The Essential Indexical

THE INDEX IN THE PRODUCTION OF MEANING IN CAMERA-LESS
PHOTOGRAPHY

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Front cover:

Hijma, Cobie. *Cyanotype photogram of ivy.* Unique piece made for the cover of this thesis, 31-07-2017.

Preface

In front of you lies my Master Thesis, written in order to complete my degree in Film and Photographic Studies at Leiden University. With this thesis I wrap up my final year at Leiden University, this time as a Master's student.

In 2010 I came to Leiden as a youngster, fresh from the VWO, ready to start my Bachelors in Art History. Unfortunately, this turned out to be the wrong choice for me and I lost all pleasure in studying for a while. So after some deliberation I decided to follow my heart, starting a HBO education in Photographic Design at the Fotovakschool Amsterdam, which I completed in 2015. However, after a year away from university I started to miss the challenge academic education brought me and took another shot at obtaining a BA, this time in Film and Literary Studies. This proved to be a match made in heaven, even though I am still surprised about it myself. I was never a huge fan of literature nor a film buff, although I loved reading as a child. But the way in which the arts were approached in this BA suited me very well. I loved the critical and analytic way of thinking we were taught and had no trouble obtaining my degree. In my BA thesis I wrote about indexicality for the first time, indexicality of the creator of art to be precise.

After finishing my Bachelors I had no doubt about what I wanted to do next. I had looked at this Master's program when I was still in the Art History program six years ago and I had not changed my mind since. So I enrolled for the MA Film and Photographic Studies, which nicely combined my two BA programs. I knew in advance that it was going to be a tough year, but boy, did it exceed my expectations. After the first introductory workshop week of the elective *Editorial and Curatorial Training Program* with Bas Vroege, it was clear that we would have to work hard to reach the finish line. This very thesis proved to be the biggest mountain I had to climb, but fortunately I have made it to the top.

But this year has also brought me loads of invaluable experiences. I have learned what goes on "behind the scenes" of this MA program as a student member of the Departmental Teachings Committee, I got experience as a board member as the chair of our study association PixCel and I was a part of the very first Humanities Buddy

Programme of the Humanities Faculty. All in all, I got to meet a lot of interesting people, attended great lectures and gained valuable experience for my future career. My next step will be a job as a cataloguer for the photography collection of the Rijksmuseum in Amsterdam, which I look forward to starting enormously!

The idea for this thesis has been in my head for quite a while. I wrote my BA thesis on the index of the maker in a graphic novel, a film and a photography project. For my MA thesis, I wanted to dive further into the relation between the index and photography, more specifically in camera-less photography, which fascinates me greatly and I work without a camera as a photographer myself. Luckily, my thesis supervisor Tineke de Ruiter saw the value of the research I wanted to do and gave me the green light. It has been a tough few months, but I still find the topic of photographic indexicality fascinating and theoretically challenging, so I have never worked on this thesis with aversion.

The title of this thesis refers to an essay by Professor of Philosophy John Perry called "The Problem of the Essential Indexical", in which he goes into the value and problematics of linguistic indicators such as "me" and "you". Perry's ideas were later contested by Professors of Philosophy Herman Cappelen and Josh Dever, who aptly titled their book *The Inessential Indexical*. I, however, want to prove that the indexical is not insignificant at all, therefore I return to Perry's phrasing.

Finally, I would like to thank a few people for their support with this MA thesis. First of all, I would like to thank my dear parents for making it possible for me to follow this program, but also for the endless support and coaching. I would also like to thank my boyfriend Sandrik for enduring a lot of stress and whining, and for proofreading this whole thesis. I also thank my thesis supervisor Tineke de Ruiter for providing me with critical questions and feedback all the way. Finally, I would like to thank Peter Verstraten for finding the time in his busy schedule to take on the task of second reader for this thesis.
I hope you will enjoy reading the following.

Cobie Hijma
Leiden, 07-08-2017

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Introduction

These past few years a lot of art fairs and publications on photography have begun to include camera-less photography in their selections. For example, at the annual photography collectors fair Unseen in Amsterdam, the amount of camera-less works on offer seems to grow every year. Strikingly a lot of photographers have recently chosen to renounce the apparatus that is mostly used as, and at times almost synonymous to, photography: the camera. When most people think of photography, they think of expensive cameras, big lenses and the-more-the-better megapixels. However, in principle the word "photography" means "writing with light" and does not necessarily imply any kind of apparatus to do so. As French philosopher and art historian Hubert Damisch states in the essay "Five Notes on the Phenomenology of Photography" (1978): "Theoretically speaking, photography is nothing other than a process of recording, a technique of inscribing, in an emulsion of silver salts, a stable image generated by a ray of light. Note that this definition neither assumes the use of a camera, nor does it imply that the image obtained is that of an object or scene from the external world" (287).[1]

Could we then say that camera-less photography is further away or closer to the "roots" of the medium? The camera as mediator has been eliminated, which makes the "writings with light" on the material more direct compared to a conventional photograph. On the other hand camera-less pictures are always abstract or abstracted, which diminishes their ability to form iconic relations with the visible world.

The relationship between a photograph and the subject it depicts is always indexical: the subject has to have been in front of the camera in order to reflect rays of light that the light sensitive layer in the camera can record. Without the presence of the object, there would be no image of the object. But how does this work if the

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[1] This definition by Damisch does not yet include digital photography. Digitally generated images and the camera-less mode have a slightly more complex relationship, which I will go into in the first chapter when I discuss the analogue trend in the camera-less mode.

camera is eliminated from the equation?[2] A photogram, a technique where one places an object directly onto photographic paper, gives only the outline of the object. Other camera-less techniques yield images that have no iconic relationship to the subject at all. The indexical relationship between object and depiction nevertheless remains the same: an object was in the presence of the photographic paper in order to produce an image.

The way in which I use the terms *icon* and *index* is based on Charles Sanders Peirce's theory of semiotics, in which he discerns three different types of signs: the icon, the index and the symbol. The first two sign types will be pivotal to my argument. In short, Peirce sees the icon as a type of sign that refers to the visible world based on likeness to that world. The index, on the other hand, refers to the visible world on the basis of proximity; it is a trace of something, a physical imprint.

In her article "Notes on the Index: Seventies Art in America" (1977) Rosalind Krauss argues that a photograph is as much iconic as it is indexical ("Notes" 75[3]). I, however, wish to argue that this balance shifts towards the indexical if an image is produced without a camera and that the meaning of the image is therefore inextricably connected to this physical relationship of the depicted with the visible world. It is the photographic index that determines the meaning of camera-less photography, but it cannot do so on its own. An examination of a number of case studies will show that the index is either full or empty, which means this sign type will always have to be supported, to make a hierarchy in the chaos, or filled by something outside of itself.

Floris Neusüss' *Körperfotogramme*

My first case study is a series of photograms by German photographer Floris Neusüss (b. 1937). He is a pioneer in the field of photograms, more specifically photograms of human bodies. Neusüss sees the photogram as the ideal photographic image, because it is a "theoretically unending space" (Artsy) without a horizon and perspective, that

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[2] In the article "A Set-theoretic Approach to Indication and Indexicality in Photography" Emanuele Martino describes the photographic index in the form of mathematical equations, thereby proving that the index can be approached as a function, as a mathematical form (291).

[3] From now on, I will refer to the first article Krauss published under the name "Notes on the Index: Seventies Art in America" by the abbreviated title "Notes", and to the second article she published with the same title as "Notes, Part 2", making the same distinction between the two as Krauss did herself in the full title (see list of references).

offers him the freedom to create and manipulate his images as he pleases. He therefore sees his images more as paintings than as photographs, because of the step-by-step manner in which he creates his images. His photograms are abstracted because of the photogram technique employed, but still to some extent figurative. The relation between the subject and the representation is therefore iconic, highly indexical and even physical.

The series *Körperfotogramme* (1960-1983) consists of life size photograms of human beings on large sheets of photographic paper. The results are impressively large images of the human body, portrayed in an unusual fashion. Not only are the bodies now two dimensional, we also seem to be looking at them from "below". The photogram technique ensures that the outline of the bodies is clearly contrasted against the background. However, the surface of the person "posing" for the image is darkened, because hardly any light can pass between the paper and the body when one lays down on the photographic paper. The *Körperfotogramme* therefore seem otherworldly, extra-terrestrial even and fascinate the viewer because they portray something so familiar in such an unfamiliar way.[4] The person posing is about as tall as we are and seems to be so close to the surface of the picture that we can almost touch them.

It could be said that Neusüss' photograms are hardly "contemporary" photograms, since he produced his *Körperfotogramme* between 1960 and 1983. However, since he is still active as a "photogrammer" and his working method has hardly changed, he could have made these photograms of human bodies recently as well. I therefore choose to still categorise this series as "contemporary". His more recent series *Anteidola* from 2002 shows that his method of working is still equal to his workflow in the 1960s and '70s, comprising of photograms of classical statues in the Glyptothek in München.

Adam Broomberg and Oliver Chanarin's *The Day Nobody Died*

My second case study is a project that is created without a camera, but also without putting the subject of the image directly onto photographic material. In June 2008

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[4] The idea of people finding something familiar fascinating because it is portrayed in an unfamiliar way is extensively discussed by Masahiro Mori in his seminal essay "The Uncanny Valley" from 1970.

photographers Adam Broomberg (b. 1970) and Oliver Chanarin (b. 1971) travelled to Afghanistan to spend time with some British Army units for their project *The Day Nobody Died*. They did not want to take conventional journalistic photographs of the atrocities they witnessed when they travelled with the army units. As they state themselves in the manifesto that accompanies the project, also called *The Day Nobody Died*: "we have struggled with the role of representation, with how to represent these events and how representation itself is complicit in their instigation and perpetuation" (Broomberg and Chanarin 2). The two photographers therefore chose to let go of "all events a photographer would normally record" (Broomberg and Chanarin 1) and focussed on finding a way to represent the trauma without actually showing it.

The method they found to convey what a war zone feels like was to fill a box with a big role of photographic paper. This box itself became an passenger on the trip, like an additional person that was embedded in the army unit. The soldiers took care of the box, just like they took care of the two photographers in their midst, transferred the box to different vehicles and made sure the box remained closed to avoid light leaking in. To show how this box of photographic paper became a mise-en-abyme for the photographers themselves, Broomberg and Chanarin created a movie with the box as the protagonist.[5]

Once in Afghanistan, the duo took a six meter piece of photographic paper out of the box each time and exposed it to whatever they encountered to "register" it on the photosensitive layer, as "proxy, a mute witness" (Broomberg and Chanarin 2). The results are representations of conflict and suffering, without actually showing it. There is no visible similarity to the subject (icon) and also no physical relationship of subject and photographic material (photogram), so the relationship between subject and depiction is solely indexical due to the rays of light used to create the image.

Structure of argument

The question that will guide this thesis will therefore be: how does the photographic index function as the determining factor in the production of meaning in the camera-less case studies *Körperfotogramme* (body photograms) by Floris Neusüss and the project *The Day Nobody Died* by Adam Broomberg and Oliver Chanarin?

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[5] Available on Youtube (see list of references).

I will answer this question in three steps. In the first chapter, I will discuss what the sign-categories of icon and index are in the semiotics of Peirce and how the conventional photograph relates to the photographic index. Additionally, I will explain what the contemporary photographic discourse around camera-less photography entails.

In the second chapter, I will frame the index in photography theory by discussing big names in the field such as Roland Barthes, Rosalind Krauss and Geoffrey Batchen. On the basis of this theoretical discussion, I will explain how the photogram and the camera-less photographic record relate to the photographic index and how this differs from the way the conventional photograph relates to this category of signs.

In the third and final chapter I will show how this different relationship of the camera-less photographic record with the index problematizes photography's production of meaning. I will use an extensive analysis of both Floris Neusüss' *Körperfotogramme* and Adam Broomberg and Oliver Chanarin's *The Day Nobody Died* to show how these case studies put the photographic index under stress, but also foreground it, in two different ways, in the process of production of meaning.

I will conclude that the camera-less photographic record shows that the photographic index is twofold, and neither variety of the index is capable of producing meaning on its own. The photographic index is indispensable for the production of meaning with the camera-less photographic record, but needs to be filled or contextualized to work as such.

Chapter one

"Icon", "index", conventional photography and the current camera-less photographic discourse

Introduction

In this first chapter I want to discuss the sign types "icon" and "index" as formulated by semiotician Charles Sanders Peirce, for I will be using these two terms frequently throughout all three chapters of this thesis. Because semioticians are known for their very intricate writings on their ideas on semiotics, I will be using the very clearly written *Semiotics, the basics* (2002) by Daniel Chandler to elaborate on Peirce's teachings.

Following the discussion of the icon and the index as categories of signs, I will set out to relate the conventional photograph, in other words the photograph created by means of a camera, to the photographic index. As stated in the introduction, every photograph is by definition an indexical sign of what is depicted on it. Simply put, the photograph cannot exist without a physical bond with the subject it represents. The rays of light that fall onto the subject are reflected by it, into the camera. These rays have thus physically "touched" the subject before they reach the photosensitive surface in the camera, producing a physical relationship between the subject and the image of that subject.

Finally, I want to show what the contemporary photographic discourse on camera-less photography entails, as a foundation for the second chapter in which the relation between the camera-less photographic record and the semiotic categories of the index and the icon will be discussed. A camera-less trend can be discerned in the current field of photography. In this first chapter I want to take the opportunity to look at the characteristics of some of these camera-less projects that have been created in the last few decades. It is only after an examination of the characteristics of these works and their makers' reasons for renouncing the camera and also comparing them to some historical camera-less photography that we can explore how these contemporary camera-less photographic works relate to the semiotic sign-types of icon and index in chapter two. I will discuss two recent exhibitions and accompanying

publications which are completely devoted to camera-less photography, namely *Shadow Catchers* (2010) by the Victoria and Albert Museum in London and a book with the same title by Martin Barnes, as well as *Emanations* (2016) by the Govett Brewster Art Gallery in New Zealand and the book *Emanations* by Geoffrey Batchen.

Examining these two publications will allow me to discern the trend(s) in contemporary camera-less photography, without venturing too much into the thoughts of the artists themselves on his or her renunciation of the camera. Although I argued before that the maker of a work is always indexically present in his artistic product (Hijma 2016), the focus of this thesis is on the general indexical qualities of photographic imagery.

Icon and index

In order to analyse the way the two case studies I selected relate to the photographic index, I want to start by explaining how I will use the terms "icon" and "index" and what their function is in reading photographic images. Daniel Chandler's very clearly written *Semiotics, the basics* will help me plough through the small part I want to utilise of the theoretical spider web that is semiotics. In the introduction to his book Chandler indicates that semiotics is hard to define and several big names in the field, such as Eco, Saussure, Peirce and Jakobson, have formulated what semiotics is in a somewhat different way (2-3). In short, Chandler summarizes, semiotics can be defined as "the study of signs" (1).

