**Imaging the Internet**

**Exploring characteristics and functions of online photographic images through the works of Post-Internet artists**

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Abstract

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This thesis considers the manners photographic images act and function online, and the processes that govern them through analyses of the artworks of four Post-Internet appropriation artists.

Chapter 1 describes the online functions of the photographic images that were appropriated in the work of the discussed artists. Through exploration of the characteristics of the digital photographic image, as well as the online functions of the images appropriated in the discussed works, the state of the photographic image in the post-photographic era is described.

Chapter 2 goes into the practice of the four discussed artists, in order to consider the manners they have altered and formed the photographic content after the appropriation of these images. This postproduction practice has been inherently informed by online paradigms, which can then also be seen in the ways content is shaped in the artworks.

Chapter 3 will discuss these artworks from the point of the post-Internet condition the artists are referring to. By connecting the findings of the first two chapters, it will be possible to consider how these images are positioned and what these artists are aiming to convey in doing so.

Introduction

*'To an ever greater extent our experience is governed by pictures, pictures in newspapers and magazines, on television and in the cinema. Next to these pictures firsthand experience begins to retreat, to seem more and more trivial. While it once seemed that pictures had the function of interpreting reality, it now seems that they have usurped it. It therefore becomes imperative to understand the picture itself, not in order to uncover a lost reality, but to determine how a picture becomes a signifying structure of its own accord.'[1]*

Apart from a lack of reference to digital devices, this quote remains as relevant today, as it was when it was published. The essay of which this statement is a part, appropriately titled *Pictures*, was written by curator Douglas Crimp as part of the catalogue for the homonymous 1977 exhibition.[2] The exhibition featured work from artists like Sherrie Levine (1947), Robert Longo (1953) and Jack Goldstein (1945-2003), artists that would later be part of the group dubbed the 'Pictures Generation', which would also feature names like Cindy Sherman (1954), Barbara Kruger (1945) and Richard Prince (1949). This name does not only refer to the title of the exhibition, but also to the preoccupation of this group of artists: reflecting on the impact of pictures in everyday society.[3] These artists all were part of the first generation to grow up in a post-war consumer society in which they were confronted with images on an everyday basis; a period in which newspapers, magazines and billboards were increasingly filled with pictures, but also a period in which almost every American and Western European household owned a camera.[4] The *Pictures* exhibition showed a group of artists that were positioning themselves to the role of images in society. Through tactics of appropriation and rephotography these artists sought to expose power relationships and challenge ruling notions of ownership and artistic originality.

The 2011 edition of French photography festival *Les Rencontres d'Arles* exhibited a group of artists that showed a similar focus in an exhibition called *From Here On. Postphotography in the Age of Internet and the Mobile Phone*. As was the case with the artists of the Pictures Generation, the artists that were a part of the exhibition were

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[1] Crimp (1977): s.p.
[2] Crimp (1977): s.p.
[3] Crimp (1977): s.p.
[4] Van Dijck (2008): 60.

responding to the role of images in contemporary society.[5]

The exhibition was accompanied by a manifesto, signed by five artists and artistic directors who curated the show, in which the paradigm of these artists is laid out:

*'NOW, WE'RE A SPECIES OF EDITORS. WE ALL RECYCLE, CLIP AND CUT, REMIX AND UPLOAD. WE CAN MAKE IMAGES DO ANYTHING. ALL WE NEED IS AN EYE, A BRAIN, A CAMERA, A PHONE, A LAPTOP, A SCANNER, A POINT OF VIEW. AND WHEN WE'RE NOT EDITING, WE'RE MAKING. WE'RE MAKING MORE THAN EVER, BECAUSE OUR RESOURCES ARE LIMITLESS AND THE POSSIBILITIES ENDLESS. WE HAVE AN INTERNET FULL OF INSPIRATION: THE PROFOUND, THE BEAUTIFUL, THE DISTURBING, THE RIDICULOUS, THE TRIVIAL, THE VERNACULAR AND THE INTIMATE. WE HAVE NEXT-TO-NOTHING CAMERAS THAT RECORD THE LIGHTEST LIGHT, THE DARKEST DARK. THIS TECHNOLOGICAL POTENTIAL HAS CREATIVE CONSEQUENCES. IT CHANGES OUR SENSE OF WHAT IT MEANS TO MAKE. IT RESULTS IN WORK THAT FEELS LIKE PLAY. WORK THAT TURNS OLD INTO NEW, ELEVATES THE BANAL. WORK THAT HAS A PAST BUT FEELS ABSOLUTELY PRESENT. WE WANT TO GIVE THIS WORK A NEW STATUS. THINGS WILL BE DIFFERENT FROM HERE ON…'[6]*

