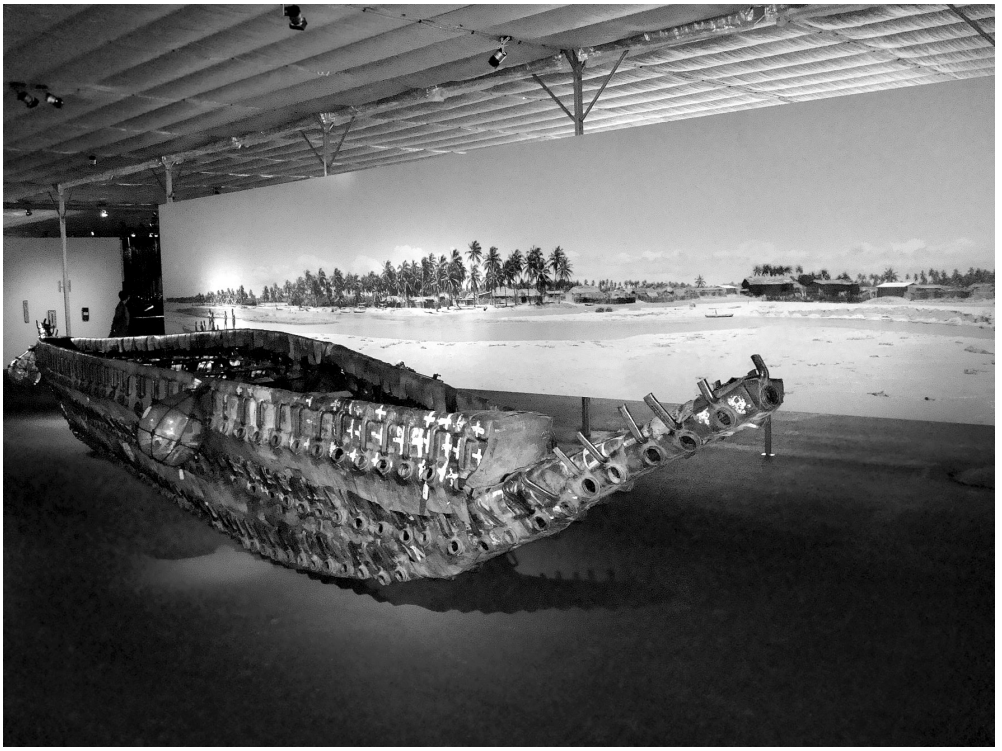
In the installation *Dream* (image above[356]), by Beninian artist Romuald Hazoumè we encounter a ghost ship. It is a metal vessel constructed of petrol canisters that are commonly used as material for various constructions in third world countries. The vessel stands in front of a panoramic image of a desolate beach that, for Western sensibilities, perhaps portrays something exotic, calm and sublime. The contrast between the rugged and clumsy vessel and the beach-landscape tells a narrative of the circumstances of many African emigrants, who risk their lives in dodgy boats and ships in order to escape the social and economical hardships of the third world. They sacrifice everything for a dream that is both dangerous and unrealistic. The vessel in the piece is full of holes (for the lids in the canisters), it is an antithesis of a safe vessel.

The viewer senses a corporeal and a dangerous object in relation to the image of the beach. In this juxtaposition we comprehend more than mere facts about the African emigrants. In a sense we usually know these facts already, to give one example of such facts: "The Mediterranean is one of the busiest irregular mixed migration routes into Europe through Greece, Italy and Malta. Last year [2011] was a record in terms of the number of arrivals in Europe via the Mediterranean, with more than 58,000 people making the crossing. According to UNHCR estimates, more than 1,500 people drowned or went missing while attempting to cross the Mediterranean to reach Europe in 2011."[357] These facts are communicated to us via different media, but Hazoumè's installation appeals to something other than facts. It communicates an understanding of the experiences that are present in the pressing social circumstances of the third world. A text on the floor next to the vessel states: "Damned if they leave and damned if they stay: better, at least to be gone and be doomed in the boat of their dreams". *Dream* leaves a trace in my understanding of a certain mindset, certain material and emotional limitations, within certain experiences. These limitations are made conspicuous by the presence of certain objects.

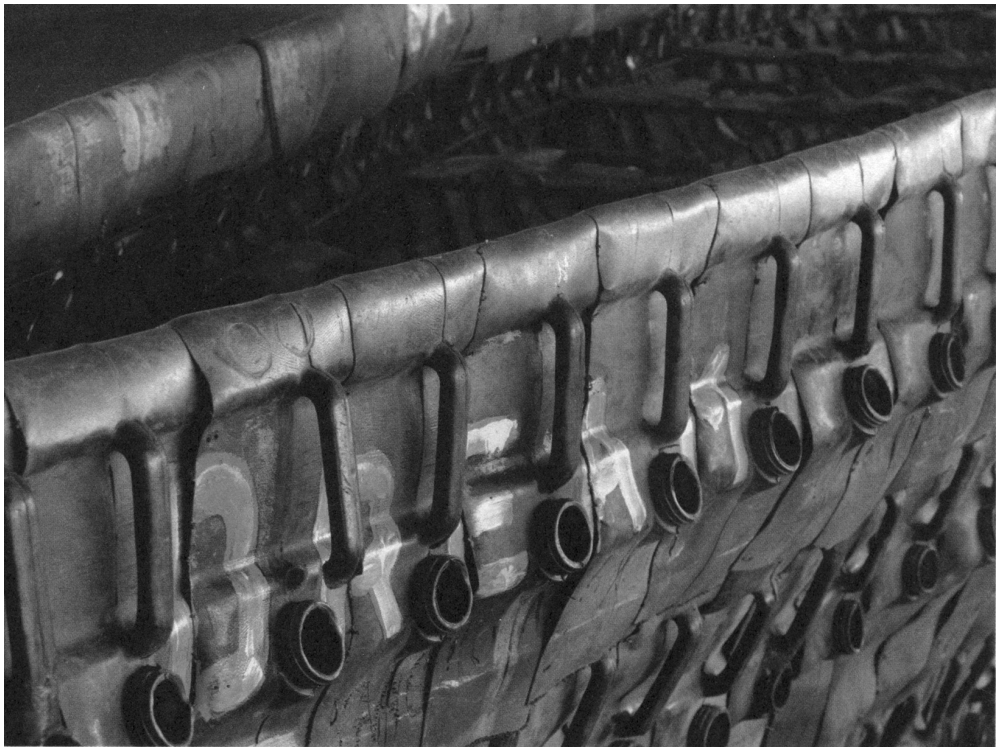
My encounter with the installation had a severe effect on me. Initially it awakened

356 Romuald Hazoumé, Dream, 2007, mixed media installation. Photo Romuald Hazoumé. Collection Museumslandschaft Hessen Kassel - Neue Galerie Copyright Artist. Image Courtesy October Gallery, London.

357 The UN Refugee Agency: <http://www.unhcr.org/4ff2c63e9.html>



questions concerning distant sufferings – the challenge of communicating suffering, uncertainty and pain via images. I would claim that we can understand at least some aspects of the experience of the refugee's life-world through this artwork. For example, I felt strongly that I understood the limitations of the refugee experience, the limitations that their lives have in a comparison with my life and perhaps vice versa. I would not claim, although the installation is a representational object, that I only *imagined* what the refugees experience is like. Was this only imagination? Instead I would propose that the installation invited me to share some aspects of refugee experience. For the moment that I am affected by the artwork I do not simply view a representation, I do feel a sense of sharing an experience. Here our words start to play tricks on us. My experience is not *the same* experience as the one the artwork portrays. My experience is about visiting an exhibition space where I am confronted with an art object, the refugees experience is about sitting in a unsafe vessel that transports him/her over the Adriatic sea – then what do I mean when I claim that I do share



an experience, that I do not simply imagine what it would be like? This is the key question for this last chapter.