In the nineteenth century linguist Ferdinand de Saussure (1857-1913) formulated a theory about how we give meaning to the world around us by using the term "sign". This sign is made up out of two parts: the thing that refers meaning to us ("signifiant") and the meaning of that reference ("signifié") (Chandler 14). In English these two components of the sign are mostly referred to as the "signifier" and the "signified". Together these two halves of a circle, as they often are visualized in explanations of this theory[6], form that which conveys meaning, which communicates. Not very much later Charles Sanders Peirce (1839-1914) reworked Saussure's two part sign system into a three part semiotic theory. Peirce still saw the sign as a two-part

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[6] For an example of such a semiotic circle, see W.J.T. Mitchell's "Word and Image", where he explains the concept of "tree" by means of such a circle (54).

entity, but he distinguished three different categories of signs: the icon, the index and the symbol, which differ from each other in the way the signifier relates to the signified (Chandler 36-7). If the relationship is based on likeness between the signifier and the signified, Peirce calls it an iconic relationship. An example is a portrait: an image of someone that is made to give an impression of their appearance. The relationship can also be based on proximity of the signified to the signifier, a relation based on presence, which can be both spatial and temporal.[7] The sign that is constructed by such a relationship Peirce calls the index. The example mostly used for this sign type is the footprint: it shows that a foot once was at that place (spatial proximity), but that is not there anymore (temporal proximity). It shows a trace of the foot, the presence of the foot once in this place, but not the foot itself. Finally, the relationship between signifier and signified can also be arbitrary, completely based on agreement between people, as is the case with the symbol. An example of this is the red rose that stands for love: the rose itself does not resemble love or denote the proximity of this abstract idea but it stands for love because we as a culture have at some point decided that it does. This last category is complicated, because both the iconic and indexical relationship can be "proven" to some extent. The symbolic relationship, however, is purely based on convention and can therefore work in one environment with particular cultural specifics, but does not necessarily have to work in the same way in another cultural environment. A red rose might stand for love in the West, but is that also a convention in an African tribal society? With the symbol, no affinity between signifier and signified needs to exist at all.

Daniel Chandler describes signs as "middle men", which are indispensable in order to be able to produce meaning. He argues that meaning is not transmitted one way from a transmitting party to a receiving party, but it is an active effort from both sides. The receiver has to work in order to "receive" either the likeness, the proximity or the agreement (Chandler 11). This idea of active participation by the receiving party

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[7] The terminology that is used to describe the index is complicated and confusing at times. For example, Chandler uses the word "proximity" to indicate the indexical relationship between signifier and signified, while others speak of "presence" or "trace". Eventually all these terms aim to express the same relationship, but the words used might make it seem like different things are meant by these scholars. In my opinion, this only proves how complicated semiotics can be, especially because we try to talk about the production of meaning through a sign system itself: language.

will return in my argument several times, because the photographic index also relies on the action the viewer takes to connect information that is offered to him, be it in the image via other sign-types (icons) or via contextual information.

The conventional photograph: the icon and the index

To explain how the conventional photograph relates to these semiotic categories of icon and index as formulated by Peirce, I want to refer back to the argument of Rosalind Krauss that I incorporated in the introduction, that the photograph is as much iconic as it is indexical ("Notes" 75). This means that a photograph refers to the visible world based on *likeness to* and *physical presence in* that world. Philosopher Jonathan Friday has therefore labelled photography as "iconically indexical" (343), which bears resemblance to the visible word, but also is also "a tracing of patterns of light reflected from its object" (343). For the conventional photograph, this reasoning holds up quite well.

If we envision conventional photography schematically, it would look something like this: subject – light source – camera – image (**diagram 1**). The subject reflects light coming from a light source, which is then caught on a photosensitive layer in the camera. The light the subject absorbs will not be bounced off the surface and will therefore not reach the light sensitive layer. In both the case of a digital and an analogue photosensitive layer, this process of "catching" light yields a latent image, which has to undergo another process, either the processing of data by a processor in a digital camera or the developing and fixing of the image by chemicals when working with analogue material. After this second process, which in a sense can both be considered as "developing", an image has been produced.

For a photographic image to be created, the subject always has to be present in front of the light sensitive layer. This is often claimed to be the difference between photography and painting: one can paint an image of an apple by only thinking of an apple, but one cannot take a picture of an apple without having an actual apple present. As discussed above, the rays of light from a light source "touch" the surface of the subject and are registered by the camera. The camera makes use of a lens in order to create a sharp image of the subject. Consequently, the subject and the image of the subject look alike: the same colours or hues of grey the subject has, are registered by

the camera, the same shape and the same shadows. By means of the lens the image is in focus, so it is also recognizable as the subject for the viewer.[8] The semiotic relationship between the subject as the signified and the photograph as the signifier is therefore iconic: it is based on similarity.

This similarity is produced by the "touching" of the subject by light rays. The word "touch" implies a physical relationship between the two. Since the light rays are absorbed by the light sensitive surface after they have touched the surface of the subject, the physical relationship between the light rays and the subject is then transposed into a physical relationship between the subject and the light sensitive layer. Thus the relationship between subject and image is also physical, albeit indirect (Martino 296). This tangibility of what has been in front of the camera and the subsequent image is what makes up the indexical relationship between the two parts of the photographic sign: the subject has been there, was present to serve as a "model" after which to create an image, not by a painter's skill, but by a machine's mechanics. This automated way of producing an image is what caused the apparatus of photography to become almost synonymous to the medium of photography itself. In addition, this mechanical mode of representation together with its indexical relation to what it represents are what make up photography's truth claim. Because what we see in the photograph must have been there in front of the camera to be portrayed, we generally take what we see to be real. Even though the general audience nowadays is getting more accustomed to the manipulability of images, there is still a firm belief in the photograph as proof of something. When we want to remember how something occurred or convince someone else that something really happened, we take a picture as evidence, for our future selves or for others.

Contiguity

This truth claim of photography can only withstand criticism if we as viewers put our faith in it. In the short article "Carnal Knowledge" (2001) writer and curator Geoffrey Batchen discusses this truth claim of photography that is inextricably connected to its indexicality, on the basis of the work of two artists in relation to the qualities of touch

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[8] It must be noted here that it is very well possible to create an out of focus, even highly abstract image by means of a camera with a lens. What I speak of here, however, is the regular use of a camera, without going into all the artistic possibilities of the apparatus.

inherent to photography. He begins this discussion by elaborating on the photographic index, proving that the physical relationship a photograph has with its subject does not only make the photographic image an indexical sign, it also exemplifies that this relationship is physical and the photographic image can therefore make its subject "felt" to the viewer.[9] Batchen calls this quality "contiguity": a state of being in contact with something (21). "Photographs are primarily designated as indexical signs," Batchen explains, "as images "really affected" by the objects to which they refer" (21) he continues citing Roland Barthes' *Camera Lucida* in passing. Contiguity "is what can give any sign in the present a direct association with another sign in the past, and it is precisely this temporal and historical connection that provides photography with its uniquely "carnal" knowledge of the world" (21). The relation Batchen indicates between present and past is strongly related to another concept of Barthes: "temporal anteriority". What the French semiotician means by this is that a photograph always shows us something that *was.* A photograph, after all, is always a delayed image of something. There is no such thing as a "direct image" of the here and now, even though marketers of instant photography make it seem like there can be. Between the moment of registration of a scene (the opening and closing of the shutter) and the moment our eyes can view the registration (as a print, negative or on a screen), something has to happen to make that image visible. The delay between registration and viewing might only be a second, for example on a camera phone, but still the image cannot be viewed in the exact same moment as the registration of that moment. In the case of analogue photography, this delay is a great deal longer, due to all the extra steps that have to be taken to create a viewable image: development, fixing, the printing of the negative, and again the development and fixing. The contiguity between the subject and the subsequent image therefore only functions when the needed knowledge to put the contiguity-link in place is already present in the viewer (Batchen 23). As a viewer of a photograph, I cannot make a connection between the image and the subject of the image, if I do not know that subject.

For abstract photography, to which the camera-less photographic record to some extent always belongs, this effort of the viewer to "know" the image is even

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[9] The idea of making the subject felt to the viewer will come back in my discussion of the case study *The Day Nobody Died* by Broomberg and Chanarin, further on in this chapter.

more important, because the images do not offer many iconic referents to assist the viewer. Contextual information becomes the key to discerning what the images are "about" and put the continuity link in place. This information thus has to be provided with the images in the context, be it via an accompanying text in a book, an explanatory sign on the wall etcetera.

The fact that many artists are emphasizing either a physical or temporal[10] contiguity in their work can be explained, according to Batchen, by a "palpable anxiety about contiguity's future" (22). He blames the digitally rendered photographic image for the fear that the relationship between every photograph and its subject will disappear, because digital photographs are so easily tampered with, even though strictly speaking they still need an indexical relationship with the visible world to be created. The digital image is therefore "nothing but surface" (22), Batchen says. Contemporary artists who emphasize the physical link between the photograph and the visible world foreground the photographic index, proving that for them, as I argue here, it is indispensable for the medium.

The digital photographic image puts the index under stress. We could say that the photographic index of digital photography is the same as with an analogue image. The rays of light have bounced of the subject and were caught by a light-sensitive layer in the camera. Up until this point in the image-forming process, analogue and digital images are produced in the exact same way. However, the analogue light-sensitive surface then needs to be developed and fixed in order to result in an observable image. Loads of retouching and manipulating can be done during this processing phase, but all within the boundaries of the information that is enclosed in the silver salts. In the processing of a digital image, manipulation can be done with the information enclosed in the image-file, but new image-information can also be rendered by software. The digital image is thus in a sense "limitless", whereas the analogue photographic image is always "limited". In a way, we could say that the digitally rendered image loses "touch", to use a word that screams indexicality, with

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[10] Of course it can be argued that a temporal relationship is merely a specific version of a physical relationship, given that a relationship through time can also be seen as a relationship in space if we consider time to be spatial as well, seeing time as a fourth spatial dimension.

the visible world. "Contiguity" would therefore become harder to construct for the viewer, because everything in an image can refer to both everything and nothing at all.

Analogue trend

With this difference in manipulability of analogue and digital images in mind and the implications of that difference for the photographic index, it is interesting to note that the current camera-less trend also seems to be an analogue trend. In a way, this is not surprising. An analogue camera only functions as an image-making apparatus when other material is added to it, i.e. film. In the digital camera the light-sensitive layer is an integral part of the machine, which cannot be removed without breaking open the casing. The digital photosensitive layer is also re-usable countless times. Next to that, the analogue material still functions the same way whether it is inside or outside the camera. The digital light-sensitive cells need to be hooked up to a processor in order to "know" that they have to absorb light at all. Just like film these cells display some form of sensitivity to light, but they don't undergo a permanent physical transformation when they absorb light. Analogue material is sensitive to light on its own, chemically changing structure when it comes into contact with light.

Whereas everyone who wants to try conventional photography will often opt for the digital camera because it is cheaper and easily accessible, for a photographer who wishes to experiment with camera-less photography working with digital equipment is unattractive. As a reaction to the movement among photographers to "go" camera-less, a lot of "how-to" books for aspiring artists also have hit the market in the last few years.[11] Briefly looking through these publications shows that the way to go camera-less is to go analogue: fairly easy historical processes you can try at home as the cyanotype and the salt print, but also manipulating the more conventional film in all kinds of ways.

An example of such a camera-less project for which its analogue materiality is indispensable will help me demonstrate how the camera-less photographic record is almost always also an analogue image. In 2013 Luke Evans and Josh Lake, two young artists studying at Kingston University in London, embarked on a journey through the

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[11] A few examples of such publications are Robert Hirsh's *Photographic* Possibilities (1991), Christopher James' *The Book of Alternative Photographic Processes* (first edition 2007), Malin Fabbri's *Anthotypes* (2011) and Antonini and others' *Experimental Photography* (2015).

human body by means of photographic material. Evans and Lake put small pieces of film in specially designed capsules and ingested them (Solon). After the capsules left their bodies in the natural way, they cleaned the film and put it under a microscope (Kelly). This resulted in the project *I Turn Myself Inside Out* which was acquired by the Saatchi Gallery in London after their graduation (**figure 9**). Had these two young photographers decided to do such a project digitally, they might have run into some problems. Unless it is in a medical setting, it is never a good idea to swallow small machines that use electricity, however small the amount. This would also have made the project a lot more expensive, because digital photographic micro equipment is very pricey. Analogue film material, on the other hand, is widely available and relatively (and I stress that this is only true in this context) cheap. It can also be cut into any necessary size very easily and still function in the exact same way, as this project by Evans and Lake proves. The "negative" images of their bodies were only very tiny pieces of film, but could be enlarged by means of a microscope to form huge prints.

I Turn Myself Inside Out is not only of interest to me because it is produced with analogue material, but also because of its complicated relationship to the photographic index. I have argued before that this project of Luke Evans and Josh Lake is an index of its makers, because their bodies do not only function as the subject of the images, it is also the means of production (Hijma 40). The indexical relationship between the photographers' bodies and the images is therefore twofold; it is a physical relationship between the signifier and the signified by means of the bodily fluids that imprinted themselves on the material, an indirect index, but also a direct one because of the contact between signifier and signified. I will return to this project and its relation to the photographic index in chapter three.

If you want to venture into the field of camera-less photography and have a basic knowledge of photography and analogue photographic material, there are already a great many possible processes and manipulations available. Analogue light-sensitive material is also "tangible", another term that heavily hints at indexicality: you can take it out of its container and hold it in your hands. This makes it easier to envision what kind of things you could try with it and generate ideas as you are working. Because the digital photographic image is generated in a *machine* instead of before your eyes, it is harder to get creative with it. The physical relationship between

the visible world and the photograph that is foregrounded by the camera-less photographic record, which I will go into more in depth later on, seems to be strengthened by its analogue nature. The tangibility of the material seems to extend itself to the indexical relationship between image and subject, between signifier and signified.

Historical perspective on camera-less photography

Before I move on to discussing the contemporary camera-less practices, I want to briefly go into the history of the photographic mode. This small historical framework will make the characteristics of the contemporary camera-less works more clearly different from historical camera-less photography.

When the medium of photography "saw the light" by the hands of Joseph Nicéphore Niépce and Louis Jacques Mandé Daguerre in France (Gernsheim and Gernsheim 20-21) and simultaneously William Henry Fox Talbot in Britain (Gernsheim and Gernsheim 28), photography appeared in two forms. In France the Daguerreotype process became very popular, but the process turned out to be short-lived because it was not reproducible (Hacking 9-10). This reproducibility of photography is what turned out to be its marketability (Benjamin).

In Britain, Fox Talbot developed a different photographic procedure based on photosensitive salts that he called "photogenic drawings". The name Fox Talbot gave to this mode of production indicates that he saw a close relationship between his new-found medium by means of a camera obscura and painting, calling them "drawings". However, Fox Talbot mostly used his procedure to make photograms of plants and objects, or copies of other images. His most famous photogenic drawings are a part of the six instalments of his book titled *The Pencil of Nature* from the 1840s (Parr and Badger 14-15). Fox Talbot's photograms are the earliest examples of this technique, which are also unique, irreproducible pieces. However, the main reason why the British scientist chose this way of working is not out of a need for artistic expression as is the case with Neusüss, but because his aim was predominantly scientific in nature. Fox Talbot saw the photogram technique as most suitable for his effort to create accurate representations of fauna, something the cameras that were available to him at that time could not achieve. For example, the photogram is a 1:1 scale

representation of its subject, offering the viewer precise information about the size and shape of the subject of the image.

Another publication that is worth mentioning in this context is the first real "photobook" by the very first female photographer: Anna Atkins' *Photographs of British Algae: Cyanotype Impressions* from 1843.[12] Atkins made three different versions of this book with cyanotype photograms of British algae, of which 17 copies are currently known to exist. This book is remarkable because it is the first of its kind: a photobook. As in the case of Fox Talbot, Atkins chose to work with the photogram technique because her effort was also scientific and her main goal was to transfer accurate factual information to the observer of the images (Parr and Badger 20-21). The images should offer enough information about the size and shape of the plants to discern differences between the various kinds of algae she recorded.