This manifesto describes the work of a group of artists that is informed by the characteristics of digital imagery and exploits the Internet as a place for image access and manipulation. While this manifesto serves a descriptive and instructive purpose, the artworks lack further academic attention, which necessitates a research into the artworks and artistic practice of the artists exhibited in this 2011 exhibition. This research facilitates characterization of a contemporary form of art, while it also sheds light on the subject these artists are positioning themselves to: the functions of photographic images in digital culture and the processes that govern them.

While the artworks presented in *From Here On* manifest themselves in various forms and shapes, they all position themselves to the Internet and the consequences it has had for the use and spread of both photographic and filmic images. All of the artists have made use of the increased availability of photographic images the Internet offers, either by incorporating images and clips found on the Internet in their works, or by making use of the opportunities the Internet has created in order to search, alter and archive

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[5] Cheroux et al. (2013): 104.
[6] Cheroux et al. (2013): cover page.

images. As these artists seem to respond to the influence of the Internet in everyday society and the possibilities it has brought for their artworks, they seem to answer to the characteristics of Post-Internet Art.

The term Post-Internet Art was first coined by Internet artist Marisa Olson (1977) in 2006 as a description of tendencies in Internet Art practice, of which it is derived, and further characterized in a 2008 interview, as she states: *"there doesn't seem to be a need to distinguish, any more, whether technology was used in making the work - after all, everything is a technology, and everyone uses technology to do everything."*[7] She then added: *"I think it's important to address the impacts of the internet on culture at large, and this can be done well on networks but can and should also exist offline."*[8] The most important characteristic of Post-Internet art Olson signals is a moving offline of artworks that could previously exist solely online.

While Marisa Olson was the first to coin the term, it was further developed by art critic Gene McHugh, who describes Post-Internet Art as *"art responding to [a condition] described as 'Post Internet'–when the Internet is less a novelty and more a banality. Perhaps ... closer to what Guthrie Lonergan described as 'Internet Aware'–or when the photo of the art object is more widely dispersed [&] viewed than the object itself."*[9] As a form of art, Post-Internet art is thus characterized by transferring online paradigms into the real world, which is to be seen as a sign of a larger Post-Internet condition; a state in which the Internet is all-informing and all-encompassing.

The term post-Internet, in this respect, does not refer to a situation after the Internet, but rather to a period in which most people used the Internet on a daily basis and the artists were aware of the implications of the Internet for their artistic practice (hence the alternative term: Internet Aware Art).[10] "Post", then, simultaneously is used to position the movement after Internet Art, which only exists online, and to describe the relation of the artists to the Internet, using its tools and strategies in order to tackle subjects, much in the same way postmodern artists adapted and absorbed the strategies of modernism.[11]

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[7] http://we-make-money-not-art.com/archives/2008/03/how-does-one-become-marisa.php.
[8] http://we-make-money-not-art.com/archives/2008/03/how-does-one-become-marisa.php.
[9] Vierkant (2010): s.p.
[10] http://www.artspace.com/magazine/interviews_features/post_internet_art.
[11] http://www.artspace.com/magazine/interviews_features/post_internet_art.