The thoughts and questions that are provoked in me by Hazoumè's installation lead to general philosophical questions concerning the relationship between image and experience. As related to the two previous chapters, my point of entry into this discussion is that the primary moral question regarding images is concerned, not only with *what* is shown in images, but with *how* images communicate, how they reveal their relation to the historical and material world. In this sense images are moral agents. Their agency resides in that images are able to change and transform my perception and understanding of the world. In Hazoumè's installation I am confronted with certain features of the immigrants' experience that I perhaps know about on a factual level, but I get the sense of knowing something further, of sharing something or being offered an understanding of something, an understanding that I perhaps have not had before. The images role here is not simply to

represent something, it has an effect on me, and thus becomes an agent.

If we address this question of communicating an experience, as a question of representation, we will end up in the conundrum concerning what it is to have *the same* experience. The problem that I want to get at here resides in a conception in which *content* of an image is comparable with a *content* of experience. As I have shown, the traditional mimetic understanding of art builds on such a reduction. And, as I will point out, skepticism towards the ability of art – iconoclasm – builds on a negation of this same mimetic understanding. In a nutshell, iconoclasm points out that there is a discrepancy between image and experience and therefore states that art is deceptive by definition. What I claim is that both the mimetic understanding of art and the negation of this mimetic understanding, will leave us with an insufficient understanding of the concept of image. The whole comparison between image and experience, that for example the medieval notion of *species*, Locke's conception of experience as an image inside a Camera Obscura, and Plato's iconoclasm, largely build upon, is misguided.

What I will show in what follows is that, whereas we can talk of content of images, we cannot, in the same sense, talk of a content of our experience. My experience is not a content for me, I do not have the privilege of taking a distanced observational perspective towards my own experience, therefore my experience cannot be, strictly speaking, *a content* for anybody else. When we talk of images they may have a content in the same way for me, as for a person standing next to me. In this sense images grant us a distanced observational perspective, and therefore images can be said to have a content. This distinction is important to understand when we want to dissolve some of the uncertainties concerning our conceptions of knowledge, communication and images, since it also shows that experience, strictly speaking, is not representable in any straightforward sense. This is not an iconoclastic conclusion. I do not claim that we should not trust images, but rather that we should neither see the likeness between image and experience as a criteria for truthfulness, nor see the discrepancy between image and experience as a criteria for deceptiveness. In order to make this discussion clearer I will proceed by scrutinizing the concept of iconoclasm.

The Problem of Iconoclasm

The classical mimetic theory of images explains the relation between experience and image as a relation of likeness. According to this theory, art signifies because it resembles an object in the world, to perceive an image is then an experience *like* perceiving the actual object. This also entails a classical moral problem concerning art. Plato writes in *The Republic*:

> The art of representation, then, is a long way from reality; and apparently the reason why there is nothing it cannot reproduce is that it grasps only a small part of any object, and that only an image. Your painter, for example, will paint us a shoemaker, a carpenter, or other worksman, without understanding any of their crafts; and yet, if he were a good painter, he might deceive a child or a simple-minded person into thinking his picture was a real carpenter, if he showed it them at a distance.[358]

In this way Plato thinks that the artist can deceive the viewer by making mere likenesses of, for example a carpenter. The artist's knowledge, due to his/her focus on visual likeness, lacks any proper understanding of the carpenter's craft. If images are to escape this Platonic iconoclasm, we have to acknowledge that the image is not only a reflection of the world, that it is also a part of the world. Images alter our perception, a certain image can get me to view the world in a different light. In this sense images are not just semblances of real objects. But here it becomes problematic to explain how experience and image interact. When my understanding is changed by an image, what does this mean? When we conceive images as agents, as witnesses of the realities of life, we have to enter a discourse in which "likeness" stands for more than a graphic (visual) likeness between two objects (the image and the objects depicted). What I claim is that, as long as we are absorbed in this discourse of likeness we will not be able to address the moral questions concerning the relationship between the image and our experience.

358 Plato, *The Republic of Plato*, translated by Francis MacDonald Cornford (Oxford University Press 1955), p. 321.

Here it is important to understand that my objection to Plato is not concerned with the fact that he points out that images are potentially harmful for our understanding. Admittedly, images can be harmful, they can distort our understanding of the world. They can do so, not because of their ability (or inability) to resemble the objective world, but because of their agency, their ability to act within, and change our perception of this world. Iconoclasm, rightly, points out the potential harmfulness of image, but at least the simplified platonic iconoclasm tends to give a somewhat deceptive explanation for the source of this harmfulness. In order to make this clearer let us try to understand how images act upon us when they act harmfully.

One example that lets us in closer on the issue of iconoclasm is a certain change of heart that can be detected in Susan Sontag's writing on the morality of the image. In her collection of essays *On Photography* (1977) Sontag scrutinizes our contemporary cultural relationship with images. Her conclusion in the book is the idea of an ecology of images. She advocates the same kind of care towards images as we have in our relationship with the environment. As we commonly understand that different chemicals and toxins may disrupt the balance of our ecological system, Sontag claims that we should also be able to comprehend the negative effects of images on our conception of reality.[359] In *Regarding the Pain of Others* (2002), which turned out to be her last book, she has given up on this idea. Not only is it, according to Sontag, impossible to control in what contexts or in what quantities we encounter images of violence, suffering or injustices in our daily lives, it is also questionable whether such an effort is morally advisable. Certain unnerving or emotionally disturbing images that occupy the arts and the media bear witness to a world that is in itself off track. Should we then be protected from these kinds of images?[360] And if we are, do we not then lose touch with the realities of contemporary life? I think there is something illustrative in Sontag's change of heart concerning the morality of images. It is a shift from iconoclasm toward an acknowledgement of the fact that images, by themselves, do not carry a morally corruptive power, they get their morally harmful role within a context of communication.

359 Susan Sontag, *On Photography* (Penguin Books 2008), p. 180.

360 Susan Sontag, *Regarding the Pain of Others* (Hamish Hamilton 2003), p. 94.

In her later book Sontag analyses the morally pacifying role that we sometimes project on images: "People don't become inured to what they are shown […] because of the *quantity* of images dumped on them. It is passivity that dulls feeling."[361] Here, Sontag points out how the, in this case negative pacifying moral effect of images, is not dependent on the quantity of images, but on the agency of images; with what they do with our perception. The image conditions our way of understanding in a certain sense and one possible effect of this is that the conditioning may amount to passivity. We can become inured to violent images, at the same time this inuring is a dulling of our senses, something that demoralises us and severs the ties between our experience and the realities of the historical world. Sontag's statement resonates with Plato's iconoclasm in the sense that she points out how a possible negative effect of the image is passivity towards the events in the world. But she does not, like Plato, blame this passivity, this inuring, on the image. For Sontag this passivity is a consequence of us being forced to confront violent and unjust events, i.e. the passivity or the dulling of feelings that one can experience when confronted with an image of some atrocity is qualitatively the same effect that we are exposed to in direct experience, she writes: "Something becomes real – to those who are elsewhere, following it as 'news' – by being photographed. But a catastrophe that is experienced will often seem eerily like its representation"[362]. Here Sontag refers to certain reactions after 9/11. People who were witnessing the attack on the World Trade Center, described the experience as if they were watching a movie, they experienced it as unreal or surreal. Sontag points out the common psychological reaction of repression. We dispose of an ability to distance ourselves in distressing situations. I cannot here go further into the manifold psychological discussion on repression, but simply note that in this example there is a kind of similarity between repression and a certain influence that images can have on us. This connection is important when we try to understand iconoclasm, since this repression that images potentially enable, is what makes them potentially harmful.

On the other hand, Sontag writes: "Images cannot be more than an invitation to pay attention, to reflect, to learn".[363] Images cannot grant that we react or behave in a certain way

361 Ibid., p. 91.

362 Ibid., p. 19.

363 Ibid., p. 104.

towards suffering in the world. They sometimes invite us to react or even get us to act and try to rectify injustices, but their power stretches no further than to this invitation. We use images to inure, repress, disengage and as invitations to attend to, to engage with the world. In this respect iconoclasm is flawed, since, although it points out the morally harmful effect of repression, it does so by simply ignoring the beneficial uses of images.