Some eighty years later, from around 1920 to 1940, several other artists chose the photogram technique, to express their artistic ambitions: among them were László Moholgy-Nagy in Germany and Man Ray in France. By then, the photo camera was already widely available and could produce very decent quality images. However, these two artists deliberately chose not to use it for some of their photographic experiments. Moholy-Nagy, who was part of the Bauhaus movement, saw the photogram technique as a means to produce a "new vision": a mechanical imagery that was influenced by the hand of the artist as little as possible (Moholy-Nagy, "A New Instrument of Vision", Solomon-Godeau). Man Ray saw the camera as limiting his artistic expression, saying that "it has always been a sort of contraceptive preservative between my subject and myself" ("A Photographic Biography" 175).

Writer and critic Lyle Rexer in his publication on abstraction in photography titled *The Edge of Vision. The Rise of Abstraction in Photography* writes that "Man Ray on the one hand and Moholy-Nagy on the other sought to realign photography with freer and more open ways of representing than a strictly documentary system could accommodate. They did it by reconsidering what a photograph means (Man Ray) and what it is (Moholy-Nagy)" (Rexer 68). In other words, Man Ray renounced the camera so the apparatus could not overshadow his search for meaning, the semiotic value of a

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[12] In May 2017 the Rijksmuseum in Amsterdam acquired a copy of this infamous photobook, which is currently part of the exhibition "New Realities. Photography in the Nineteenth Century".

photograph. Moholy-Nagy on the other hand questioned the ontological value of a photograph by eliminating the camera from his artistic process.

Even though the reasons why these photographers I briefly discussed did not work with a camera are different, either because the photogram offers factual information the photograph cannot or because the artist wanted to eliminate any visible marks of authorship from the production process, contemporary camera-less photography like Neusüss' *Körperfotogramme* and Broomberg and Chanarin's *The Day Nobody Died* is produced in this fashion for very different reasons.

Contemporary camera-less photography

To demonstrate what differentiates current camera-less photography from the historical examples I just considered, I want to discuss two recent exhibitions and accompanying publications. First I want to discuss *Shadow Catchers: Camera-less Photography*, an exhibition at the Victoria and Albert Museum South Kensington from October 13, 2010 until February 20, 2011 and the eponymous book, edited by the Senior Curator of Photography at the V&A, Martin Barnes. In this exhibition five artists were given a platform to display the work they made without the use of a camera to a fairly large audience. The artists, Floris Neusüss, Pierre Cordier, Susan Derges, Gary Fabian Miller and Adam Fuss, have all worked with a camera at some point in their lives, but for their best known work they have all renounced the apparatus. As I was not able to see the exhibition myself at the time it was on display at the V&A, I will mainly refer to the accompanying publication in the following examination.

Shadow Catchers' publication starts off with a short introduction by way of a historical overview of the camera-less photographic practice written by Barnes. The aim of Barnes' historical background is similar to mine: to offer the reader some perspective for the contemporary camera-less works that follow. The introduction by Barnes is followed by a section on each of the five artists, first offering an essay about their life and work and ending with an extensive selection of images from different projects. The fact that a large amount of the pages of this publication are filled with only images shows that the aim of this exhibition and accompanying publication is to present these artists, who are made synecdochical for the contemporary camera-less trend.

Reading these entries on five different photographers and looking at the accompanying examples of their work (**figures 1-5**), an interesting analysis of characteristics of the contemporary camera-less record can be made. First, there is the size of camera-less images. In the case of photograms, the images are a full size representation of its subject, which is exploited in the *Körperfotogramme* by Floris Neusüss (Barnes 26, **figure 1**). Susan Derges, on the other hand, explores both large and small scale possibilities of the photogram technique (97, **figure 2**). This is connected to a second characteristic: the different perspective camera-less photographs offer. The depicted subjects seem to float in space, whether they touch the photographic surface, as in the work of Neusüss (27) or not, as in the work of Garry Fabian Miller (129, **figure 3**), without a horizon, as in the work of Neusüss (26, 28), Derges (97) and Fuss (167, **figure 4**). A third characteristic is that most camera-less photographs are unique pieces. The artists wish to explore the physical (128) and technical (26, 95) possibilities of the photogram technique causing the viewer to wonder how these images were created, as in the work of Cordier (62, **figure 5**) and Fuss (164). Finally, the last quality specific of these artists' work that is addressed in *Shadow Catchers* is the relation with the human (un)conscious. Derges examines the line between inner and outer expression in her work (Barnes 98), looking for "the link between the physical world and the psyche" (98). Neusüss also seeks to express part of the human unconscious (27), as Gary Fabian Miller aims to explore the "dark space of the mind" (130) and Adam Fuss the "existence of our inner shadow" (168). Artistic production is therefore linked to natural phenomena by these artists, although for Pierre Cordier craftsmanship of the artist is the key of his works (61) with "varying degrees of chance and control" (64), whereas Fuss opts for a "minimal intervention of the artist's hand" (164).

The second exhibition and accompanying publication I want to discuss is *Emanations: The Art of the Cameraless Photograph*, an exhibition at the Govett Brewster Art Gallery in New Zealand from April until August 2016 and the book of the same name. It is striking to see that this exhibition took place on the southern hemisphere, but word of it and the publication reached the Western art world

quickly.[13]

Whereas *Shadow Catchers* focused on the works of five specific photographers working without a camera, *Emanations* offers a more general and historically embedded perspective on this photographic practice. As the exhibition announcement endorses: "We present the most complete study of camera-less photography to date, focusing on the cameraless *mode* from the 1830s through to today and offering a global perspective on this way of working" (website Govett Brewster Art Gallery, emphasis added). The aim of *Emanations* is not only to give a historical overview of photography produced without a camera, it also sets out to offer a global perspective on the practice, which I cannot go into within the confines of this thesis. I emphasized the word "mode" in the citation, because I feel it says a great deal about the place of camera-less photography in today's photographic discourse. The use of this word shows that the curators of the exhibition are aware that camera-less photography is not a short-lived trend in contemporary image-making that will disappear again soon. It has always been there next to the conventional way of making photographic images and just after photography's "birth" in the 1830s this mode was the only possible method, as my short historical framework also showed.[14]

The other aspect of *Emanations* that sets it apart from *Shadow Catchers* is the focus on the historical, rather than contemporary perspective. As Batchen explains, and Lyle Rexer endorses this in *The Edge of Vision*, the camera-less photograph has been ignored in histories of photography. Batchen therefore sets out to write a history of solely camera-less photography in this book, being as inclusive as he can by also addressing artists from all over the world. Generally a history of photography starts out with camera-less examples, such as Fox Talbot's "photogenic drawings", but moves on to imagery produced by means of a camera as soon as a proper version was

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[13] Only weeks after the exhibition opened, I ran into the publication at the shop of the Nederlands Fotomuseum in Rotterdam. Even though most of the museum's visitors probably would not have been able to see the exhibition, the museum still found the publication worthy of a place in their shop. Obviously they feel the camera-less photographic record is of interest to the general photography-loving public that visits such a museum in this day and age.

[14] Granted, the camera-less photographic record was the mainstream mode in the 1820s to 1840s mostly because of technical restrictions to the photographic medium. As soon as superior quality images could be made (by the use of a lens, and therefore a camera "box"), the camera-less photograph fell into abeyance quickly. But this way of producing images has never disappeared completely and has also undergone technological developments alongside those in conventional photography, making the term "mode" very suitable.

created. Even the word I use myself, "camera-less" photography, implies a strong relationship with the apparatus that is often confused with the medium of photography: the camera.

Neusüss' *Körperfotogramme* and the photographic index

Floris Neusüss' *Körperfotogramme* are, as the title gives away, photograms of bodies: human bodies to be more precise. In short, the photogram technique entails putting an object onto a photosensitive surface in the dark and exposing it to light. This yields an image of the outline of the object that was placed on the light sensitive layer, a shadow if you will. The surface of the object blocks the rays of light from reaching the paper, but also blocks them from bouncing of the surface of the object onto the paper. Consequently, no information about the surface of the object is included in the subsequent image, which is therefore abstracted. Note that this technique does not involve any photographic apparatus: no camera or lens is used to create the image.

Another characteristic of the photogram, as I have also pointed out in the analysis of *Shadow Catchers*, is that the image is a life-size representation of the subject. In this case, the image Neusüss created is as large as a human laying down in a foetal position, namely 130 centimetres by 58 centimetres (Barnes 32).

An example is Neusüss' untitled photogram from 1962 (**figure 1**), which shows what such a bodily photogram looks like. The image shows an outline of a human body in black and different gradations of grey, but no colour. The background of the image is almost white, whereas the figure is dark grey to black. From top to bottom there are a few elements we can discern as human: strands of hair on the head, a vague outline of a nose on the left just below that, a few fingers on the left of the body, two knees just below those fingers and toes on the very bottom of the figure. By means of all this information we can conclude that this is a human figure, most likely female because of the hair style, but too little information is provided by the image to be certain. The pose of the figure is a foetal position, with knees bent up and arms tucked underneath the body, the body itself turned on its side. On the surface of the shadow of this figure we see various gradations of grey, indicating that some light was allowed to enter between the body and the photographic paper. This proves that the subject was physically present on the photosensitive surface, blocking the light in certain places.

The indexical presence is therefore very strong in this image, as we can see in the image that the signified even literally touched the signifier. The surface also seems a little bit wrinkled, which is another indicator of the signified that touched the signifier: the person that laid down on the paper before exposure.

Neusüss' *Körperfotogramm* thus lacks some iconic information to make this image a proper portrait of someone, but the technique that was used does make the presence of the represented more easily felt for the viewer. In comparison to conventional photography this is image therefore less iconic and more indexical.

Broomberg and Chanarin's *The Day Nobody Died* and the photographic index

The camera-less images of the project *The Day Nobody Died* by Adam Broomberg and Oliver Chanarin are created by exposing a light sensitive surface to light, without use of either a camera or lens and without putting the subject directly upon the light sensitive surface. The results are therefore completely abstract images, sometimes containing some shadowy shapes, but never recognizable as an object or scene (**figures 6 and 7**). Broomberg and Chanarin took a big roll of photographic paper with them when they accompanied a group of British soldiers to Afghanistan. On the scene, they rolled out a piece of the paper each time and exposed it to the things they witnessed. Because these images are all unique pieces of which the paper print is the only copy, the size of the images is determined by the size of the piece of paper they cut off, six meters at a time.

Nothing of the scenes these two artists witnessed when they rolled out the photographic paper can be recognized in the images, but by means of contextual information we know that it was present, mainly by means of the artists' manifesto. The titles the artists gave to the images give us a more specific idea of what that particular image represents, for example "The Day of One Hundred Dead, June 8, 2008" (**figure 7**). The title tells us that this image witnessed a hundred people die. It was physically in front of the atrocities and has absorbed the rays of light that were reflected by the events that took place. The photographic index is therefore very strong in these images, because the iconic has given out completely. We cannot recognize what these images claim to represent, we can only feel their presence in front of it. These representations are the most literal examples of Damisch' definition

of photography, which I already briefly discussed in the Introduction: "a process of recording, a technique of inscribing, in an emulsion of silver salts, a stable image generated by a ray of light" (287). They are nothing other than an inscription in silver salts, because they do not refer to anything iconically anymore. Their "pointing" function that is a product of their indexicality is therefore all the more important. These images tell us what events demand attention, without letting us get lost in the iconic details.

Nevertheless, without an explanation of what these images "represent", these photographs would have no value as a representation of conflict at all. They would simply be colourful planes, which refer to nothing outside of themselves. These photographic pointers thus do not function as such without the proper contextual information, something I will explore further in the next chapter.

Conclusion

This first chapter laid down the foundation for me to build on in the following chapters. First I discussed the terms "icon" and "index" as formulated by Charles Sanders Peirce, to explicate how I will be using these semiotic terms throughout this thesis. Next, I briefly discussed how the photographic index and icon generally function in relation to the conventional photograph, in order to be able to compare the differences with camera-less photographic images in the following chapter.

Following this groundwork, I analysed some of the characteristics of contemporary camera-less photography by means of the exhibitions and accompanying publications *Shadow Catchers* (2010) and *Emanations* (2016). The five photographers that are given a platform in *Shadow Catchers* all seek to explore the possibilities of the camera-less mode, in order to express something from inside the human psyche that a figurative, conventional image could not. The uniqueness of the images is another characteristic that is investigated by these artists. Batchen's *Emanations* offers a historical perspective on camera-less photography, showing that this mode of image-making has always been practiced in the history of photography.

Lastly, the camera-less trend is analogue in nature, because this material is easily used outside the camera and widely available. Analogue material makes it easier for aspiring camera-less artists to try it. In some cases, as my discussion of Evans and

Lake's photographic project *I Turn Myself Inside Out* has pointed out, going digital isn't an option at all. This fight between analogue and digital is an issue nowadays, of course, because we have both technologies readily available.

Chapter 2

The camera-less photograph and the icon and the index

Introduction

In the first chapter I laid down the groundwork to analyse the camera-less photographic record in relation to the index. Elaborating on the semiotic terms "icon" and "index", as well as discussing the contemporary photographic discourse on camera-less photography gives me the opportunity to discuss camera-less photography and the photographic index more in depth in this following chapter. This second chapter will answer the question how the relation of contemporary camera-less photography with the index and the icon differs from the way the conventional photograph relates to it, foregrounding the photographic index in the process. To answer this question, however, it is useful to first discuss some seminal texts on photography theory concerning the photographic index.

First, I want to examine the photograph as a sign, discussing theories on photography by Rosalind Krauss, Tom Gunning and returning once again to Roland Barthes. Krauss is of the opinion that the photograph is equally iconic and indexical, thereby showing the relevance of these two terms for the production of meaning in photography already indicated by Peirce himself (*Collected Papers* 2.286). Tom Gunning is one of the scholars that reacts to Krauss' statement by dismissing the photographic index and arguing for a phenomenological approach. It is through his critique that I can prove that, even though he tries to get rid of the photographic index in theorizing the meaning of photographs, he actually reinforces it.

Additionally, I want to take some more time to discuss the quite radical, and also changing, ideas of Roland Barthes on photography. Even though he is a semiotician himself, Barthes once claimed that the photograph is an un-coded message, only to later revise his own ideas and turning more in the direction of the indexical with his concepts of "studium" and "punctum".

To close my discussion of the index and the icon in photography theory, I will discuss a short article by Mary Ann Doane on the index, who bases her argument on the ideas of Rosalind Krauss, but makes a distinction between two types of indices that

is pivotal for my argument. Then I will relate these two types of indices again to Geoffrey Batchen's concept "contiguity".

Finally, I want to relate my two case studies, as well as the two different kinds of camera-less photography they belong to, to the photographic index. My two case studies, Floris Neusüss' *Körperfotogramme* and Adam Broomberg and Oliver Chanarin's *The Day Nobody Died*, differ from each other in the degree of iconicity they possess and the type of photographic index they foreground. I will therefore first discuss them separately and analyse their specific relation to the icon and the index. Subsequently, I will compare the results of these analyses and explicate the implications of the similarities and differences.