Important contributions to the characterization of Post-Internet art are Gene McHughs blog entries on the matter, as well as artist Artie Vierkant's text *The Image-Object Post-Internet.* While these texts are seminal in creating an understanding of the practice of these artists, they rarely include in-depth analyses of actual artworks. Therefore, this research will aim to fill this gap. Through applying a theoretical approach to the different facets of this art form, this research intends to create a characterization of both the artworks and the practice of some of these Post-Internet artists, as well as gain a broader perspective on the function of photographic images on the Internet. The artists that were shown in the *From Here On* exhibition will be regarded as exemplary for a larger group of Post-Internet artists. As it is impossible to discuss the various practices and approaches of these Post-Internet artists in a meaningful way within the confines of this research, the focus will be on the work of four artists who use preexisting images of the Internet: Jon Rafman (1981), Penelope Umbrico (1957), Jenny Odell (1986) and Corinne Vionnet (1969).

These four artists apply tactics of appropriation, which means that they make use of preexisting imagery, made by others and with another purpose. As these four artists use preexisting photographic material that originally existed on the Internet, these artworks have a direct link to online images. As such, an analysis of the artworks will also permit an assessment of online image economy. The aim of this research will be to answer the following question: 'How do the artworks of these Post-Internet artists reflect on the images they appropriate and what does this say about the state of photographic images in contemporary digital culture?'

This research will consider the implications for photographic images to exist online through the artworks of these four Post-Internet artists. In order to shed light on the different aspects of these works of art, three chapters are discerned in this research. Not only will these three chapters tackle different aspects of online image economy, but they will also focus on the various 'Post-'s that exist simultaneously and all inform the practice and positions of the artists towards these images.

The first chapter will regard the shift of photography from analogue to a digital medium. For this part the William J.T. Mitchell's book *The Reconfigured Eye* will be used in order to describe the implications of this shift towards the 'Post-Photographic Era' has had on the level of the photographic image. In order to define the characteristics of

the digital image, the writings of both Lev Manovich and Vilém Flusser on the matter will be used.

Furthermore, the use of photographic images online will be examined. Therefore, the original online location of the photographs these artists appropriate will be explored in order to consider the original function and value of these images before they were appropriated. In order to discern the different types of photography which are used in the artworks, the types of photography as described by Vilém Flusser *'The Photograph as Post-Industrial Object: An Essay on the Ontological Standing of Photographs'* will be used. The differentiation of various kinds of photography based on the kind of information they give, echoes the status of digital images as carriers of information in the form of data.

In the second chapter, the practice of the Post-Internet artists will be discussed using Nicolas Bourriaud's text '*Postproduction. Culture as Screenplay. How Art Reprograms the World'.* In it he considers the influence of the Internet on artistic practice. The term 'Postproduction' will be applied to the practice of the discussed artists in order to regard the manners in which they present the pictures they appropriate. Also, the structure of the artworks will be considered and linked to online forms. In this respect, the writings of Lev Manovich about database forms, especially '*Making Art of Databases'* and *'Database as a Symbolic Form'*, are elemental.

The third chapter, then, will deal with the ways these artworks reflect on the characteristics of online photographic images, by combining the discussed characteristics of both the first and second chapter. In order to describe the implications of the Post-Internet condition, the writings of Gene McHugh and Artie Vierkant will be used, as they are central figures in the theorization of Post-Internet art. Also, David Joselit's essay *After Art* will be used, as he contemplates the influence of the Internet in introducing new forms of art.

# Chapter 1: Post-photography and the online image

*'But if images start pouring across screens and invading subject and object matter, the major and quite overlooked consequence is that reality now widely consists of images; or rather, of things, constellations, and processes formerly evident as images. This means one cannot understand reality without understanding cinema, photography, 3D modeling, animation, or other forms of moving or still image. The world is imbued with the shrapnel of former images, as well as images edited, photoshopped, cobbled together from spam and scrap.'*[12]

This description by artist and writer Hito Steyerl (1966) of the present-day image-filled society serves as a description of contemporary image economy, but also permits an overview of the changes that have occurred in the last decades, when compared to the *Pictures* text by Douglas Crimp.