When Plato claims that an image is harmful due to it not being able to portray the reality of for example what it entails to be a carpenter, he paves way for the classic form of iconoclasm in which the image is problematic because it harms or diminishes our understanding of the realities of our experienced life. Sontag alludes to an understanding in which the realities of our experienced life are themselves often harmful to us, in this case the blame is not on the image. On the contrary the image might, in cases of us having to face atrocities, grant us a distance that is necessary in order for us to be able to even start to grasp what is going on. This "distance" that we assign to the image follows both from the distance that our vision grants us and from the distance that our vision necessarily requires. We cannot see without distance, in this sense vision as a mode of perception is a different form of engagement than for example touching (when I touch my eye, I stop seeing and start feeling). Secondly vision gives room for observation, attention, judgement and inference. This, as I noted in chapter 1, is not a spatial distance. Because of this (double) feature of distance in vision, it is, as a mode of perception, both criticized for the disengagement that it in a certain sense requires, and welcomed for the space that it grants us. Sontag writes: "Images have been reproached for being a way of watching suffering at a distance, as if there were some other way of watching. But watching up close – without the mediation of image – is still just watching".[364] The benevolent feature of this mode of "only watching" is that it enables us to step back "from the aggressiveness of the world which frees us for observation and for elective attention"[365] and "there is nothing wrong with standing back and thinking"[366].

Philosopher Raymond Gaita writes about literary descriptions of atrocities along the same lines:

364 Susan Sontag 2003, p. 105.

365 Ibid., p. 106.

366 Ibid.

> The descriptions of the Holocaust by Martin Gilbert and by Primo Levi are written with disciplined restraint. Those descriptions are dispassionate in the sense I claimed for the prose of Gaudron and Deane: though informed by feeling, they are not distorted by it. We know when we read them that they are written by men whose souls were lacerated by what they knew. It shows in their prose which we read, as Nora Levin put it, with bleeding eyes. There is no other way to read them with understanding and no other way they can convey the reality of evil they describe.[367]

In Gaita's view, it is the knowledge and the actual experiences which have inured Gilbert and Levi, the act of describing what they know and what they have been through with disciplined restraint, is perhaps the one practice that actually might bring some sanity into their experience, that might mend some of the distortions that the actual experiences of the holocaust have caused in their emotional life. For the readers of these works the relation is of course different, the text is a way of exposing us to experiences of atrocities that we probably could not imagine. There is something puzzling and important present in Gaita's example. On which side of the fence is the dispassionateness of Levi and Gilbert? Is it the negative pacifying effect of violent and unjust experiences (repression), or is it an act of taking a much required step back from the lacerated experiences that permits them to contemplate and perhaps confront their troubled past? I think that we should not try to pick one alternative as the right one. Dispassion can facilitate both a negative consequence (repression), and an active step towards contemplation. To become inured might be a necessary consequence, but it can also be a product of dealing with ones troubled experiences. And we should not forget that both consequences are reactions at a world that is off track.

In a passage in *On Photography* Sontag divides her life into before and after she saw photographs from Bergen-Belsen and Dachau. Sontag writes:

367 Raimond Gaita, *A Common Humanity – Thinking about Love & Truth & Justice* (Text Publishing 1999), p. 89-90.

> One's first encounter with the photographic inventory of ultimate horror is a kind of revelation, the prototypically modern revelation: a negative epiphany. For me, it was photographs of Bergen-Belsen and Dachau which I came across by chance in a bookstore in Santa Monica in July 1945. Nothing I have seen – in photographs or in real life – ever cut me as sharply, deeply, instantaneously. Indeed, it seems plausible to me to divide my life into two parts, before I saw those photographs (I was twelve) and after, though it was several years before I understood fully what they were about. What good was served by seeing them? They were only photographs – of an event I had scarcely heard of and could do nothing to affect, of suffering I could hardly imagine and could do nothing to relieve. When I looked at those photographs, something broke. Some limit had been reached, and not only that of horror; I felt irrevocably grieved wounded, but part of my feeling started to tighten; something went dead; something is still crying.
>
> To suffer is one thing; another thing is living with the photographed images of suffering, which does not necessarily strengthen conscience and the ability to be compassionate. It can also corrupt them. 368

The impact of these images from Bergen-Belsen and Dachau had a demoralizing effect on Sontag. At the same time they awoke a kind of revelation and moral understanding. What is important in Sontag's description of her experience of the encounter with the holocaust-images, is exactly this ambiguity, these two layers of emotion: the feeling of something going dead inside, and the sense of revelation. Although they led to experiences that are unwanted, the images spoke of acts, real acts of atrocity. Now if we cannot deal with the experiences that the photographs awaken in us, how can we then understand the victims that are depicted in these images? The experience that these images awaken can both be an opening toward understanding the horrible experiences of the victims and a beginning process of dulling of the senses and demoralisation. This example stands in stark contrast to Plato's iconoclastic view, since Sontag's reaction shows that a photograph

368 Susan Sontag 2008, p. 19-20.

from a concentration camp can portray and even communicate real horrors perhaps even better than written descriptions. A Platonist might object that an image from Bergen-Belsen or Dachau is still not able to portray the experience, the sufferings of a holocaust survivor. And the Platonist would of course be right. But *what* could communicate the actual sufferings of another person to me, what would this mean? My inability to take on another persons experience through an image, cannot be blamed on some inherent distorting quality of images, because this is in fact not an inability of any sort, but an impossibility (I will get back to this point later).

When I look at the photographs from concentration camps I am not there, I am at a safe distance in time and space from these atrocities, but I do see what happened. These photographs do address me, have an impact on me, they tell me something about the condition of the world, and in the end the condition of myself in this world. My self is literally at stake in viewing these images. Can I accept that these images are real, or will I fall back on my own scepticism, passivity, dulling of the senses, repression. In this context it is not the image that will deceive my understanding, but my scepticism, and the scepticism can easily be maintained if we subscribe to iconoclasm. Can I accept that these images are a part of this world, that they are of *this* world? If I accept this, at the same time I have to discard my sceptical inclinations and iconoclasm. On the one hand, it seems correct to claim that we have a duty to know what happened in Auschwitz. If we are presented with images that bear witness of the atrocities, we should perhaps feel obliged to see these pictures, in order to really know. On the other hand, if the effect of these images is that we become inured in the sense that our hearts become hardened, then how can it be right to claim that we are obligated to view them?

It is too harsh to claim that we have to be able to confront any image regardless of its content only because it describes a real event. Sontag's reaction on the photographs of Bergen-Belsen and Dachau is understandable and if we are demoralised for a period of time, due to an image, it cannot mean that we are morally weak or insufficient. On the contrary, *our morality lies in our reluctance towards accepting that what these images show actually happened*. This sensivity *is* what our moral faculty consist of. This sensitivity and the reluctance to accept atrocities is *the opposite* of scepticism and iconoclasm. If I feel reluctant towards a

violent image it is because I already understand the image as, not an appearance of the world, but as a part of this world. This requires moral courage, because it is not an innoxious venture. Sontag describes Virginia Woolf's stance: "Not to be pained by these pictures, not to recoil from them, not to strive to abolish what causes this havoc, this carnage – these, for Woolf, would be the reactions of a real monster. And, she is saying, we are not monsters, we members of the educated class. Our failure is one of imagination, of empathy: we have failed to hold this reality in mind."[369] If this failure of attending to the realities of experienced life leads to scepticism towards images, towards a dulling of the senses, then both I as a viewer of the image and the image have failed. When the image fails its agency is disqualified. In this sense our understanding of reality is tied up with morality. Scepticism concerning images – iconoclasm – enters into the picture, not because of some innate mendacious quality of images *per se*, but because the world that they sometimes portray *and* the way they portray this world, is off track. It is in this kind of context that we should understand Adorno's famous statement about there being no poetry after Auschwitz.[370] What Adorno points out in this essay (*Cultural Criticism and Society*), is how the breaking down of communication is a consequence of the evils of the world, he writes: "Even the most extreme consciousness of doom threatens to degenerate into idle chatter." The same sentiment can be found in a quote

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369 Susan Sontag 2003, p. 7.