The index in photographic discourse

When we consider the entirety of a photograph as a sign, the iconic and indexical are the most relevant categories to discuss the way it produces meaning. Elements in the diegetic world[15] of the photograph can of course refer to a signified symbolically, but the photograph as an object will mostly be considered in terms of likeness to its subject and presence of that which it shows.

In the two articles "Notes on the Index: Seventies Art in America", art historian Rosalind Krauss argues that every photograph is "a type of icon, or visual likeness, which bears an indexical relation to its object" ("Notes" 75). According to her theory, if we were to create a spectrum from the icon on the left to the index on the right, the photograph would have to be placed exactly in the middle; it refers to what it shows in an iconic way, but it also has a physical relationship with that scene. This way, Krauss argues, "the photograph heralds a disruption of the autonomy of the sign" ("Notes" 77), because it does not refer to the visible world as one type of sign. She adopts the definition of the index given by Peirce that the index is a physical trace of something[16], but she adds to this the concept of "shifters" ("Notes" 69-70), a concept first formulated by linguist Roman Jakobson. The "shifter" is a sign that is empty in itself

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[15] The term "diegesis" is often used in literary theory, denoting the spatio-temporal universe in which a story takes place, which is separate from "our" world: the world of the author (Herman and Vervaeck 87-98). In the case of the photograph, we could see the separate spatio-temporal world depicted in a photograph as a diegetic world in itself as well.

[16] It might come across here as if Peirce claimed that a sign is either a symbol, index or an icon, but this is actually not the case. Peirce himself also stated that a sign, the photograph in particular, is a mix of different types of signs, never solely the one of the other (*Collected Papers* 2.281).

and only gains meaning in context. It can therefore have several different meanings in different settings, hence the term "shifter". An example of a "shifter" is a personal pronoun such as "you", which indicates the person that "I" addresses as "you" and can shift content in a conversation with several people numerous times. The index, Krauss continues, is always empty like these "shifters" and needs to be filled with a "presence": "the implication is that there is no convention for meaning independent of or apart from that presence" ("Notes" 80). The proximity that the indexical quality of photography guarantees, is also where the production of meaning starts.

The conclusion could therefore be, bringing my argument to an early close, that the index is indispensable for the production of meaning in photography. However, this would be too easy. In the decades after Krauss wrote these articles, many scholars argued *against* the index as the determining factor of photographic meaning, or even against the use of this term itself. One of those critics is Professor of Art History and Media Studies Tom Gunning, who in his article "What's the Point of an Index? or, Faking Photographs" (2004) argues against the index and in favour of the emotional response someone has when looking at a photograph. Photographs, he says, "are more than just pictures" (Gunning 46). They make us think of something beyond the surface of the image, imagine what is behind it, or, in other words, what was once *before* it. This view on photography is again relatable to Barthes' idea of "temporal anteriority", which seems to return in every discussion of the photographic index, even though not always in these terms. Gunning's view is different from the semiotic approach, he explains, because the reading of a photograph in terms of signs reduces the reference to signification. Gunning sees the "passageway" (46) a photograph opens up not as a route to signification, but as an entrance to a whole world beyond the surface.[17] He therefore argues against the indexical claim of photography, because the index "falls entirely into the rational realm" (Gunning 46). He paraphrases both renowned French film critic André Bazin[18] and Roland Barthes in their claim that no

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[17] This idea of a photograph as a passage to a whole other world refers back to the earlier discussed literary term "diegesis".

[18] In his seminal essay "The Ontology of the Photographic Image" (1945) André Bazin explains that photographs present themselves as objective and real, but this is only an effect of their mechanical means of production. The photograph is therefore no substitute for reality, because it becomes separated from it.

photograph is ever fully a substitute for that which it depicts, although all signs function as substitutions of the referred (Gunning 47). Gunning continues to state that photographs resist significance because they also show "noise" (47): elements that cannot be explained as signs, but are still there in the picture. Unfortunately, Gunning neglects to provide any clear examples.

This "noise" is the reason Gunning wants a phenomenological approach of the experience of photographs instead of a semiotic one. To build his argument on this after devoting eight pages of his ten page article to the truth claim and use of the index seems confusing, if not contradictory to his point. Adding to that, it is easy to argue that the superfluous elements in a photograph Gunning calls insignificant "noise" can all also be read as signs, as denoting something, since it is *there* in the image. An element cannot be present in the image if it has not been in front of the camera, if it was not present to be reproduced by light in an emulsion of silver salts. So in a sense, every element in a photograph is an indexical sign.

This "there"-ness is very important in the discussion of indexicality in photography, both for and against it, as my discussion of Gunning showed. I agree with Gunning that a photograph can have something present in it that catches your attention and makes you *feel* something. I also agree that this "something" is not always easily definable as a sign, because it is not always a particular element in the photograph that stirs you this way. However, I do not agree that this eliminates the index as the "locus" of meaning. On the contrary, I feel the indexical quality of photography is exactly what produces this "hit".

When I say things like "hit", "something that touches you" and "something that evokes emotion", it rings a Barthesian bell. In his posthumously published book *Camera Lucida* (1980) semiotician Roland Barthes coins two concepts in relation to photography: the "studium" (26) and the "punctum" (27). The "studium" consists of the rational connotations you have with certain photographs: "What I feel about these photographs," Barthes states, "derives from an *average* effect, almost from a certain training" (26, emphasis in original). Barthes goes on to say that the "studium" is "a kind of general enthusiastic commitment […] without special acuity" (26). This is a category of images that we might find pleasing to look at, but are not necessarily invested in emotionally. The "punctum", on the other hand, is harder to define, because it refers

to the indescribable reaction we have to certain photographs. Many people can see a "studium" photograph almost in the same way because the "studium" is, as Barthes said, (culturally) trained. The "punctum" is "the element which rises from the scene, shoots out of it like an arrow, and pierces me" (26) Barthes explains. It is a sensitive point, a sting, "that accident which pricks me (but also bruises me, is poignant to me)" (27, brackets in original); it is a detail (43) and it evokes an emotional reaction in the viewer before he has the chance to apply the "acquired" "studium".

The relation between signifier and signified in the photographic message, be it either as "studium" or "punctum", is quasi-tautological according to Barthes. In another essay he wrote before *Camera Lucida* titled "The Photographic Message" (1977), Barthes claims that the photograph is a message (194), but it is un-coded (196). This claim shows that Barthes later changed positions on the relevance of the photographic index, when he revoked this idea of the un-coded photograph during the writing of *Camera Lucida* (especially in the second part). In the case of an un-coded photograph, Barthes claims, the signifier and signified would therefore be the exact same thing, making the photograph as a sign tautological. The photograph shows, but in order for what it shows to be signs, Barthes says, it has to be *described* and to describe an image you need words: language, a wholly separate symbolic sign system (198). Therefore the photograph is purely "denotative" (198): it is a perfect analogy of reality (196), but it does not "connote" (197) anything itself. Here I feel Barthes gets trapped in his own reasoning, because he also argues the following:

> The photograph professing to be a mechanical analogue of reality, its first-order message in some sort completely fills its substance and leaves no place for the development of a second-order message. Of all the structures of information, the photograph appears as the only one that is exclusively constituted and occupied by a "denoted" message, a message which totally exhausts its mode of existence. (197)

How can a photograph be un-coded if it has a first-order message, a message being a form of communication and communication being impossible without signs? This message might be only denotative in a photograph, but it is still communication, sending something out for someone to receive, through a "channel of transmission" (Barthes 194). Barthes even continues his argument saying that "in photography […] there is never *art* but always *meaning*" (203, emphasis in original). How can this

meaning be produced if the photograph is an un-coded entity that cannot be dealt with except with other sign-systems? Barthes completely overlooks the fact that a photograph can send a message just by being what it is: a demarcated field of visual information, right there for the looking-at.

Even though Gunning and to some extent Barthes make it seem that the indexical and the emotional are mutually exclusive, this is not necessarily the case: the index can evoke an emotional reaction to an image precisely because of the "presence" the photographical index ensures. The world-famous but never seen "Winter garden photograph" Barthes talks about in *Camera Lucida*, a picture of his deceased mother (67), proves this point, even though Barthes himself does not give the index credit. Barthes explains his "punctum" on the basis of this photograph, which somehow stung him more than any other photograph ever did. In my view, it is exactly the fact that he *knew* that his mother stood in front of a camera this way, looked into the lens, that touches him. What Barthes recognizes in this photograph is the essence of his mother, even though he never saw her at this age. So it is not a specific element of the picture that makes it indexical for his mother's being, but the image as a whole. Her presence in front of the camera at the moment of production is what makes him emotionally affected by the image. A painting made of such an occasion would never have the same power, because we do not believe every painting to be a veritable representation of that which is depicted on it (Bolter and Grusin 30). As Gunning asserts in his discussion of the truth claim of the photograph, the contemporary viewer still believes that the photograph has truth value, even if he knows how malleable an image is (40-41), thereby returning to the position Rosalind Krauss takes in the two articles she wrote on the index:

> [T]he support for the index could obviously take any configuration, two- or three-dimensional [...] Yet even as that presence surfaces, it fills the work with an extraordinary sense of time-past. Though they are produced by a physical cause, the trace, the impression, the clue, are vestiges of that cause which is itself no longer present in the given sign [...] the paradox of being physically present but temporally remote. (65)

This citation from Krauss' "Notes, Part 2" reminds us again of Roland Barthes' concept of "spatial immediacy" and "temporal anteriority", only phrased slightly differently.

The photograph asserts a "having-been-there", having been physically present at the moment of creation and therefore being an indexical sign par excellence, which "satisfies questions of verifiability at the level of the document" ("Notes, Part 2" 66) according to Krauss. The "spatial immediacy" of photography strengthens its claim to being a document of truth, as a matter of "evidence, rather than a function of logic" (Krauss, "Notes, Part 2" 66). According to Krauss, the observer of photography does not believe in its truth based on rationality, but because he is programmed to believe a photograph as evidence of a scene. The indexical therefore evokes the emotional, because we believe what we see to be real, truth, to have-been (Barthes, *Camera Lucida* 77).

Two types of photographic indices

In a way, the discussion of Krauss, Gunning and Barthes has already provided me with two positions in relation to the index. Whereas Krauss deemed the index to be shifting, Gunning argued the sign type to be full of insignificant noise. In the short article "Indexicality: Trace and Sign: Introduction" (2007) Professor in Film and Media Studies Mary Ann Doane discusses both these positions and shows that it is possible for both the full and the empty index to co-exist. Doane's introduction to an entire issue of a journal devoted to the index shows that the authors included in it want to re-examine the viability of the index "as a concept, an expectation, and a crucial cultural and semiotic *force*" (6, emphasis in original). In short, according to these authors the indexical qualities of film and photography matter. Doane follows Krauss in her introduction on the index, when she explains that the index seems to either "harbor a fullness, an excessiveness of detail" (2) or it "implies an emptiness, a hollowness that can only be filled in specific, contingent, always mutating situations" (2) as is the case when we speak of the index as "deixis".

"Deixis" refers to words that are completely meaningless in itself, but gain content by the context in which they are used (Bal 30, Hesselberth). Examples of such words are "here", "there", "me" and "you". This idea of the index as "deixis" is basically a reworded version of Rosalind Krauss' concept of "shifters". This closeness of the index to its objects, Doane argues, even raises questions as to whether the index is a sign-type at all; as I already pointed out when I discussed Barthes' concept of an un-

coded photographic message, in theory everything can refer to something indexically, by being present. However, as Doane indicates, there is no difference between index-as-trace and "shifters" in Krauss' argument, making all types of indices "the sheer affirmation of an existence, the emptiness of a "meaningless meaning"" (3). The quote by Peirce that Doane starts her introduction with is becoming in this context: "The index asserts nothing; it only says "There!"" (1).

The question is, however, if the emptiness of the index also makes it devoid of meaning. Doane disagrees when she states that it is precisely the deictic quality of the photographic index which makes it crucial "when attempting to deal with the saturation of images characterizing contemporary culture. […] To take up the index today, as a theoretical concept, is to insist that the complexities of the issue of referentiality should not deter us from investigating and analysing its force" (5). So the force of reference is still very much there and the index is pre-eminently the concept to analyse this force.

Thus the power of the index lies in its paradoxical content: the index is both full of signification but at the same time empty of reference without context. The key to either create a hierarchy in this plethora of signs or fill the emptiness lies in the interpreter of the index: the viewer. It is the "reader" of the image who has to recognize the signs communicated by the image and translate them into meaning, be it iconic, indexical or symbolic. In the case of the photograph, as said, this deciphering will mainly be focused on the iconic at first: what I can see and what it resembles to me. Another thing the photograph asserts, however, is the presence of that thing the viewer recognizes: it has been in front of the camera. This makes the object of a photograph, as Roland Barthes puts it in "Rhetoric of the Image" (1964, even before "The Photographic Message"), subject to both "spatial immediacy", it is here in front of us to see, and "temporal anteriority", the object itself is not here *now* but it once was in the presence of this light sensitive layer (159). Without someone to communicate to, these messages would all be sent but never received. In other words, these signs would not be signs at all.

Signification needs an interpreter, someone who connects the dots, if you will. This is where Geoffrey Batchen's concept "contiguity" comes into play once again. Batchen stresses that contiguity, the state of being in contact with something ("Carnal

Knowledge" 21), only works when the viewer of an image has the knowledge to connect what he sees to what it represents. If the required knowledge is not already present in the viewer, the link will not be made and the indexical sign does not function. Contiguity is "what can give any sign in the present a direct association with another sign in the past" (21) according to Batchen, a viewpoint seemingly displaying similarities to Barthes' ideas of "spatial immediacy" and "temporal anteriority". Batchen continues that "it is precisely this temporal and historical connection that provides photography with its uniquely "carnal" knowledge of the world" (21). In other words, the indexical connection of the photograph to its subject, both physically and temporally, is what makes the photographic sign so "carnal": "relating to physical, especially sexual, needs and activities" (Google Translate) or "relating to sex or someone's body" (Longman Dictionary). According to Batchen the relationship between the photographic image and the world it portrays is so intensely physical, that it is like love-making.

The other side of the paradox, the emptiness of the index, relies just as much on the reader of the image. The deictic index can only have meaning when it is used in a certain context. In other words, the index as "deixis" is filled by information outside of the sign itself. It is again the viewer who has to make this connection between the sign and the context that provides the sign with its signified. Thus in the case of the deictic indexical image, as in the case of the "noisy" index, the "contiguity" only works if the viewer has the required knowledge to relate these two parts of the deictic index.

Körperfotogramme **and the iconic and the indexical**

The photogram differs from the conventional photograph in the way the signifier, the image, and the signified, the "stamped" object, are connected. Whereas the conventional photograph is both iconic and indexical, the latter reinforced or "filled" by the former, a photogram of an object is abstracted from its appearance in the visible world. This abstractedness also involves a proportionally different relation to both icon and index, because abstraction also implies diminished iconicity; there is less to recognize and more relations have to be made by means of the observer's frame of reference. Let me explain this using Floris Neusüss' *Körperfotogramm* "Untitled" from 1962 (**figure 1**).

Were this a conventional photograph of a person, then we would in general be able to see what the person looks like, what facial features he or she has and what kind of clothes he or she is wearing. In other words, if this was a conventional photograph, we would first and foremost discern the iconic qualities of the image in order to give meaning to it. By means of the photogram, however, most of this iconic information about the portrayed object has been eliminated. The photogram is therefore less iconic than the conventional photograph, because the relation between signifier and signified is based less on "likeness". But the likeness between object and representation has not been completely abandoned. As my reading of the image in the previous chapter has proven, it is still possible to gain information about what we are looking at based on elements in the image that demonstrate a similarity to things we know.