Whereas both authors observe a society filled with visual information, Steyerl emphasizes both their unstable nature and the different kinds of images that circulate in society. The reason for this apparent process of destabilization can also be found when comparing the two texts: while Douglas Crimp emphasizes the role of *pictures* in society, Steyerl only refers to *images*. While both words are often used interchangeably, a 'picture' commonly refers to a visual representation *on a surface*, whereas 'image' refers to the visual representation without a carrier.[13] This shift in vocabulary, from a society filled with printed representations to the contemporary world of disembodied images (or even 'processes formerly evident as images'), is a consequence of the process of digitization.

A similar characterization is visible in the manifesto that accompanied the *From Here On* exhibition. As is also observed by dr. Helen Westgeest, the manifesto does not mention the word 'photography' once, while a lot of the featured artists make use of photographic images.[14] Instead, the title of the exhibition makes reference of 'postphotography'. Before the works of the artists discussed can be examined, it is necessary to research this shift in vocabulary from photography to post-photography,

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[12] Steyerl (2013): s.p.
[13] This difference is also exemplified in the English proverb: '*You can hang a picture, but you can't hang an image.*'
[14] Westgeest (2012): s.p.

the underlying changes for the photographic medium, and the implications this has had for the use of photographic images online.

While Douglas Crimp already describes a society 'governed' by pictures, this feeling of image saturation was still in its infancy compared to contemporary image economy. It is true that the amount of images had expanded drastically over the course of the twentieth century due to lower production costs. However, though plentiful, photographs were still very much pictures, in the sense that they needed to be attached to a carrier in order to be seen.

This characteristic would change with the advent of digital photography. While the technique of creating digital images had been around for years, the first consumer digital camera only arrived in 1986.[15] While not a new technology altogether, the commercialization of this process was the beginning of the so-called 'digital revolution'.[16] Digitization had replaced analogue mediums with what was called the 'new media'. New media are defined by two characteristics: objects consist of digital code and are therefore numerical representations. This code can, then, also be written down formally, allowing a digital image to be described using a mathematical function.[17] Furthermore, as new media objects are subject to algorithmic manipulation, they can be altered instantly as they are programmable.[18]

As both these qualities would also inhabit digital photography, the popularization quickly sparked a debate among scholars. Their main concern was the question whether or not digital imaging was able to represent reality. The invention of digital photography had reignited an old debate about the truth claim of photography.[19] This debate was held between those who saw photography as an automatic way of duplicating reality and those who stressed the constructed and artificial aspects of photography.[20] The debate surrounding this truth claim in photography had resurfaced since digital photography consists of digital code, instead of a trace of light on photosensitive paper.[21] Therefore, it was argued, the indexical quality of photography had been erased. As such, according to some theoreticians, the truth claim photography has held since its

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[15] Rubinstein, Sluis (2008): 9.
[16] Rubinstein, Sluis (2008): 11.
[17] Manovich (2001): 27.
[18] Manovich (2001): 27.
[19] Lister (1995): 219.
[20] Lister (1995): 219.
[21] Manovich (2001): 27.

conception has been obliterated. Digital images can be altered and even made on computers without the interference of reality. The indexical quality of photography, the idea that photography is inherently a trace of reality, was thus seemingly negated by digital photography.[22]

An important voice in this discussion was William J.T. Mitchell's 1992 book *The Reconfigured Eye: Visual Truth in the Post-Photographic Era*.[23] In it Mitchell proclaimed the 'death of the photograph' at the hand of the digital image.[24] The reason for this was twofold: on the one hand, the changed nature of the photographic image in the digital era and on the other hand, the growing globalization and ubiquity of photographic images. This changed nature of photography caused Mitchell to refer to the period after the digitization as the 'Post-Photographic Era'. According to Mitchell, photography is, with the advent of digital imaging, inherently informed by the implications of its severed link with reality. The claim of a new era after photography is also supported by other theorists such as Timothy Druckrey, who states*: 'And once the image is digital, it has little to do with photographic systems except by implication. It is in this sense that these images can be called postphotographic, as they no longer rely on the character of the photograph to verify something in the world.'*[25] Druckrey thus explains the post-photographic era as a period in which the reliance on photographic veracity has vanished. Photographic representations should, according to this reasoning, always be met with doubt and skepticism.