370 This, perhaps the most famous quote by Adorno, is constantly misinterpreted. In order to understand in what context it belongs within Adorno's own thinking it is important to note that he was not completely satisfied with his own formulation: "To write poetry after Auschwitz is barbaric ". The gist of the essay in which the statement appeared, *Cultural Criticism and Society*, cannot be boiled down to these few words. Here are the last sentences of that essay: "The more total society becomes, the greater the reification of the mind and the more paradoxical its effort to escape reification on its own. Even the most extreme consciousness of doom threatens to degenerate into idle chatter. Cultural criticism finds itself faced with the final stage of the dialectic of culture and barbarism. To write poetry after Auschwitz is barbaric. And this corrodes even the knowledge of why it has become impossible to write poetry today. Absolute reification, which presupposed intellectual progress as one of its elements, is now preparing to absorb the mind entirely. Critical intelligence cannot be equal to this challenge as long as it confines itself to self-satisfied contemplation." Theodor W. Adorno, "Cultural Criticism and Society", in *Prisms* (The MIT Press 1982), p. 34.
Later Adorno returns to this quote, and reassesses his own sentiment in *Negative Dialectics:* "Perennial suffering has as much right to expression as a tortured man has to scream; hence it may have been wrong to say that after Auschwitz you could no longer write poems. But it is not wrong to raise the less cultural question whether after Auschwitz you can go on living – especially whether one who escaped by accident, one who by rights should have been killed, may go on living. His mere survival calls for the coldness, the basic principle of bourgeois subjectivity, without which there could have been no Auschwitz; this is the drastic guilt of him who was spared. By way of atonement he will be plagued by dreams such as that he is no longer living at all, that he was sent to the ovens in 1944 and his whole existence since has been imaginary, an emanation of the insane wish of a man killed twenty years earlier." Theodor Adorno, Negative Dialectics, translated by E. B. Ashton (Routledge 1973), p. 362-363.

by Henry James that Sontag finds significant:

> One finds it in the midst of all this as hard to apply one's words as to endure one's thoughts. The war has used up words; they have weakened, they have deteriorated like motor car tires; they have, like millions of other things, been more overstrained and knocked about and voided of the happy semblance during the last six months than in all the long ages before, and we are now confronted with a deprecation of all our terms, or, otherwise speaking, with a loss of expression through increase of limpness, that may well make us wonder what ghosts will be left to walk.[371]

The trust or distrust toward words or images is in this way entwined with our trust or distrust in the world itself. In this sense the evil of the world works to eliminate the possibility of communication, words and images become idle in the wake of evil times.

A starting point when we want to understand the question concerning the relation between experience and image is then to acknowledge that images have the power to transform my experience when they are able to latch onto and be a part of this world. If they were mere reflections, solely a part of an image-world, how could they affect me one way or the other? The image can condition me and even address me. This is then not a relation in which, I see the image as a reflection, a copy, a semblance or a representation of the world. When the image gets real, it is a part of the world and the experiences that are awakened in me are not fantasies, they are real and they will condition me and perhaps even determine how I view the world. It is through this kind of process that my knowledge comes about.

And conversely, the real harm and the serious threat toward our moral faculty and our knowledge is a situation in which images lose their ability to communicate experience. Images can be used to enable us to repress, to betray our understanding, imagination and empathy. In this sense the failure or the harmfulness of the image is a failure of attending to

371 Henry James in an interview by Preston Lockwood, New York times, March 21, 1915. <http://query.nytimes.com/mem/archive-free/pdf?res=F00C12F73F5D1A728DDDA80A94DB405B858DF1D3>

the realities of the others experience, of communication. One might argue that I deny the fact that images can distort or lie, but I do not deny this, quite the opposite. My point is simply that these distortions and lies fall under the same general evil: a failure of communication. In this sense when we talk about documentary depiction, it also includes a moral aspect: the extent to which the image engages or disengages us from the realities of contemporary life. This aspect is beyond the mimetic or representative relation, the likeness between image and object. The moral aspect of realism is not concerned with representation, but with communication.

How does the Image Communicate Experience?

We tend to conceive of images as representational, but whether we by this mean that images represent natural objects or subjective experience, the likeness of the image does not explain how it communicates. There is still an issue concerned with the ability or inability of the image to communicate experience that requires explanation. When I, for example, enter an exhibition space and view Romuald Hazoumè's installation, it is clear that my experience in this situation is in no way *like* the experience of a refugee that the piece portrays. It tells me something about the refugee's experience, but not through involving any criteria of likeness. When I feel that the piece communicates with me I do not become a refugee, nor do I become *like* a refugee. In order to clarify this point further it is important to acknowledge, once more, in what sense a theory that proposes that our experience consist of *content* – species, projections, sense-data, images – is misguided.

Recall the quote in which Donald Evans reminds us that questions concerning how it is possible for us to communicate by means of images are; "naturally bound up with considerations of how it is possible to communicate at all"[372]. If we stick to an idea in which experience consist of a content we easily end up in a certain philosophical skepticism

372 Donald Evans, "Photographs and Primitive Signs", *Aristotelian Society Proceedings 1978/79*, New Series – volume LXXIX (The Compton Press 1977), p. 215.

concerning the possibility of communication. If, for example my pain, or Martin Gilbert's or Primo Levi's tortured experiences are something we could call "a content", then how can somebody else access this content? This is a generic philosophical question concerning communication and skepticism thereof.[373] But what we need to understand is that this question is wrongly constructed. This deceptive way of questioning is present in many of our contemporary discourses. Dirk Lauwaert writes in a comment on Susan Sontag's *Regarding the Pain of Others*: "Imagination is the unique ability to reverse roles. […] You can never literally take the other's view […] it is the result of distance and aesthetics"[374]. This way of speaking seems to point out something obvious: that another person's experience is always *another* experience from my own (experience). I cannot take or have another persons view since I inhabit my own body, to have another's view, is in this sense, impossible. This inability to *have* another person's experience becomes obvious especially in cases of suffering. Olli Lagerspetz writes: "The only way for me to have your pain, in the sense discussed, is by somehow *being you* while, at the same time, remaining *me*. If that is the problem, telepathy is just as useless as the telephone."[375] The same point is valid when we talk about sharing a view. We cannot "have" the same view, which does not mean that we could not share a view.

It is one thing to state that we have (numerically[376]) different experiences since we have different bodies, and another thing to say that our experiences cannot be communicated. Again we have to scrutinize our concepts. If we by communication mean that my experience is a certain content, a certain view, and that the only way another person can have this view

373 In his essay *One's Knowledge of Other Minds* A.J. Ayer calls this a "text-book problem in the theory of knowledge". A.J. Ayer, *Philosophical Essays* (Macmillan & Co Ltd. 1952), p. 197.

374 I found this quote in Inge Henneman's essay *Beyond Compassion – How to Escape the Victim Frame in Social Documentary Photography Today*. Henneman describes Lauwaert's stance as an expression of a view in which the ability to empathize with the other is seen to consist of fictions. Here I use Hanneman's way of quoting Lauwaert, because it so precisely catches an, in my view, typical skeptic attitude. I am not here concerned with Lauwaert's text, but with the exact wording in the quote. The expression catches perfectly the duality in skepticism. It states something obvious: that my experience is different from any other experience. This obvious fact is used as a explanation for our inability to communicate our experiences to the other, and our inability to understand the other's experience. Henneman's essay can be found in Jan Baetens and Hilde van Gelder (eds.) *Critical Realism in Contemporary Art – Around Allan Sekula's Photography*. Leuven University Press 2006, p. 104.

375 Olli Lagerspetz: *My Pain in Your Tooth? Wittgenstein on 'My Pain' and 'His Pain'*, unpublished, p. 2. Here Lagerspetz paraphrases A.J. Ayer, *Philosophical Essays* (Macmillan & Co Ltd. 1952), p. 194.

376 A.J. Ayer 1952, p. 194.

is if this content can be externalized, for example through me painting a picture or taking a photograph, and that then this picture is internalized by that other person through him or her looking at it, then "communication" will entail that my experience is a transference of a certain content from within me to within another person. If this sounds strange, think of the theory of *species* that I analyzed in the beginning of this thesis, or Locke's idea of our soul as a camera obscura. These theories maintain exactly this idea of experience as content and communication as transference of content from one mind/soul to another, or more commonly from the natural object to the subject.