However, the information supplied by the iconic elements of the image is not very comprehensive in Neusüss' untitled *Körperfotogramm*; there is a certain likeness between signifier and signified, but not enough information is given to consider this image to be an icon of the portrayed person. Because the image is less iconic than a conventional photograph, there is room for other readings than those based on likeness. This shift from the overbearing icon to other possibilities is due to the higher degree of abstraction present in images produced by the photogram technique. The abstracted image makes the subject of the image more pronounced, which we can only barely discern to be a human being.

The subject of this image should be such a familiar shape to us, a human body, but still it looks otherworldly when portrayed in this manner. The indexical claim of the image, that this person has really been "present' on the photographic paper, is amplified by the fact that we cannot get "lost" in iconic details about the "surface" of the individual. In a sense, this figure does not become an individual at all because of the lack of surface-information, but remains a shape, a form. To return to Batchen's concept of "contiguity", by means of the little iconic referents we see in this image we can make an indexical connection between the photogram and its subject. The physical relationship is even more prominent in this case, because the iconic does not offer that much support to distil meaning from this image. It is the "contiguity", the state of being in the presence of this body, which makes this representation of the human

body interesting. Due to the abstraction present in this photogram, a consequence of its mode of production, the photographic index takes over from the icon to guide the reading of the image.

***The Day Nobody Died* and the iconic and the indexical**

In the case of the camera-less photographic record that is not produced as a photogram, in other words, one that is not an image of a "stamped" object on a photosensitive surface, the icon as the determining factor for the production of meaning is pushed to the background even further. These images consist of photographic material that is simply exposed to light by taking it out of a light-proof environment. The series *The Day Nobody Died* was created like this*.* Where this kind of images is concerned, the influence of context on photographic "contiguity" is of paramount importance. Whereas the photogram moves away from the iconic and more in the direction of the index as the determining factor of the production of meaning, the camera-less photographic record does away with iconic relations entirely. The only value these images have, is therefore encapsulated in their indexical properties. As can be seen in the images from Broomberg and Chanarin's *The Day Nobody Died* (**figure 6 and 7**), these images do not refer to *anything* in the visible world based on a likeness to it, except for colour. This abstraction causes the viewer to look for other ways to interpret the image: if we cannot see what it *shows*, maybe we can then somehow find out what it *represents*. This is where the context comes into play. The context offers the viewer information which he or she can use to fill in the index, which is empty in itself. Rosalind Krauss calls this process "the addition of an articulated discourse, or text, to the otherwise mute index" ("Notes, Part 2" 66).

The very fact that we *know* that these images from Broomberg and Chanarin's project represent a war zone in Afghanistan is only because of external, contextual information that is provided with the project (the artists' manifesto, the video of the box). The indexical qualities of these images assert that the sheets of photosensitive paper were *there* in this region, among the members of the British army units. These photographs are therefore text-book examples of Barthes' concept of "spatial immediacy" in photography, but only because we *know* these sheets of photographic paper to have been in the presence of their supposed subject. The image "The Press

Conference" (**figure 6**) shows that it *has-been-there* (Barthes 76) in front of a press conference, but it does not depict this subject. It only conveys its essence by representing it indexically. The index is therefore leading in the production of meaning of these images, but has to be supported from the outside. The camera-less photographic record privileges the index over the icon, but the index cannot sustain itself without external reinforcement. We would not be able to tell if these images either represented a war zone or a teddy bear if the contextual information provided by the two artists did not accompany the images.

Conclusion

In the photographic discourse scholars have argued in favour of as well as against the index as the determining factor in the production of meaning in photography. Rosalind Krauss argues that the photographic index is equally important for the interpretation of images as the icon is. She states that the index is an empty sign-type, which can shift in meaning when framed in another context.

Others such as Tom Gunning are of the opinion that the index should be disregarded when judging photographs because it is only insignificant "noise", arguing that the emotional response an observer has should be leading in all efforts of interpretation. In other words, the emotional should triumph over the rational. However, these two approaches are not mutually exclusive. As a matter of fact, the emotional response we have to certain photographs can be considered as indices themselves, since it is something *present* in the image which stings us, to use Roland Barthes' words.

From these different positions, two types of photographic indices can be discerned: the full "noisy" index Gunning discusses and the empty shifting index Krauss elaborates on. Mary Ann Doane proves that these two types can exist next to each other and images can refer to something in both these ways. In the third and final chapter I will go into these two types of indices in relation to my two case studies in more detail.

Chapter three

Index as trace and index as deixis

Introduction

In this final chapter I want to go further into the problematic relationship between the photographic index and the camera-less photograph. As the discussion of Neusüss' *Körperfotogramme* and Broomberg and Chanarin's *The Day Nobody Died* has pointed out in relation to the index and the icon in the previous chapter, the camera-less photographic record has a strong connection to the index, because of the diminished figuration. It seems that the further the image moves away from likeness to the visible world, the more important the physical relationship between world and image becomes.

The distinction I keep making between two types of camera-less photographic images, the photogram and "other" camera-less images, is not without reason. The photogram is made by a specific technique, placing the object directly onto the photosensitive surface, which makes the relationship between signifier and signified not only physical by means of the rays of light that have "touched" the object and then the paper, but also because of the literal physical contact between these two. "Other" camera-less images are produced in a wide variety of ways; this concerns all images that are produced without a camera, but also without physical contact between the depicted subject and the photosensitive surface. This category comprises images that are "exposed" to the referred in the most literal sense: the photosensitive layer was in the presence of the signified, has "faced" the signified so to speak, and registered its countenance.

In this chapter I want to return to my two case studies once again and question the reasons why they foreground the index. I will do this by analysing them separately again, because of the difference in physical relationship to the signified I just explained. This difference in physical relationship between referred and referent also yields a difference in the indexical qualities of the photographic images. It seems the photographic index can function in multiple ways and manifests itself differently with the photogram and with other camera-less photography.

Finally, I will make a comparison between the results of these analyses, in order to be able to say something about the role of the index concerning the camera-less photographic record as a whole.

Körperfotogramme as physical index

As stated in the introduction to this chapter, the photogram has a twofold physical relationship with the subject that is depicted on it: the signified. The physicality of this relationship is not only embedded in the rays of light that are used to inscribe the image in the light sensitive surface: light rays first touching the signified and then touching what will become the signifier. Even more notable, in the case of the photogram the signifier is literally brought into contact with the signified. The object is placed directly onto the light sensitive material, before it is exposed to light. In the case of the photogram, the signified can be seen as a stamp of sorts which presses not its surface of ink on the paper, but its outline, by blocking the light rays from touching the paper.

Floris Neusüss' *Körperfotogramme* have been created in this stamp-like fashion, creating a strong physical connection between the depicted bodies and the images. As said before, Rosalind Krauss claims that every photograph as a sign is as much icon as it is index. I would like to propose to shift the balance in favour of the index when it comes to the photogram. The twofold physical, tangible connection between the signified and the signifier makes the indexical, the relationship based on physical trace or temporal proximity to the signified, more prominent when reading the images for meaning. Adding to this, the photogram technique abstracts the object depicted, so recognisability or the iconic qualities of the signifier are diminished, making the physicality of the signifier even more prominent.

I argued before that the icon can fill in the index by providing information, so to speak. The iconic qualities of an image can assist the index in producing meaning by offering information about what we see, so we as viewers can make the connection between what we know and what we see and put the indexical relationship in place. In a way, the icon becomes the context the index needs to function. However, in the case of these corporeal photograms by Neusüss and the photogram in general as well, the icon also aids the index by not functioning as a proper icon itself. If the icon is most

prominent in an image, it will absorb the viewer's attention and Batchen's "contiguity" will disappear into the background. The viewer will always, first and foremost, search for what he recognizes from his frame of reference. So if the iconic qualities of an image are diminished, by technical issues or interference from the artist, the viewer will have more trouble to *recognise* and he will turn to contextual information to find out what he sees. This is where the index overtakes the icon and becomes the most prominent sign-type for the production of meaning in photographic images. As Neusüss himself states about these kinds of images: "A bizarre view is designed to point beyond the picture itself. The viewer is supposed to be stimulated to complete the picture for himself, to go beyond the picture, and to make connections with reality" (*Fotografie als Kunst* 21).

Interestingly though, as far as Neusüss is concerned, the photographer can never transmit his "inner disposition" (21) to the viewer by means of the image, even if it is capable of transforming an everyday sight into something remarkable (21), without instating "a generally understandable language" (22) that permits the viewer to read the image. It is not really clear what he means by this "language", except that it is an image-savviness needed to understand what is seen, but which might also be able to help transmit the artist's message. The object depicted is irrelevant, according to Neusüss, it is the "artistic handling of photography" by the photographer that is "thrust into the foreground and determines the form of the picture" (21). The photogram technique Neusüss employs foregrounds his artistic influence more than a conventional picture would, even though I feel the subject of his *Körperfotogramme* are not at all irrelevant. Thus Neusüss' photograms make a statement not only about reality, about the world we see, but also about the artistic photographic process itself, thereby becoming "pictures for the sake of the picture itself" (20) with a meta-photographical layer of meaning. Neusüss aptly summarizes his view on this foregrounding of the medium when he writes:

> Into the lap of photography has fallen the task of representing nature true to herself by means of natural laws, a task that has led photography into encounters, not with that which was so bviously being portrayed (the What), but rather with the act of portraying (the How). The conditions of this How have regularly been determined by the technical developments in photography. (*Fotografie als Kunst* 17).

In a discussion of one of Neusüss' *Körperfotogramme* in *Fotografie als Kunst, Kunst als Fotografie* (1979) the photographer points out another aspect of photographic indexicality that is foregrounded by camera-less photography. When addressing the technicalities of the production of life-size photograms of human bodies, Neusüss states: "The wiping motions produced during manual development of the large photopaper strips can be detected as traces on the picture" (28). The wiping motions he describes on this page relate to a specific photogram (**figure 8**), which shows obvious lighter parts in different gradations, apparently created by influencing the saturation of the paper with chemicals on certain parts of the image during development. This is an obvious intervention of the artist in the photographic process, thereby influencing the final image very directly. Neusüss states that this influence of the artist is visible as "traces on the picture" (28). In other words, the artist is also indexically present in the final image by making such interventions in the photographic process, by leaving traces of his influence in the final product.

The camera-less project *I Turn Myself Inside Out* by Luke Evans and Josh Lake I already discussed briefly in the first chapter (**figure 9**), even though strictly speaking not photograms, prove that the photographer can introduce himself into his work in a physical, indexical manner in a similar way (Hijma 40). By ingesting small capsules containing pieces of photographic film, they not only make photographic images without a camera, but also use their very own bodies as the photographic "apparatus". Granted, it could easily be argued that these images are not photographs, since the final product was not created by the inscription of *light* on photosensitive material, but by bodily fluids that acted upon the film. However, the photographic index still holds up: the subject was in the presence of the photographic material in order to produce these images. For example, the Elsevier *Foto en Film Encyclopedie* [Photo and Film Encyclopaedia] gives a definition of photography that fits this project by Evans and Lake particularly well, stating that photography is an "in fields of use generally used term for those techniques that capture a picture formed by light or other suitable radiation by means of chemicals or other physical (e.g. electronic) means" (262, my translation). The "other suitable radiation" that is mentioned in this definition is most important, extending the boundaries of photography to include images as Evans and Lake's as well, but also the more common photographs by x-ray. It seems that it is not

the type of physical wave that determines what can be defined as photography and what cannot, but the actual tangible presence of the referred in front of the referent.

In the book *Anteidola*, about a project Neusüss did for the Glyptothek in Munich (**figure 10**), editor Raimund Wünsche says that the title "anti-eidola" means counter-image, which, according to him, the images of Neusüss are. For this project Neusüss made life-size photograms of antique statues in the Glyptothek, which were then presented on the walls next to the statues themselves. This way, the images became a kind of negative or counter-images of the statues, not only because of the juxtaposition, but also by the controversial technique that eliminates all surface details. The same could be said for Neusüss' *Körperfotogramme*. The photogram technique thus produces abstracted counter-images of things, by alienating the things we know into shapes and shadows of which we can only determine the meaning by tracking where the indexical references in the images take us. The photographic index in the photogram is therefore a "full" index, to return to Doane's distinction between types of indices. On the one hand, the photogram lacks iconic information in order for the icon to "take control" of the production of meaning. As a result, the index takes over this role, but is not hierarchical in itself: everything in the image can be an index, if read in this fashion. The index in the photogram is therefore chaotic and it is up to the reader to decide, based on contextual information, what the image is essentially *about*. On the other hand, to make matters even more complicated, the iconic qualities of the image can function as this contextual information, helping the viewer in "filling" the index.

The Day Nobody Died as deictic index

In the case of the camera-less photographic record that is not a photogram, so not a "stamp" of an object directly onto a light sensitive surface, complete abstraction is introduced and the icon as a sign-type for the production of meaning is abandoned completely. In "Review of Moholy's Achievement" (1948) art historian Beaumont Newhall claims that "the logical end point of the photogram is the reduction of photography to the light-recording property of silver salts" (71). This end point he describes, seems to me to be the camera-less photographic image. It is merely the exposing of a photosensitive surface to light, in front of an object or a scene. The

connection between the signified and the signifier therefore seems weak and requires a lot of effort and trust from the viewer to work. Though a photogram can sustain the index with what little iconic information it offers, this is not the case where the camera-less photograph is concerned.

This does not mean that camera-less photography is a meaningless chaos, as experimental photographer and Guggenheim Fellow of Photography Robert Newton suggests. He argues that "abstraction in photography does not of necessity denote an incoherent mess. Rather it is a measure of the extent to which the corporeal object photographed can be distilled off to yield the subject" (Rexer 277). The subject of photography cannot be distilled more than in camera-less photography: no more figuration, nothing left to recognize but colours and undefinable shapes.

The contextual information plays an enormous role in the production of meaning for *The Day Nobody Died*, specifically when it comes to the nature of the situation it was produced in. What I mean by "nature of the situation" is the traumatic ambience of the Afghan war zone Broomberg and Chanarin attempted to represent. The word "attempt" is key here, since photographers have struggled with the representation of suffering for a long time. What do you show and what is too horrible to turn into a flat two dimensional image? And when you have decided what to show, then *how* do you show it? Broomberg and Chanarin have very deliberately decided for this project not to show anything, only *represent* the traumatic events by testifying what the abstract images that make up the project bore witness to (artists' manifesto 1-2). *The Day Nobody Died* is therefore a series that functions as a bystander of events, in the physical presence of these events. The photographic index is therefore most important when it comes to discerning the meaning of these images.

Roland Barthes states in "The Photographic Message" that "in photography the trauma is wholly dependent on the certainty that the scene "really" happened: *the photographer had to be there*" (209, emphasis in original). In the case of Broomberg and Chanarin's project, the images themselves do not show us a scene that really happened, because we cannot recognize it as such. The "certainty" Barthes speaks of is therefore even more dependent on trusting the contextual information that is offered to the viewer to fill the photographic index. As Barthes continues: "the more direct the trauma, the more difficult is connotation" (210). In the case of *The Day Nobody Died*,

Broomberg and Chanarin have deemed the trauma of the events so intense, that they decided to abandon figuration and thus recognisability completely, in order to convey the pain and distress they witnessed through a testimonial of physical presence of the signifier.