However, there are also scholars who do not recognize such a duality between analogue and digital photography, stating that elements of manipulation and artificiality have always been inherent to photography.[26] Also, over time some of the theorists that initially had foreseen the end of the photographic medium revised their opinion. An example is theorist Fred Ritchin, who initially called digital photography '*The end of photography as we have known it'*.[27] Ritchin later modifies this statement by writing that '*photography as we have known it is both ending and enlarging'*.[28] An example of the continuing sense of photographic truth can be seen in the feeling of truthfulness that is connected to photographs that were taken with a smartphone. The low-quality, grainy

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[22] Mitchell (1992): 220.
[23] Mitchell (1992): 225.
[24] Mitchell (1992): 20.
[25] Druckrey (1994): 7.
[26] Manovich (2003): 245.
[27] Batchen (1999): 9.
[28] Kember (2013): 2.

appearance of these photographs imbues them with a sense of immediacy and authenticity.[29]

These pictures show that some of the characteristics of photography have survived, and have intensified as a consequence of the digitization. Therefore, it seems the advent of the Post-Photographic era does not signal the end of the photographic medium, but has created new functions and uses for photography.

While the arrival of digital imaging sparked a debate among theorists, it did not radically alter the way the public at large perceived the medium. While amateur photographers would trade in darkrooms and other equipment, and would purchase computers and scanners, these would still be used within the paradigm of analogue photography.[30] This lack in changing paradigms set on by the changed medium can be described according the concept of 'remediation' as explained by Jay Bolter and David Grusin.[31] Remediation refers to the transference of characteristics of an older medium unto a new medium.[32] This is, as Bolter and Grusin state, especially the case for the digital medium, as the digital medium wants to erase itself, so that the viewer reacts to it the same way as he would with the original medium.[33] Interplay between two mediums can only happen when the user is aware of the characteristics of both mediums and is able to compare them. As the digital medium, according to Bolter and Grusin, tries to prevent this awareness, it is logical that digital photography was initially used in the same manner as analogue photography.

A more radical shift occurred with the introduction of the first digital consumer camera with a screen, which allows the photographer to see the photographic image seconds after it was taken, in 1995.[34] The incorporation of not only a screen, but also a 'delete'-button into the camera, removed the delay between taking a picture and viewing it, and negated the cost of film development.[35] This moment signals a shift from print-based images to screen-based images.

The screen-based image is what philosopher Vilém Flusser called the 'disembodied image', or '"pure" surface'.[36] Because of this transformation, images are no

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[29] Rubinstein, Sluis (2008): 11.
[30] Rubinstein, Sluis (2008): 11.
[31] Bolter, Grusin (2000): 44.
[32] Bolter, Grusin (2000): 44, 45.
[33] Bolter, Grusin (2000): 45.
[34] Rubinstein, Sluis (2008): 12.
[35] Rubinstein, Sluis (2008): 12.
[36] Flusser (2002): 70.

longer dependent on materiality to be seen, which has consequences for the availability of imagery, as well as for the production of photographic images. Without the need for physicality in order to view images, producers of photographic images are able to censure their output, but are also, with expanding storage options, stimulated to increase the amount of pictures they take.

Another important factor to consider is the role of the Internet in this development. The rise of the Internet created opportunities for individuals to upload and share their images. Even though the Internet initially mainly dealt with texts and simple graphics, the improvement of technology allowed it to become an increasingly graphic environment.[37]

The arrival of Web 2.0 around 2001 made the Internet into an interactive medium which allowed all users to contribute to the online content. A consequence of this shift is the advent of platforms for amateurs to upload content to. An example of this development is Flickr, a photo-sharing platform which allows amateur photographers to upload and share their photographs. Flickr recorded its 100 millionth photo upload already in 2006.[38] These numbers were quickly superseded with the introduction of social media websites such as Facebook, Twitter and Instagram. By incorporating the camera in the mobile phone and through an accentuation of the social value of instant photographic messaging, photography reached a new state of saturation. In 2011, the social media website Facebook alone already housed 60 billion photos, with online photo-sharing communities like Photobucket and Flickr also hosting some billion photographs.[39]

The transition from material pictures to screen-based images may, in this light, be more important for the way photography is experienced than the absence of a direct link with reality.