Another more modern theory could be characterized as a kind of variation of this. In the modern philosophy of mind experience is still characterized as content, as for example in the notion of sense-data.[377] If we simplify, the notion of sense-data still entails a theory in which the object affects our sense-perception, but here the cause and effect is not a simple process in which a content is moving from one mind to another, or from the natural object, by the means of *species*, to the perceiver. For Descartes, the natural world, the thing in itself, is different from how we experience it, our perceptions are transformations, perception transforms nature into experience.[378] In this theory perception still consists of a kind of semblance or data, it is an approximation of something. In this sense the natural object is translated to something else, i.e. sense-data ("sensation (Berkeley), impression (Hume), representation (Kant), sense-datum (G.E. Moore"[379]). Against the backdrop of this theoretical framework external images are then a way of communicating my inner experiences. When I make an image from my experience, the image is a translation of experience into visual representation. According to this theory the idea of "imagination" becomes an explaining factor. Imagination becomes

377 See D. W. Hamlyn, *Understanding Perception – The Concept and its Conditions* (Ashgate Publishing Ltd. 1996), p. 9-10.

378 Descartes writes: "Now although this picture, in being so transmitted into our head, always retains some resemblance to the objects from which it proceeds, nevertheless, as I have already shown, we must not hold that it is by means of this resemblance that the picture causes us to perceive the objects, as if there were yet other eyes in our brain with which we could apprehend it; but rather; that it is the movements of which the picture is composed with, acting immediately on our mind inasmuch as it is united in our body, are so established by nature as to make it have such perceptions". René Descartes, *Discourse on Method, Optics, Geometry, and Meteorology* translated by Paul J. Olscamp (Hackett Publishing Co. 2001), p. 101. Here Descartes discards the mimetic theory and proposes instead a kind of mechanic causal process, in which through movement and pressure, the objects affect the senses into perceiving what there is to be perceived.

379 D. W. Hamlyn 1996, p. 9.

the faculty that transforms experience to image. For example, Lauwaert seems to think that imagination is a way of constructing a view that is similar to my own personal 'inner' view, i.e. experience when it becomes content, is then always something different from 'the actual experience'. 'Imagination' is what makes communication possible, according to this theory.[380] Here the door is opened for skepticism, because in this understanding imagination is always fictional, since it does not access the actual content of the other persons experience, but rather imagination creates a representation of the content of the others experience. This theory-structure also nourishes an understanding in which communication by necessity consists of creating a fictional content in order to grasp an actual first person experience.

What is important to note here is that the idea of 'experience as content', although it has taken another form in which the content is not literally transferred from one person to another, is still at play and still invites the same philosophical problems. The problem here is that the statement "You can never literally take the other's view", *if it is uttered as a skeptical remark*, builds on a misconception concerning experience, image and communication. There is no barrier here to start with. When we think that a person never can take another persons view, and therefore conclude that we need, once more, a go-between, in this case the faculty of imagination, in order to overcome this problem, then we are bound to end up in skepticism and iconoclasm. Scepticism points out that there is a material and natural world beyond my experience, my phenomenal world of inner representations, sensations or ideas, and states that this gap is one of the main sources for problems within philosophy. However, the problem here is quite simply a consequence of mixing up image with experience, or perhaps, of not being able to distinguish these two concepts from each other sufficiently. My view cannot be a content for somebody else, since, and this is the fundamental point here, "my view" is *not* a content *for me*, it is not a content at all, and thus cannot be *had* (by me or anybody else). My view is not an object and my consciousness is not a container of objects. When I am engaged in a view, I am not occupied by an inner image, I am engaged with an object in the world. Merleau-Ponty writes: "Everything that exists exists as a thing or as a consciousness, and

380 This is how the role of imagination is defined in classical aesthetics. Luc Boltanski writes: "In Smith, as in Hume, distance is overcome by a deliberate act of imagination. The spectator *represents* [my emphasis] to himself the sentiments and sensations of the sufferer." Luc Boltanski, *Distant Suffering – Morality, Media and Politics* (Cambridge University Press 1999), p. 38.

there is no half-way house. The thing is in a place, but perception is nowhere, for if it were situated in a place it could not make other things exist for itself, since it would repose in itself as things do."[381]

Whereas we can talk of images as having a content, since we can have a situated spatial and observational relation to an image, we cannot talk of experience as consisting of a content. To have a pain is in fact to *be in* pain, likewise to have a view is in fact to *be in* the act of viewing. As I have pointed out in the first part of this thesis, philosophy has maintained this idea of experience as content. In medieval philosophy the concept of species, in Renaissance philosophy the idea of the soul as a camera obscura, and later on up until this day the idea of our experience as consisting of sense-data, all these views commit the fallacy of mixing up the concepts of image and experience. It is immensely important to understand why this is a fallacy. In a nutshell, the concept of experience is disparate from that of image since an image is an object for us in a sense that our experience is not. Ayer writes: "It is not to be supposed that one can number people's feelings as one can number the things they may carry in their pockets."[382]

To be in pain, or to have a traumatic memory is a state in which you cannot choose not to attend to that pain or memory. In this sense the concept of attention is not viable when we talk of having an experience, because for one thing, we cannot turn away our attention from something that we are experiencing at the moment, we cannot take an observational stance toward our living experience, since it is a part of what we are at that moment. If we conceive of experience as consisting of content, then we are talking of *content* in quite a different sense than when we talk of the content of an external image, since an inner image is a different concept than that of the external image. Ludwig Wittgenstein writes in *Zettel*: "one also cannot follow one's own mental images with attention."[383] I can follow the outlines of a picture that is in front of my eyes. An external picture *has* outlines, it has a frame that I can point at, follow with my finger or my eye etc., but when I speak of an inner experience the relation is different, an inner experience has literally neither outlines nor a frame. I cannot

381 Maurice Merleau-Ponty, *Phenomenology of Perception* (Routledge 2007), p. 44.

382 A.J. Ayer 1952, p. 195.

383 Ludwig Wittgenstein, *Zettel*, edited by G.E.M Anscombe and G.H. von Wright (Basil Blackwell 1967), p. 16e.

focus my attention on the outlines of a memory. I cannot acknowledge its frame, where it ends, how it is located, what the scale of the objects represented are compared to the real object because it is not "located" in any sensible meaning of the term. To be in pain is to be absorbed by the pain, ones attention *is* in a sense occupied by that pain, or even, ones attention *is* for that moment pain.

With this I do not want to deny that we can meaningfully speak of an "inner image", rather I want to point out that it, as a concept, is significantly different from that of an external image. An inner image cannot be said to represent volume or scale because it is another kind of image than the external image, essentially, because it is not an optical image. Therefore it is also a stretch to claim that an inner image has content, that it is representational. The same point can be applied to the experience of seeing. In *The Blue Book*, Wittgenstein makes this point clear when he writes: "We easily forget that the word 'locality' is used in many different senses […] I can say 'in my visual field I see the image of the tree to the right of the image of the tower' or I see the image of the tree in the middle of the visual field". And now we are inclined to ask "and where do you see the visual field?"[384] This issue relates to the question concerning agency, since: "… if we think by imagining signs or pictures, I can give you no agent that thinks"[385].

Let us track back to Kepler's dialectic of the image, Kepler writes: "Since hitherto an Image has been a Being of the reason, now let the figures of objects that really exist on paper or upon another surface be called pictures."[386] There is something completely sensible in this dichotomy, since there are differences between external images and inner experiences. For one, an external image *is shareable*. I can look at an image with you and point out the features of it and in most cases you would be able to follow my pointers and my focusing of attention on certain details. In this sense the external image is "to be shared". Wittgenstein is not explicit about this issue, his focus is elsewhere. But the fact that external images are shareable is a fundamental point that follows from his scrutiny of the philosophy of mind.

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384 Ludwig Wittgenstein, *The Blue and Brown Books* (Harper Torchbooks 1960), p. 8.

385 Ibid., p. 6.

386 Johannes Kepler, *Optics: Paralipomena to Witelo & Optical Part of Astronomy* translated by William H. Donahue (Green Lion Press 2000), p. 210.