Many scholars, such as Griselda Pollock, Ernst van Alphen and Susan Sontag, have addressed the representation of trauma in their writings, mostly focussing on the ethical side of showing agony, distress and (human) suffering. In the case of film and photography, this discourse is more pertinent because the images produced by these media are created to the likeness of the visible world, with an indexical relationship to reality that ensures that, as Barthes said, the photographer/filmmaker was *there* when the horrible events took place. As critic John Berger claims in his short article "Understanding a Photograph" (1974), the very fact that a photograph of something exists, asserts that the photographer deemed the subject worthy of portrayal. In other words, by forming a series of images that they claim represent traumatic events in a war zone, Broomberg and Chanarin point out to us that they considered these events worthy of our attention: they point us to these events.

Context

In the article "From Presence to the Performative: Rethinking Photographic Indexicality" (2003) art historians David Green and Joanna Lowry claim that the influence of Barthes' *Camera Lucida* in photography theory and his understanding of photographic indexicality have distorted the discussion on the index in the following years: "it has led, inevitably, to a preoccupation with the origins of the photographic image in a chemical trace, to its relationship with time and absence, and to the complexity of our affective response when we encounter this evidence of a moment that has passed" (47). This is a particularly bold statement, since the index is very much concerned with all these three elements. However, Green and Lowry do not aim to subvert this definition of the index, but state that it does not "exhaust our understanding of [the photographic] indexical properties" (47-8). The two authors see the photograph as a performative gesture "which points to an event in the world, as a form of designation that draws reality into the image field, [...] thus itself a form of indexicality" (48). The photographic index, according to them, points out to the viewer

what needs to be looked at, as John Berger also stated. It is already in the writings of Peirce himself that we see the index being defined as a pointer or indicator (Chandler 36-7). Both Yuriko Furuhata, whose ideas I will discuss later on, as well as Green and Lowry see the photographic index as a kind of performative gesture, an action that directs the attention of the viewer. They relate it to the speech-act theory of John Austin, in which an utterance is not only language, but performs an action as well.

Images as in the series *The Day Nobody Died* are therefore indexical in a deictic way. Other than photograms which are indices full of information, which needs to be put into a hierarchy and connected to its meaning by the viewer, other camera-less photography is in itself empty on the level of signification and needs to be filled by the viewer. Granted, the "full" photogram-index can also be filled by the few iconic referents that are present in the image, but this information is present in the image itself. Other camera-less photographic records like *The Day Nobody Died* do not offer iconic referents within the boundaries of the image except for colours and vague shapes.[19] All the information needed to fill the index thus comes from external sources, from the context. These images by Broomberg and Chanarin are therefore meaningless, unless they are put into context with certain information, in this case added by the artists' manifesto and the video of the box. The image could thus in theory gain a completely different meaning when provided with a different context.[20] The only reason we grant the meaning of the war in Helmand Province of Afghanistan to it now, is because we put our trust in the context provided by the artists, a condition Green and Lowry feel has to be met in order for the photographic index to function (51).

The deictic photographic index in *The Day Nobody Died* thus points us towards what needs to be seen but cannot be represented. Rather, it is as if Broomberg and Chanarin want to make us as viewers *experience* the scene through these images, instead of showing it to us. Green and Lowry's analysis of the work of Robert Barry fits

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[19] See **figure 11** for an installation view of *The Day Nobody Died*, in which a full six meter image of the series can be seen.

[20] Granted, this could also be done with images that are created by means of a camera. The difference between these camera-less images and conventional photographs being that the camera-less image needs a context to produce any meaning except for colours and shapes, whereas the conventional photograph can also function as a "locus" of meaning on its own.

the project *The Day Nobody Died* perfectly as well:

> [Their] production of a photographic record of these non-visible works of art might
> seem consciously futile and absurd yet these images may be significant of our
> understanding of the limitations of a particular form of indexical inscription. If at one
> level these images are displayed as documentary evidence denoting a state of affairs,
> what is also clear is that they are carefully designed to be at the limit point of
> photography's documentary capacity. While proving us with the indexical trace [that
> these events happened] they also gesture towards the impossibility of recording it, and
> our attention shifts instead towards the act of photography itself as the moment of
> authentication. (50)

Green and Lowry even go so far as to say that it is no longer the visual that is most
important, but the ascertaining of what is represented by it. However, at the level of
signification, the visual might be suppressed and signify hardly anything, but it can
never be dispensed with, since it is the visual that makes the impact, conveys the
affect of the image to the viewer and gets him interested in the story behind it in the
first place (Green and Lowry 51). The photographic index can never work if the visual
"excess" itself does not function as the signifier. Rosalind Krauss summarizes this aptly
when she writes that what is required is a "filling of the "empty" indexical sign with a
particular presence. The implication is that there is no convention for meaning
independent of or apart from that presence" ("Notes" 80).

Problematization of the photographic index

The lesson that can be learned from these analyses is that the photographic index
cannot exist in a void. It is not a singular, independent semiotic category that can be
attached to something as a label as if to say: this is indexical. Instead, the photographic
index always brings with it connotations and interpretations by means of contextual
information, something it cannot dispense with. The index has to be supported from
the outside. This seems to make it a paradoxical undertaking to argue for the index as
the determining factor in the production of meaning in photography. However, when
we think back to the three semiotic categories that Peirce coined, the icon, the index
and the symbol, we see that neither of these categories functions on its own or
without external information. The icon can only signify based on likeness, when the
likeness is established by someone. The symbol refers to the signified based on

agreement, so the interpreter has to be aware of this agreement in order for the sign to function as a symbol. And lastly, the index refers to its object based on physical presence, on proximity, that can never be wholly proven but has to be, in a way, trusted by the viewer. To make matters even more complicated, this physical presence does not occur in the temporal "now" of the image, but is always in the past. Thus, in the case of the index there is not only a spatial remove between signifier and signified that has to be linked together by external information, there is also a temporal remove.

In the article "Indexicality as "symptom": Photography and Affect" (2009) media scholar Yuriko Furuhata also stresses the oft-overlooked temporal aspect of the index (184); the photograph is not only a physical trace of a scene, it is also a registration of that time, produced by means of time. There is a temporal gap between the signified and the signifier in the photographic sign, because, as said before, a photograph of something cannot be observed at the exact same moment as its production. Furuhata goes on to say that this makes the index in photography unintended, because "the intended referent has already vanished at the moment of the creation of the index" (184). According to this line of thought, the viewer is always looking at indices from the past, never at an index from the here-and-now. Barthes' concept of "temporal anteriority" resonates strongly in this argument.

Where a conventional photograph is concerned, the trust that the viewer has to invest for the index to work will mostly be provided by the image's iconic qualities. A picture of a tree is for us proof that the photosensitive material was in the presence of the tree, because we can see the tree in the picture and thus know it is an image of that specific tree. Photograms or other camera-less images stretch this trust to its breaking-point, because they are less figurative, hardly iconic and therefore (almost) unrecognizable as the thing they represent. In the case of the non-photogram camera-less photograph, there is no iconic relationship with the referent at all, so the index should logically take the icon's place and as a sign-type determine the message of the image. The lack of iconicity, however, also produces a lack of visual referentiality to the depicted scene or object for the viewer, so he will not be able to determine if this indexical relationship indeed overrules the icon or symbol. The only way the viewer can make this decision is by basing it on additional information and putting his trust in

the fact that this information is truthful, because the image itself cannot make any specific claims to the contrary.

The reason why the index is often related to the truth claim of photography can therefore be seen in two ways. On the one hand, the index is a proof of presence, of being a veritable testament of that which is depicted. It guarantees that the subject of the image has been in front of the camera and has inscribed itself by means of reflected rays of light into the silver salts or digital cells (Gunning 40). On the other hand, the image itself can never be proof that it is a veritable image of that which is depicted. As said, external information, via captions, accompanying texts or other images, have to support the truth claim that the image makes, in order for it to claim anything at all. The truth claim of the index is therefore circular: the index proves the presence of the image, but at the same time this presence can never be proven by the image itself.

What I have not fully addressed yet, but which is fundamental for the index to function, is the interpreter: the viewer of the image. Barthes phrases it as follows in "The Photographic Message": "Thanks to its code of connotation the reading of the photograph is thus always historical; it depends on the reader's "knowledge" just as though it were a matter of a real language [*langue*], intelligible only if one has learned the signs" (207, emphasis in original). As became clear with my earlier discussion of Doane's two types of indices and Batchen's concept of "contiguity", the interpreter is of great importance each time the index is concerned, in order to connect the proverbial dots. Additionally, as touched upon by Barthes in the previous citation, the frame of reference a viewer uses to interpret the image and accompanying context differs with every person and also in time. It is impossible for a photographer to know exactly what connections the viewer will make when he sees his work. It is even impossible to predict who exactly will see his work. Therefore the photographer can only try to offer the viewer something to hold on to for interpretation of the image, by deliberately offering, there it is again, context.

It is on this point of photography's truth claim and the viewer's trust that Furuhata joins Susan Sontag in the comparison between photography and quotation: "A photographic inscription is, first and foremost, an infinitely repeatable semiotic sign that makes a claim to authenticity through its fidelity to "reality"" (Furuhata 181-2),

and she adds to that later that "It is at this point [of a viewer's trust], I believe, that the linguistic analogy of quotation becomes particularly pertinent, since what is at stake is a certain willingness to suspend disbelief in the photographic index: there is a psychic investment or trust in the fidelity of the sign to its pre-photographic referent" (185). Furuhata points out that this "trust" is not only faith in the photographic record, it is a suspension of disbelief, meaning that the viewer always has a certain amount of suspicion towards images. She hints here at the training we have in reading images, what Barthes calls "studium", which develops the understanding that we should not take every image we see to be a truthful representation of the world. We know better by now, because we have been misled countless times before.[21]

In the case of camera-less photography, however, this image-savviness and additional suspicion does not aid us in determining what the image is *about*, because we cannot even see what the image is supposed to be about by the lack of iconic referents. Furuhata does not see the truth claim of photography as the result of the camera though, because she states: "For what the photographic apparatus guarantees is only the mechanical transmission of light and its interaction with chemicals; it does not explain the trust or belief that we have in the connection between this sign and its referent" (185). We can deduct from this argument that for the media scholar the truth claim of photography does not come from the fact that the images are sharp, mechanical reproductions of the visible world. No, the belief comes from the recognisability of the images, as "quotes" of the world.

This is the point where I disagree with Furuhata. She states that the photograph has a two-fold analogical relationship with the world: it is materially analogical, but also mimetically analogical to the visible world. This last meaning, she says, shows that the analogical no longer points to the physical relation between sign[22] and signifier, only to mimetic qualities (Furuhata 183). I agree that the analogical properties of

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[21] Examples of instances where observers of photographs were misled can be found numerous times in the history of World Press Photo. Even though the World Press Photo competition makes use of strict regulations concerning photo manipulation in press photography, there is a scandal almost every year after the selection is presented and proof is uncovered that one of the selected photographs has been tampered with prior to submission to the contest.

[22] Furuhata uses the term "sign" here to indicate the opposite of the signifier, a pitfall often fallen into by scholars using semiotic terms. I feel usage of the term "sign" to indicate the signified makes matters unnecessarily complicated, because De Saussure demonstrated that the sign is the whole of both signifier and signified together.

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photography points to its mimetic relationship with the world, but I do not agree that this implies no physical relationship between the sign and the referent. Granted, Furuhata does not claim that this relationship does not exist, she merely says it is not foregrounded. However, from a technical point of view, how would a mimetic photograph even come into being *without* a physical relationship between signified and the signifier? Furuhata stretches her point too far here by dismissing the physical relationship between signifier and signified, while it is exactly this physical bond that makes the mimetic photographic image possible.

Conclusion

Returning to Neusüss' *Körperfotogramme* and Broomberg and Chanarin's *The Day Nobody Died* one last time has helped me prove that the photographic index in the camera-less photographic record can have two different forms. In both the case of the photogram as well as the "other" camera-less photograph the index overrules the iconic qualities of the images, because the icon is diminished due to the level of abstraction of the images. However, this is also where these two kinds of camera-less photography differ from each other.

Floris Neusüss' photograms of human bodies prove that the photographic index becomes foregrounded when the images do not offer the viewer extensive iconic information to discern what the image is about. Nevertheless, the photograms still offer some iconic signifiers that support the index in functioning as an index. The iconic information has to be used to instate hierarchy in the abundance of indices that are transmitted by the images. The photogram technique, putting an object directly onto a photosensitive layer, asserts a strong physical presence of the signified on the signifier. The photographic indices in these photograms are therefore full, "noisy" indices, which can be put into hierarchy by what little iconic information that is offered.

The images from Adam Broomberg and Oliver Chanarin's *The Day Nobody Died* are completely abstracted and thus offer no iconic information at all. The consequence of this is that the index, the photographic sign as a trace of what it was a witness of, is the only thing signified by the images. However, in and of themselves the images do not transmit any information except for colours and shapes. The photographic indices only function as physical presence of that which they represent when contextual

information about the scene or object represented is offered. In the case of the "other" camera-less record the photographic index is therefore deictic: it is an empty sign in itself, which can only signify something particular by means of framing.

Thus both these types of photographic indices have to be supported from outside of themselves. However, the physical presence the index asserts is even stronger with these camera-less works than with the conventional photograph. The index therefore triumphs with the camera-less photographic record, but it also problematizes it.

Conclusion

The essential indexical

The question that guided this thesis was: how does the photographic index function as the determining factor in the production of meaning in the camera-less case studies *Körperfotogramme* (1960-1983) by Floris Neusüss and the project *The Day Nobody Died* (2008) by Adam Broomberg and Oliver Chanarin? I opted to answer this question in three steps: the previous three chapters.

In chapter one, I set out to discuss clearly what I understand the semiotic categories of icon and index to be. I based my understanding of these terms on the semiotic teachings of Charles Sanders Peirce, who appropriated the two part sign-theory of Ferdinand de Saussure that a sign consists of a signifier and a signified, and divided the signifier into three different categories: the icon, the index and the symbol. Only the first two categories are important for my argument. The icon, Peirce states, is the type of signifier that refers to its signified based on likeness to it. The index, on the other hand, refers to its signified based on proximity of the signified: the signifier is a physical trace of the signified. According to art historian Rosalind Krauss, the conventional photograph is as iconic as it is indexical. It not only refers to its signified based on likeness, it also has a physical relationship with this signified because of the rays of light that first touched the object depicted and then the photosensitive layer to produce the image.

In addition to this discussion of the semiotic terms icon and index and the semiotic value of the conventional photograph, I briefly highlighted some historical examples of camera-less photography by William Henry Fox Talbot, Anna Atkins, László Moholy-Nagy and Man Ray, to show that their reasons for "going" camera-less were different from the reasons contemporary photographers have. For Fox Talbot and Atkins, the camera's that were available at the time were inadequate for their goal: to produce images that conveyed scientific, factual information about the portrayed objects. That is why these photographers chose to use the photogram technique. For Moholy-Nagy and Man Ray, the renouncing of the camera was for conceptual reasons: the former wanted a mode of vision that was as mechanical as possible, the latter

found the camera to be limiting.