The immaterial state of photography in its post-photographic quality also has other implications than its impact on image dissemination. Vilém Flusser distinguishes three ways in which the new photographic image, in its immateriality, can be distinguished from a chemical one: because of its immateriality, it is not subject to entropy and therefore practically eternal; it can move and sound and; it can be changed

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[37] Mitchell (2003): 299.
[38] Rubinstein, Sluis (2008): 14.
[39] http://mashable.com/2011/02/14/facebook-photo-infographic/.

by its receiver.[40] As these qualities mostly impact the way photographs are read and the process of signification, it is necessary to regard these implications from a theoretical viewpoint.

Theorists have for a long time tried to interpret intrinsic photographic meaning using linguistic terms, including sign, symbol and icon. Gradually, however, the idea that photographic meaning was influenced by external factors, such as the context in which it appears, started to gain momentum.[41]

Philosopher Roland Barthes, in his 1961 text *The Photographic Message*, described the photographic image as a message without code, or rather: a continuous message.[42] According to Barthes, the structure of a photograph is not isolated, but is always in communication with at least one other structure.[43] At the point of reception, photographs are never met in isolation, but are always embedded in other sign systems, such as captions and layout.[44] Therefore, the meaning of a photograph is never autonomous, but dependent on the context in which it is met. The polysemic nature of photography allows it to mean more than one fixed thing.[45] In the case of the disembodied image, the context in which it appears continually changes and, with the advent of digital manipulation software, the meaning is never fixed, but always subject to change.[46]

While photography can still be seen in the same light, as a continuous message, the relationship between imagery and other sign systems have changed in the post-photographic era. As the production of photographic material has intensified, as well as its circulation, photographs have gained significance as a mode of expression. Visual images have gained so much importance, that scholars speak of the "pictorial" or "iconic" turn.[47][48]

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[40] Flusser (1986): 331. To what extent images have actually become eternal remains to be seen. While images are no longer dependent on physical support and are no longer subject to physical deterioration, they are now dependent on digital storage. This means that files can easily disappear with a computer crash, but also that images are reliant on a certain technology and the longevity of this technology in order to be seen. Also, as the amount of photographs taken is growing, the risk exists that images become lost in the numbers.

[41] A well-known voice in this debate is that of photographer Allan Sekula, who described the photograph as *'an "incomplete" utterance, a message that depends on some external matrix of conditions and presuppositions for its readability.'* Sekula (1974): 4.

[42] Barthes (1983): 196.

[43] Barthes (1983): 195.

[44] Lister (1995): 221-222.

[45] Lister (1995): 226.

[46] Lister (1995): 225-226.

[47] Mitchell (2004): 5.

The concept of a pictorial turn refers to the twentieth-century notion of the "linguistic turn"; a term coined by philosopher Richard Rorty in order to stress the recognition of language as an important way of constructing and deconstructing reality.[49] The fact that today scholars are referencing the importance of images over that of language is a significant development, and telling of the necessity of visual literacy.

The notion that images are replacing language as carriers of information was already present in Vilém Flusser's 1987 publication on the future of writing. For Flusser, writing was developed in order to analyze images, and with it came the notion of history.[50] Flusser writes: *'Images are mediations between man and his world, a world that has become inaccessible to him immediately. One must learn how to decipher these images, one must learn the conventions that give them their meaning (…) The purpose of images is to mean the world, but they may become opaque to the world and cover it, even substitute for it.'[51]* The fact that Flusser writes on the importance of images in a text on the future of writing, is telling of a growing importance of images as vehicles for communication and a growing necessity of pictorial literacy.