The important point that I want to bring forth here can be boiled down to the following: My experience is not a content for me, therefore it cannot be a content for anybody else. An image has a content for me, it can be the focus of my attention, and when it is, it is also in the exact same way a content for anybody else. For something to reside somewhere there has to be an observer, an agent that can determine where this something resides in relation to other objects. My experience lacks this quality of being detached from me, and therefore it cannot grant me an observational viewpoint. I cannot trace the outline of an inner experience, since, in a literal sense, there is no agency at work here, i.e. I am not detached from my inner images. An external image is a surface through which we can share a view upon the world. This is the aspect that distinguishes external images from inner images. The inner image is not something we look at (neither is it something we look through). Or as Comte put it: "The mind may observe all phenomena but its own." because "In order to observe, your intellect must pause from activity; yet it is this very activity that you want to observe. If you cannot effect the pause, you cannot observe; if you do effect it, there is nothing to observe."[387] Comte drew the wrong conclusions from this statement, but he was right about the fact that, in the case of my own experience, in one sense I am not in a relation to it that permits me to *observe* it, since here the *me* and the *it* are the same.

Let us now return to my original question concerning the discrepancy between the refugee's experience that could be said to be portrayed in Hazoumè's installation and my own experience of observing a piece of art in a exhibition space. The discrepancy here does not tell us anything about the installation's ability or inability to communicate, since the *likeness* of experiences is not a proper criterion for the success of communication (the piece tells me perhaps as much about being a refugee as it tells me about being European, about the institutions of art, about manipulation of materials, and so forth). Neither is, then, the discrepancy in likeness of experiences (the refugee is on a boat in circumstances that could prove fatal, I am at an art-exhibition, etc.) something that makes communication impossible.

The observational view granted by the image, is not *like* my relation to my own suffering, in images I can see another suffer whereas I myself am possibly in a relatively comfortable

387 Auguste Comte, *The Positive Philosophy of Auguste Comte*, volume 1 (Kegan Paul, Trench, Trübner, & Co. Ltd. 1893), p. 9.

mood and situation. Adam Smith writes: "My companion does not naturally look upon the misfortune that has befallen me, or the injury that has been done to me, from the same point of view in which I consider them. They affect me much more nearly. We do not view them from the same station, as we do a picture, or a poem, or a system of philosophy, and are, therefore, apt to be very differently affected by them."[388] This observational position is also possible when I see a person next to me that suffers. Whether we stay in this comfortable observational mode or permit the other to condition us, this is the moral question that certain images and first hand experiences of situations in which another person suffers, address us with. Through my engagement with, and attention to, another person's predicament, in direct experience or by the means of images, I will be able to understand the other person's suffering *as suffering*, and this will entail discomfort. This does not however mean that the other persons pain, would be inflicted on me, rather it means that I myself understand the reality of the other person's pain and thus acknowledge that we share a world, that also my world is prone to suffering and pain. My relation or empathizing with the other is not a way of accessing that person's actual experience (content of experience). Neither is empathy, if this term is to hold any deep moral meaning, a fictitious practice in which I project or construct an experience in resemblance of the others experience, through imagination. Or, let me rephrase, imagination is not only a faculty that makes up fictitious representations. Hannah Arendt makes a beautiful redefinition of the task of imagination, when she writes:

> Imagination alone enables us to see things in their proper perspective, to be strong enough to put that which is too close at a certain distance so that we can see and understand it without bias and prejudice, to be generous enough to bridge abysses of remoteness until we can see and understand everything that is too far away from us as though it were our own affair. This distancing of some things and bridging the abysses to others is part of the dialogue of understanding for whose purposes direct experience establishes too close a contact and mere knowledge erects artificial barriers.

388 Adam Smith as quoted in Luc Boltanski 1999, p. 36.

> Without this kind of imagination, which actually is understanding, we would never be able to take our bearings in the world. It is the only inner compass we have. We are contemporaries only in so far as our understanding reaches.[389]

In Arendt's view, understanding ties together epistemology and morality. It is such an inclusive account of knowledge, image and communication that I have described in this second part of this thesis. My emphasis has been on the visual record and on the documentary. The example that I begun this chapter with, Romuald Hasoumè's installation, might be considered an exception, since formally it is neither a visual record, nor a piece that strictly speaking could be called a documentary, it is not even an image. Nevertheless I would not be comfortable with calling it fiction either, since it latches on to a very real and current tragedy of the experiences of African refugees who want to enter Europe. This is communicated, not through showing what an actual refugee actually sees on his/her journey over the Adriatic sea, but through establishing an understanding of some aspects of *how* the refugee sees. The installation's reality and its place in, and relation to, the historical world is not dependent on its status as a record, but on its competent agency, its way of communicating, of sharing a view. Here the meaning of realism does not build upon a relation of likeness between image and object, but on a relation of trust between subject and subject.

It is something like this, an understanding that stretches to the other, that I claim the documentary as a moral category can establish. If we understand the documentary strictly as a formal and epistemological category, it seems to offer us a possibility in which we see what someone saw at a certain time and in a certain place. But in order for the image to become something that we respect as a real image in the actual historical world, something further is required. The documentary image should also be able to show us *how* someone else views the world, and this does not happen through the feature of photographic recording.

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389 Hannah Arendt, "Understanding and Politics (The Difficulties of Understanding)" *in Essays in Understanding 1930-1954 – Formation, Exile, and Totalitarianism* (Schocken Books 1994), p. 323.

The twist that the documentary supposedly ads to depiction is that a record can capture a real experience. For example if person x witnesses the attacks on the World Trade Center on September 11, 2001 and makes a visual recording during the experience, we might think that we can share his/her experience through this recording. This is not completely incorrect, but it is, on the other hand, a very inaccurate description of what happens in the relation between an image and an experience. This complicated relation between image and experience is what I have articulated in this last chapters. What I have said above points out that when I see the recording, I do not experience the event. I can share something by the means of a visual record with somebody else with functioning eyes, but I do not share an experience in any straight forward meaning of the term. What is shared is a focus on the same thing, but the actual experience is not shareable *because* of the recording, since experience is not reducible to something like an image.

Communion

Lastly I will briefly elaborate on how the image enables two persons to see the same thing. One of the underlying goals for this chapter has been to describe how the trust or distrust toward images is entwined with our trust or distrust in the world itself. This relation is often understood in traditional philosophy as a relation between man and a metaphysical world of ideas. However this view can obscure the relation. Our trust or distrust toward the world manifests itself most clearly in our trust or distrust in other people and our common social world.

In the first part of this thesis I concentrated on the images relation to the object and criticized certain common misunderstandings of this relation. What I have pinpointed in this chapter is that the alternative view, that the image is *like* our experience, should also be scrutinized. If likeness is not the criterion based on which the image communicates, then we have to redefine what this communication is about. What I find significant in Adorno's aesthetics is a certain critique of the very persistent dialectic within aesthetics – the idea that images are copies either of the external object or of subjective views (experiences).

Neither of these positions within a certain aesthetic discourse are able to account for how an image communicates. In order to shift the focus of this discourse, Adorno writes: "Mimetic behavior does not imitate something but assimilates itself to that something"[390]. In Adorno's aesthetics the important relation is not that between an observing subject and the image, but of the image as an agent that shows me the otherness of the other. It permits the depicted to utter: "*Here I am* or *This is what I am*"[391]. In this sense the image does not imitate, its behavior is different. If the image imitates anything, it imitates our human capacity to transcend our own "inner" knowledge and stretch out to the other. Michael Jackson writes along the same lines on Hannah Arendt's epistemology:

> Unlike classical empiricism, where the observer makes himself a *tabula rasa* in order to register his impressions of the observed, judging requires active engagement and conversation – allowing *one's own thoughts* to be influenced by thoughts of others. Accordingly, judging implies a third position, reducible to neither one's own nor the other's: a view from in-between, from within the shared space of intersubjectivity itself.[392]

If we talk of the image as a go-between, it is exactly this meaning that I condone here. The image is something in-between the views of my own and the views of the other. When we look at images we do see something that potentially everybody else can see. The concept of image is based on an idea in which the surface of the image is an "outlook", a surface through which we can share a view upon the world with others and see the same thing. In this sense the image is never personal, it is always a shared view. If I would be the only one to see what an image shows it would not communicate properly. Or conversely, if we use Cavell's

390 Here I quote the earlier edition and translation, Theodor Adorno, *Aesthetic Theory*, translated by C. Lenhardt, edited by Gretel Adorno and Rolf Tiedemann (Routledge & Kegan Paul 1984), p. 162. In the newer version the same sentence is translated, as follows: "If mimetic comportment does not imitate something but rather makes itself like itself […]". Theodor Adorno, *Aesthetic Theory* (Continuum 2004), p. 145.