In contrast to these historical examples, I analysed contemporary camera-less projects by discussing the two recent publications on camera-less photography: Martin Barnes' *Shadow Catchers* and Geoffrey Batchen's *Emanations.* Contemporary artists who renounce the camera do not seem to do this because of technical reasons nor do they want to create images with the least possible amount of interference by the photographer. Artists as Susan Derges, Garry Fabian Miller and Floris Neusüss choose to work with the photosensitive material only, because it offers them more artistic freedom. Furthermore, the one-on-one scale images the photogram technique produces, is another characteristic that is often exploited. It must be said that even nowadays camera-less photography is almost always analogue in nature, because the material is relatively cheap and still fairly easily available.

Two types of contemporary camera-less photography can be discerned. On the one hand there is the photogram, which is produced by placing an object directly onto a photosensitive surface and exposing it to light, producing an outline of the object. On the other hand there is the "other" camera-less photographic record, which is created by exposing the photosensitive surface to the object or scene (and therefore also to light). This last technique yields only colours and vague shapes, no sharp images of the signified.

In the second chapter, I used this groundwork on both the semiotic terms of icon and index and the characteristics of contemporary camera-less photography from the first chapter to frame the index in photography theory. Various scholars, such as the previously discussed Tom Gunning, have argued against the index as a concept for meaning production in photography. Close analysis of their arguments reveals that, much like Gunning's argument, they attempt to dismiss the index yet still adhere to it, only naming it differently. Gunning sees the photographic index as superfluous "noise": everything in a picture can refer to something based on proximity because it was there in front of the camera, but that does not mean that it gains meaning because it is there. However, as my discussion of Neusüss' *Körperfotogramme* has shown, the full or "noisy" index can still be the determining factor for meaning production, when it is supported by iconic signifiers that help fill the indices with information.

Conversely, as stated before, Rosalind Krauss argued that the photograph is both icon and index. She sees the photographic index as a "shifter", borrowing a concept from linguist Roman Jakobson. By "shifter" Krauss means that the photographic index only gains meaning in a certain context, as for example personal pronouns also do. Another term that is often used to describe this type of signifier is "deixis". The index itself is empty, according to this reasoning.

Thus, scholars usually take position on either the side of the full index or on the side of the empty, deictic index. Mary Ann Doane argues that it is not necessarily either/or: both types can occur, depending on the type of image. In the third chapter I analysed Neusüss' *Körperfotogramme* and Broomberg and Chanarin's *The Day Nobody Died* once again in relation to the photographic index and showed that Neusüss' photograms are examples of full, "noisy" indices and Broomberg and Chanarin's project only works in the given context, making the indices they transmit empty in and of themselves. Both these case studies foreground the photographic index, because of the diminished or lack of iconicity that is a result of the camera-less technique, abstracting the images. In both cases the index asserts that the photographic record was a witness, in the proximity of what it represents, whether we can make out what that is by means of iconic signifiers or not.

These two case studies therefore show that the photographic index is twofold; it is either full and lacks hierarchy or it is empty and in need of a context to frame it in. In the case of contemporary camera-less photography, be it photograms or "other" camera-less projects, the index triumphs over the icon as the determining factor in the production of meaning by the photograph, but it cannot do this on its own. The photographic index is always in need of support from outside of itself, either by iconic signifiers as in the case of the photogram or by contextual information as in the case of the "other" camera-less photographic record. The photographic index is therefore indispensable for the production of meaning when it comes to camera-less photography, but it cannot stand alone.
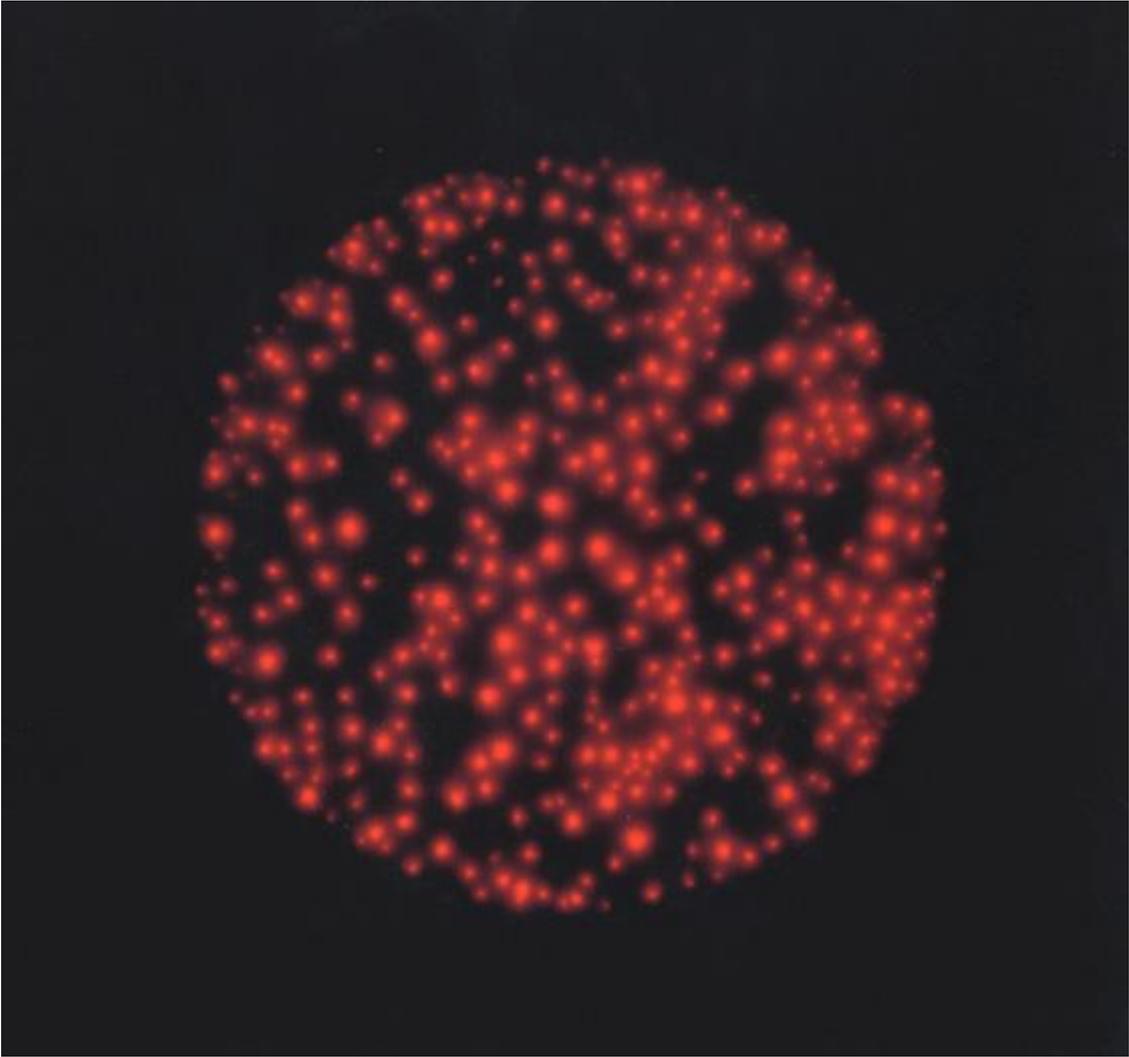
Appendix 1 – images

Figure 1. Neusüss, Floris. "Untitled." *Körperfotogramme. Berlin.* Gelatin-silver print. 1962.

Berlin: Collection Christian Diener.

Figure 2. Derges, Susan. *Vessel No. 3 (1).* 1995. Dye destruction print. 46 cm x 46 cm.

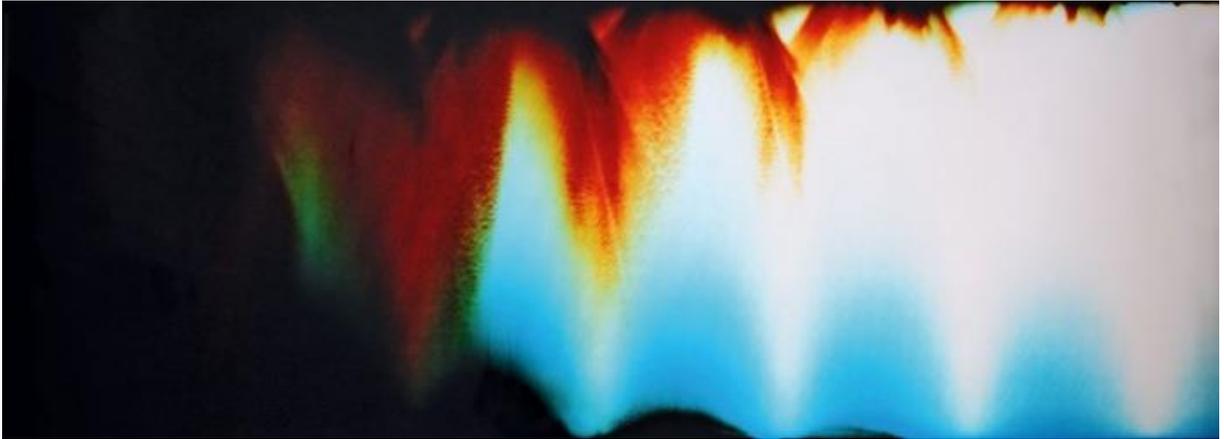**Figure 3.** Fabian Miller, Garry. *Becoming Magma, New Year, January 2005.* 2005. Dye destruction print. 41 cm x 30,5 cm.
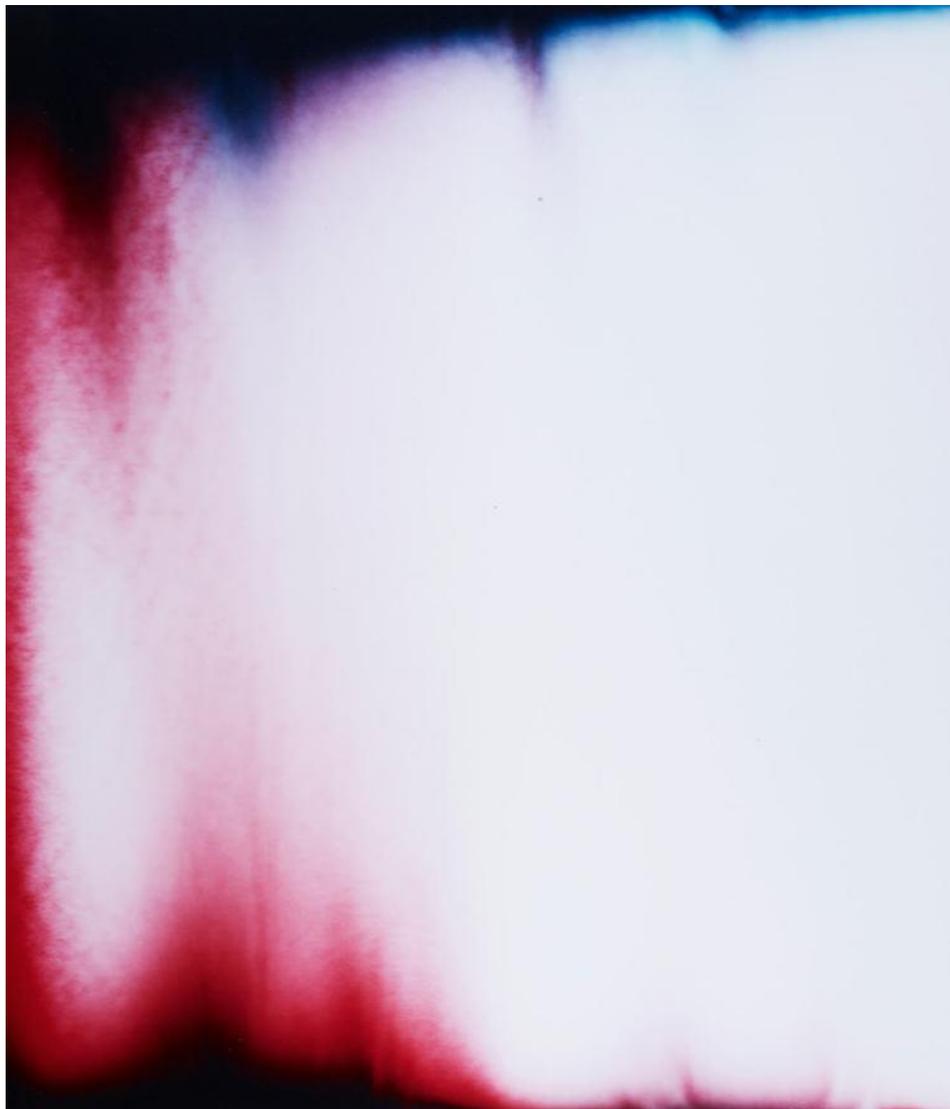
**Figure 4.** Fuss, Adam. From the series *My Ghost.* 1999. Gelatin-silver print. 134,6 cm x 113 cm.

Figure 5. Cordier, Pierre. *Chemigram 8/2/61.* 1961. Chemigram. 49,4 cm x 58,4 cm.

Figure 6. Broomberg, Adam and Oliver Chanarin. "The Press Conference." (detail)
*The Day Nobody Died*. 2008. Unique C-type print. 726 mm x 6000 mm.