391 Ibid., p. 147.

392 Michael D. Jackson, "Where Thought Belongs: An Anthropological Critique of the Project of Philosophy", in *Anthropological Theory*, Vol 9 (3), 2009, p. 238.

expression, if the image reads me, it is never personal in a literal sense, since it also has to be able to address somebody else in order for it to be an image. The image is "a view" that is dislocated from every observers body. Whereas another person cannot "literally" share my view, she is invited to have the same outlook on the world through the surface of the image. In this sense "communication" does not mean that a certain content is communicated from me to another person via a mediating image, but that we *share* a certain view in looking at a picture. Communicating is like taking "communion". Luc Boltanski writes:

> The *Communion of Saints* is precisely that form of union which brings the baptized together, beyond the constraints of space and time […] in such a way that 'everything received in holiness by each belongs somehow to all' and 'what each must do and suffer is not gauged by his needs alone, but on the needs of all' so that we cannot say who receives and who gives.[393]

In order to take this discussion to a more everyday level, I want to bring in another example in which this "sharing" of a view is central, here the emphasis is on a bond between two people. Patti Smith writes:

> One evening, having read my notebook, he designed a totem for Brian Jones. It was shaped like an arrow, with rabbit hair for the White Rabbit, a line from Winnie the Pooh, and a locket-sized portrait of Brian. We finished it together and hung it over our bed. "Nobody sees as we do Patti", he said again. Whenever he said things like that, for a magical space of time, it was as if we were the only two people in the world.[394]

393 Luc Boltanski 1999, p. 7.

394 Patti Smith, *Just Kids* (Harper Collins 2010), p. 103-104.

This quote refers to an earlier passage in her biography *Just Kids* in which Patti Smith describes how she met photographer Robert Mapplethorpe.[395] Smith worked in Brentano's bookshop in New York that also carried an assortment of ethnic jewellery and crafts. In her mind she had picked out one of the pieces on display as her absolute favorite. A Persian necklace made of two enameled metal plaques held together by heavy black and silver strings. Later, when Mapplethorpe visited the shop and they met for the first time, he wanted to purchase exactly this necklace. For Smith this revealed that she and Mapplethorpe saw the same thing. Their attention, their aesthetic eye and their judgment picked out the same piece of jewellery and through this shared judgement they also shared a world.

What is important in this example is how the quote "nobody sees as we do", makes conspicuous how two persons can share a view. Smith's and Mapplethorpe's views are not two copies of "one view", but a shared view that is no more Smith's than Mappletorphe's. In this example communication as communion has lost its theological emphasis (without losing the holy aspect of sharing).

The statement "you can never take the other's view", indicates that there is "a view", but that it cannot be transferred to another person, that 'the view' is something personal, only accessible to one's own self. What does this entail? Solipsism? The possibility of communication is then obstructed because "the view" can only reside in a specific person with a specific body. However this line of thinking already presupposes that there is "a view". And the closest that I can get to that view is to make or attend to a copy of that view. Is this the task of the image? I would claim something else, that the image helps us share an experience with the other. It helps us in sharing a view upon the world so that sensation literally becomes a form of communion.[396]

395 Ibid., p. 36. The connection between this passage in *Just Kids* and the practice of making documentary film was made by documentary filmmaker and friend Lotta Petronella.

396 To paraphrase Maurice Merleau-Ponty 2007, p. 246.

Afterword

The story I have told here is from the start one of reduction. In order for philosophers to understand how knowledge comes about, the relation between us and the world was reduced to an abstraction of a relation between a subject and an object. A key part in this reduction was played by the concept of representation, that which stands as an interface between subject and object. Here the image, and later on, the visual record, steps into the narrative. As I have shown, the reduction was fruitful in many ways. By focusing on this very simple relation between an object, a record that works as a trace of the object, and the subject, an immense evolution was achieved in pictorial arts, science and philosophy.

The second part of this story in my work is a narrative of inclusion as opposed to reduction, one of reconstruction as opposed to deconstruction. Knowledge is not solely achieved through representation. It is not solely achieved through vision, and it is not solely reached by turning to the objective world. In order for us to understand the meaningfulness of the reduction we have to understand what this project of reduction and rationalization left out of the equation. By showing how there early on was a tight competition between the sense of touch and vision for the primacy in the hierarchy of epistemological senses, I have also indicated that sense perception is multimodal. We need all our five sense to work beside each other and in connection to one another in order for us to understand the world. These five senses need a consciousness, a thinking and reflecting mind in order to work with each other; a common sense if you will. The senses also inhabit a body: without a corporeal body they would not have a home and locality in this world. I hope that these points have become clear throughout this thesis. The most fundamental entity that has been sidelined in the reduction is, however, the other subject and our relation to other subjects. This is the endstop in this narrative. But actually it is the beginning. Without other subjects the need for images, visual records and documentary films would be superfluous. The reason for their existence is our need to communicate, to share our views and thoughts. It is because we share a world that we need images. And it is because we share a world that we have knowledge. In order for us to be able to see, we need other people and other pairs of eyes. It is in this connection that images become helpful aids. They are not primarily aids in the same sense as a telescope is an aid for

our vision. Images do in many ways help us see better, but not primarily by amplifying our visual perception or by making it more acute, but through communicating and connecting our vision with other people's vision.

The practice of sharing our views with each other is born from the realization that alone, without the views of others, we are foreign to this world. Jakob Meløe writes, describing the landscape of Saami reindeer herders:

> We are foreign to this landscape. Walking the same tracks as the reindeer herders and looking where they look, we see little of what they see. (There is a sense in which we all see the same when looking in the same direction or at the same lump of matter. But, standing alone, this sense of 'seeing the same' is devoid of practical and moral implications, and so of little use, whether in the moral sciences or in our daily life.)[397]

When I read these lines, although I agree with Meløe, my intuition reacts and tells me that there is something wrong with this idea. I would like to add that I also have profound moments when I am being alone with the world, and contemplate and attend to the objects that I see. I would like to claim that we, each one of us, have this kind of primal relation to the world, somewhere in our past or at least latently as a possibility somewhere within our reach. And, that this kind of contemplative and attentive relationship between a lonely man/woman and a natural world is fundamental to our process of feeling at home in this world. The whole legacy of Western philosophy is a celebration of such a solitary contemplative attitude, as the basis for finding our existential grounding in life, and for receiving true unbiased knowledge of the world. The reason why I tend to subscribe to this solipsistic idea is, at least partly, that it has been indoctrinated into me through philosophy. Throughout the process of writing this thesis, however, a resistance towards this solipsistic inclination has grown stronger.

397 Jakob Meløe, "The Two Landscapes of Northern Norway", in *Inquiry*, vol. 31, 1988, p. 400.

The important question here is: what happens with this relation between an I and the world when another subject steps into the situation? Does the world become less clear or does the world speak to me less directly, when another subject is present? Along with Meløe, I would claim the opposite: I need other subjects in order to understand my relation to the world, in order to understand "how little we know about what our relation to reality is, our complicity in it"[398]. The presence of other persons can help me realize this.

Are my relations to images less profound than my relation to the actual world? I do not see this question as very meaningful anymore, since images are part of the continuum that is my relation to the world, that is, when they work as they should.

Images and our practices that involve them are the negotiation concerning what my relationship to this world is.

398 Stanley Cavell, "What Photography Calls Thinking" in William Rothman (ed.), *Cavell on Film* (State of New York Press 2005), p. 116.