Figure 7. Broomberg, Adam and Oliver Chanarin. "The Day of One Hundred Dead, June 8,
2008." (detail) *The Day Nobody Died.* 2008. Unique C-type print. 762 mm x 6000 mm.
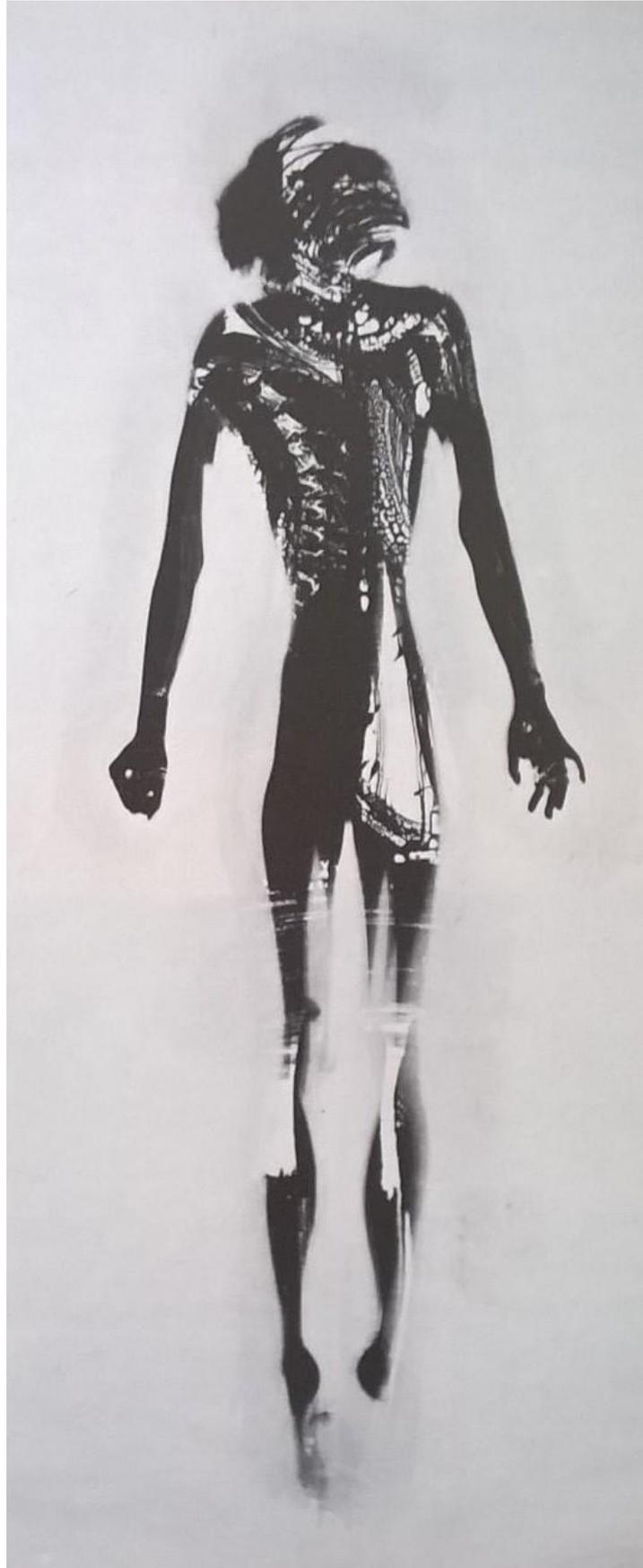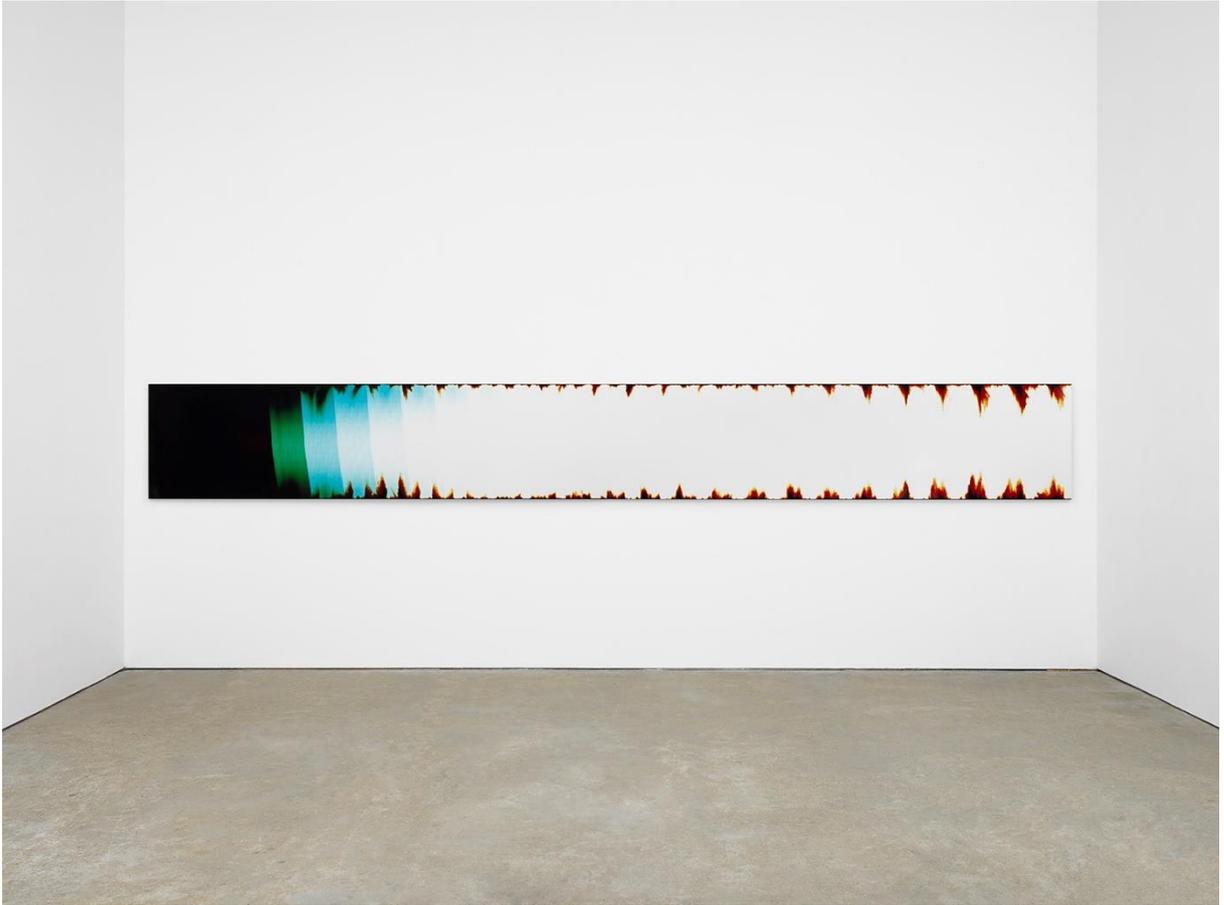
Figure 8. Neusüss, Floris. *Figurenfotogramm, positive, gewischt.* [Figure photogram, positive, whisked] 1964.
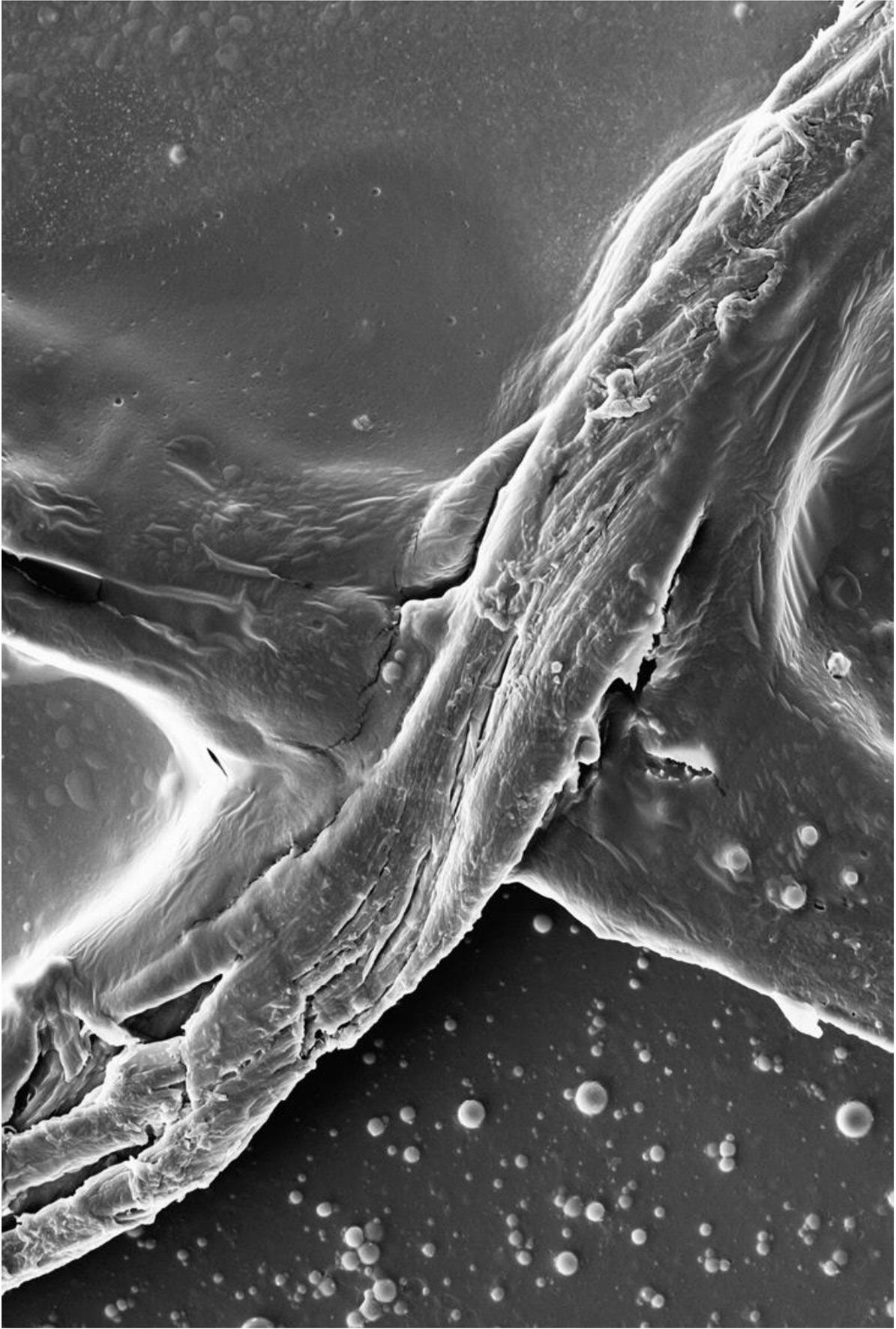
Figure 9. Evans, Luke and Josh Lake. *I Turn Myself Inside Out.* 2013. Collection Saatchi Gallery London.
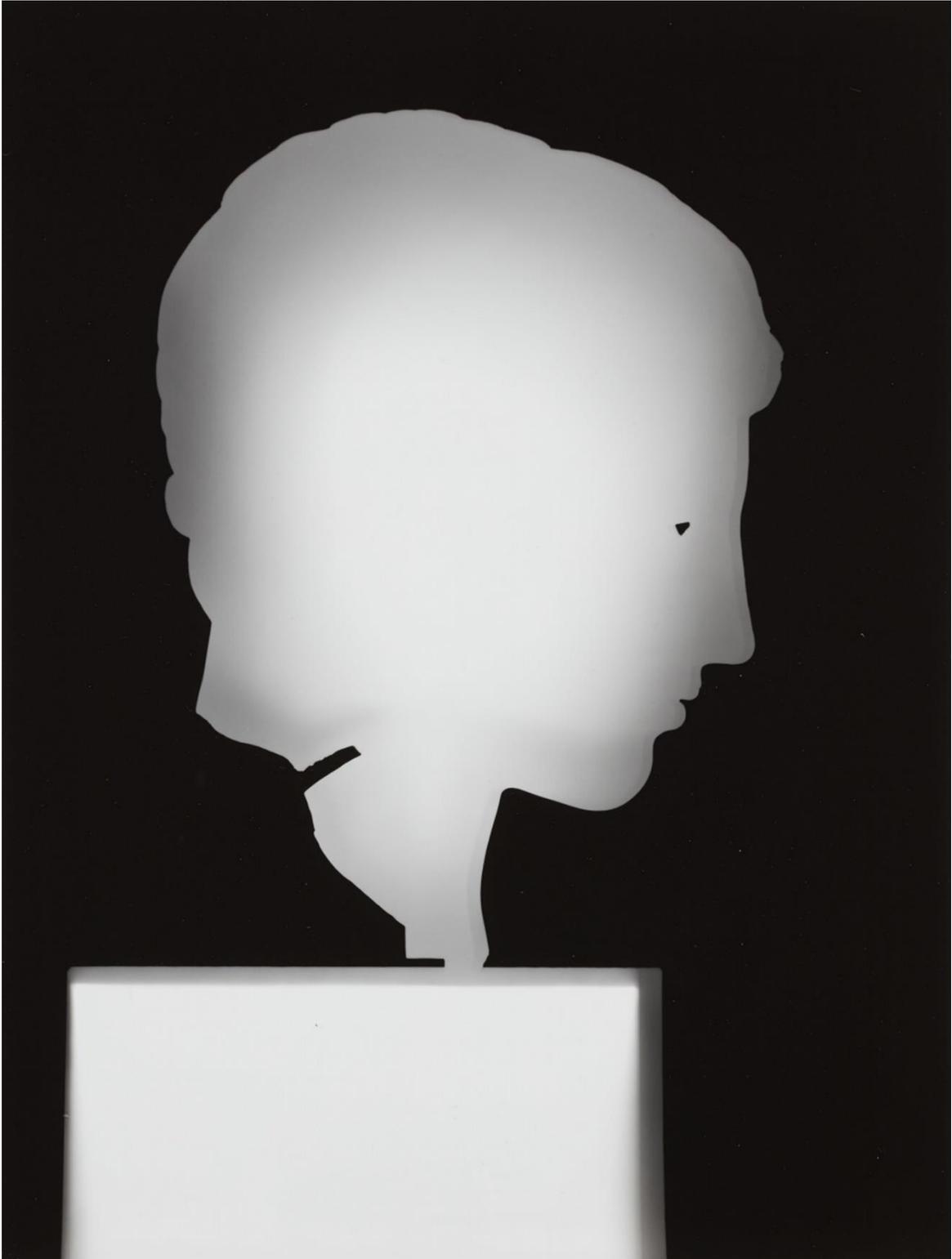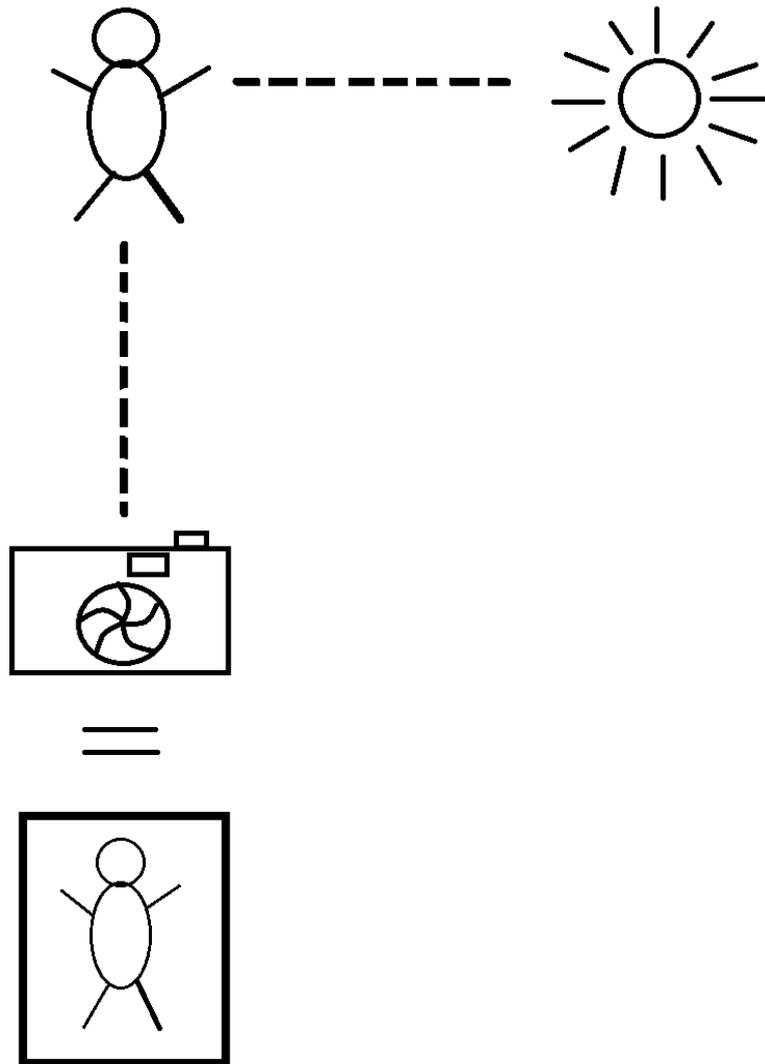
Figure 10. Neusüss, Floris. "Kopf eines Jünglings." *Anteidola.* 2001. 60 cm x 50 cm.

Figure 11. Broomberg, Adam and Oliver Chanarin. "Installation view." *The Day Nobody Died.* 2008.

Appendix 2 – diagrams

Diagram 1. Hijma, Cobie. *Conventional photography: light source, subject and camera.*

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