Swedish summary – Svensk sammanfattning

Varifrån härstammar tanken om att det personliga eller det subjektiva står i vägen för vår kunskap? Den här frågan kunde vara en öppning till flera viktiga filosofiska diskussioner, men i min avhandling används den för att undersöka en specifik historia om bilden. Hur uppstod fotografiet och den dokumentära bilden? Hur kom det sig att den visuella världen började uppfattas som objektiv och vad innebar denna övergång? Man kan säga att den västerländska filosofin under upplysningen behövde en form av representationer som var objektiva, man ville etablera en slags ”blick från ingenstans”. Då vi kommer fram till 1800-talet och positivismen har fotografiet åtagit sig den här rollen som en bild som förbigår det subjektiva, våra mänskliga omdömen och vår psykologi. Det som jag gör i min undersökning är att visa på de spänningar som den här utvecklingen innefattar. Då man går in på detaljerna blir det tydligt hur skör och konstruerad uppfattningen om en objektiv bild egentligen är. Den objektiva bilden är en oerhört fruktbar konstruktion, den gav oss den moderna kosmologin, det perspektivistiska måleriet och fotografiet, å andra sidan döljer konstruktionen bildens egentliga moraliska uppgift.

De tre kapitlen i den första delen av avhandlingen utformar en bildbegreppets genealogi. Undersökningen behandlar det perspektivistiska måleriets uppkomst och rationaliseringen av vårt synfält, samt den medeltida uppfattningen om mentala bilder (kapitel 1), camera obscura (kapitel 1 och 2) och uppfinningen av fotografiet och dess relation till positivismen (kapitel 3). Det essentiella för den här genealogin är den begreppsliga diskussionen. *Bildens* roll definieras av hur begreppet är relaterat till andra begrepp som *seende*, *kunskap* och *jaget*. När bilden vid en viss tidpunkt börjar uppfattas som en kopia av vårt synfält, ett slags visuellt facit, fungerar den här utvecklingen inte i isolation från andra händelser. För att belysa hur visuell registrering och dokumentation kom till, undersöker jag olika visuella metaforer som härstammade från en viss *ocularcentrism* inom västerländsk filosofi. De här visuella metaforerna är sammanflätade med förändringar i uppfattningar, en kultivering av vissa idéer och övertygelser, samt av vissa handlingar som utförs av seendet. I min läsning behandlar jag uppfattningar av seendet, jaget och bilden hos några av den västerländska vetenskapens och filosofins grundgestalter: Leonardo da Vinci (1452 – 1519), Francis Bacon (1561 – 1626),

Galileo Galilei (1564 – 1642), Johannes Kepler (1571 – 1630), René Descartes, (1596 – 1650), John Locke (1632 – 1704) och Gottfried Wilhelm Leibniz (1646 – 1716).

I den andra delen av avhandlingen diskuterar jag bildens kommunikativa roll. Med ”kommunikation” avser jag inte att ett *innehåll* förmedlas med hjälp av bilden från mig till en annan person, utan att vi *delar* en gemensam vy då vi ser på en bild. Kommunikation syftar i det här avseendet på att uppgå i en gemenskap, bilden är ett medel med hjälp av vilket vi kan etablera ett gemensamt sinne. Det här innebär en revidering av vår förståelse av begreppen bild, seende och kunskap. Kunskap, även kunskapen som vi får genom dokumentära bilder, föds genom en intersubjektiv dialog. De traditionella epistemologiska teorierna, empirismen och rationalismen, försummar inte enbart i det ena fallet (empirismen) vår subjektivitet, uppmärksamhet och omdömesförmågan, och i det andra fallet (rationalismen) objektivitet, observation och neutralitet, utan även relationen mellan två subjekt. Den här diskussionen är ett resultat av min läsning av centrala verk av Friedrich Nietzsche, Maurice Merleau-Ponty, Hannah Arendt, Theodor Adorno och Ludwig Wittgenstein.

Historien som jag berättar här är från början en berättelse om uteslutning. För att förstå hur vår kunskap blir till, reducerade den tidiga moderna filosofin relationen mellan oss och världen till en relation mellan ett subjekt och ett objekt. I den här reduktionen spelade representationen, den entitet som fungerar som mellanhand mellan subjektet och objektet, en central roll. Här stiger bilden och senare den visuella registreringen – fotografiet och den dokumentära filmen – in i berättelsen. Jag kommer att visa hur den här reduktionen gav upphov till en enorm utveckling och framgång. Genom att fokusera på det här väldigt enkla förhållandet mellan ett objekt, en registrering som fungerar som en representation av objektet, och subjektet, uppnådde man enorma framsteg inom bildkonsten, vetenskapen och filosofin.

Den andra delen av den här berättelsen handlar om inkludering i kontrast till reduktion, det är en rekonstruktion i kontrast till dekonstruktion. Kunskap uppnås inte enbart med hjälp av representationer. Kunskapen är inte huvudsakligen något vi får kontakt med genom seendet, och den nås inte enbart genom att vi vänder oss till den objektiva naturliga världen. För att förstå meningen med reduktionen och rationaliseringen, måste vi förstå vad som förbisågs, vad som lämnades bort från ekvationen, då den uträttades. Genom att visa hur

det i den tidiga moderna filosofin uppstod en hård tävlan mellan känselsinnet och seendet, angående vilketdera var det primära kunskapande sinnet, vill jag exemplifiera hur vår sinnesförnimmelse är mångformig. Då vi vill förstå världen krävs det att alla våra fem sinnen fungerar sida vid sida och i växelverkan med varandra. De här fem sinnena behöver ett medvetande, ett tänkande och reflekterande förstånd för att kunna samspråka med varandra, låt oss kalla det ett samfällt sinne. Sinnen befolkar en kropp: utan en materiell kropp skulle de inte ha en lokalitet i den här världen.

Den mest förbisedda entiteten i reduktionen som jag beskriver är sist och slutligen det andra subjektet, vår relation till den andra. Det här är slutpunkten för berättelsen. Men egentligen är det början. Utan andra subjekt skulle bilder, visuella registreringar och dokumentärfilmer vara överflödiga. Skälet till att dom finns är att vi behöver kommunicera och dela våra förnimmelser, åsikter och tankar. Det är på grund av att vi delar en värld med varandra som vi behöver bilder. För att kunna se behöver vi inte enbart ett par fungerande ögon utan även andra människor, ett annat par av ögon. Det är i det här sammanhanget som bilden fungerar som hjälpmedel. Bilden är inte i först hand ett medel som hjälper oss att se bättre, så som teleskopet eller mikroskopet. Bilden hjälper oss att se bättre, men inte genom att förstärka vår optiska förmåga, utan genom att kommunicera och sammankoppla vårt seende med andra människors seende. Den här praxisen av att dela vårt seende med varandra föds ur en moralisk insikt om att ensamma, utan andra människors åsikter, är vi främmande inför den här världen.

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Antony Fredriksson

Vision, Image, Record – A cultivation of the Visual Field

The first part of this thesis delivers a genealogy of the *image*. It chronicles how the concepts of image, vision and the self evolved in relation to one another in a specific scientific and philosophical context, starting with the early Renaissance, which saw the invention of the perspectivist painting, up to the birth of Positivism and the photographic image. This development entailed a form of reductionism in which "the self" – the role of human psychology, our judgement, our attention and our will – was sidestepped. Within this intellectual tradition there is only a short step, from the understanding of the image as a representation of three-dimensional space on a two-dimensional surface, to the idea of the image as a transparent picture, a window towards the world. By taking this short step one would easily lose sight of the role of the self in the *practices* of making and viewing images.

In the second part the author offers an alternative to the intellectual tradition described in the first part. The idea of depiction as a neutral "view from nowhere" would support a skeptical attitude towards communication, dialogue and human testimony, and therefore our reliance upon each other and consequently our reliance on ourselves. What was forgotten in this understanding of the image as a view from nowhere, was that the image is an aid in the task cultivating our visual field, an aid in *sharing* our views. Due to this function of sharing, the image becomes a guide as we find our orientation in this world. I might stand beside another person and see what she sees, but I do not necessarily know her reading of it. The image adds a dimension to this relation, since it does not only show me what the other sees. When an image works properly it also shows *how* that other person sees, and thus the image becomes an agent.

While the present thesis combines the fields of philosophical epistemology, history of science and visual studies, its main interest is philosophical. It engages with philosophical misconceptions of depiction as a mimetic art form, of knowledge as domestication and of perception as reception of data.

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