This development inspired William J.T. Mitchell to dedicate a publication on the nature of images and to consider the relation between images and the viewer from the viewpoint of images. Mitchell concludes in his publication *What Do Pictures Want?* that pictures do not want to be turned into language, but want to exist on the same level.[52] Photographic images, as bearers of information that function similarly to language, can be seen as forbearers of an emerging culture of immaterial information.[53] Writer Göran Sonesson in 2012 stated: *'The pictorial sign becomes an information good, as is already the linguistic sign: something that, once it has been created, can be repeated indefinitely; but also something that can be put together out of repeatable and finished elements, just like language, although in a form peculiar to pictures.'[54]* Sonesson, in this text, directly links the 'post-photographic' state of photographic images to the rise of photographs as a new structure of signification. It is through its immateriality that photography takes on

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[48] The term 'iconic turn' or 'ikonisches Wendung' was introduced by Gottfried Boehm in 1994, while the term 'pictorial turn' was conceived by Mitchell in an eponymous article in art magazine Artforum in 1992. Therefore priority should be given to Mitchell and from here on the term pictorial turn will be used to describe this development.
[49] Mitchell (2004): 11.
[50] Flusser (2002): 65.
[51] Flusser (2002): 65.
[52] Mitchell (2004): 47.
[53] Flusser (1986): 331.
[54] Sonesson (2012): 12.

the same characteristics of the linguistic sign as something that can be repeated indefinitely.

The post-photographic condition of photographic images thus has created a society saturated with signs, letters and language in visual form. However, at the same time the nature of these images and the photographic medium are less fixed than ever. Photographic images can exist eternally, but also risk being lost in the sheer amount of circulating imagery.

In order to contemplate the different types of photography that are used in the works discussed, the parameters as set by Vilém Flusser will be used he distinguishes types of photographs on the kind of information they give. This characterization matches the new primary function of photographic images as carriers of information in the digital era. By focusing on the kind of information the photographs give, it is possible to consider the roles and functions of photographic images in the information age.

Whereas the debate that was sparked by the arrival of digital photography initially focused on the theoretical and technological parts of the photograph, it seems that the advent of digital photography primarily influenced the ways photography is used as a medium. Therefore, the post-photographic era is defined by the new uses found for photography, influenced by its characteristics of immediacy and ubiquity. As such. it may prove more important to focus on the ways digital images are embedded in online social and functional use in the post-photographical era.

In order to do so, the original online locations of the images used in the artworks of the four artists mentioned in the introduction will be discussed according to the three types of photographs Vilém Flusser discerns. He discusses the photograph as a post-industrial object, preoccupied with information dissemination.

Flusser distinguishes three types of photographs: photos made by fully automated cameras, amateur snapshots and professional photos.[55] First of all, Vilém Flusser distinguishes photographs made by fully automated cameras, such as satellites. This type carries information programmed by humans and elaborated by the apparatus, i.e. the camera.[56] This type of imagery is used by Jon Rafman and Jenny Odell, both of whom explore the material provided by the mapping application Google Maps.

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[55] Flusser (1986): 330.
[56] Flusser (1986): 330.

An example of this phenomenon can be seen in the series *9 Eyes* (see image 1) by artist Jon Rafman. A Canadian artist, Rafman uses the online mapping application Google Maps in order to find images for this project. While Google Maps primarily offers maps of certain areas to users, it also offers the option of Street View: a technology that provides panoramic views from positions along many roads in the world, comprised of stitched images made by special cameras fitted atop of a car. As such, Street View supplies the user with an infinite amount of visual possibilities.[57]

The use of material derived from Google Street View in the work of Jon Rafman is also corresponded to the audience. While the photographs of Google Street View have a distinct aesthetic, with personal information – faces and license plates – and the seams of the various images appearing blurred, the original location of these images is stressed through the Google Maps interface being part of the representation, ensuring their legibility for the spectator.

The interface in the application is used to make the visuals navigable. The presence of an interface in the aesthetics of Google Maps emphasizes the mediated view of the spectator, a concept referred to as 'hypermediacy'.[58] At the same time, however, Google Maps aims to achieve a sense of immersion, or 'immediacy', in the viewer through stitching together photographic images. 'Immediacy' refers to the negation of a mediated gaze, acquiring a sense of transparency.

Jenny Odell is another artists working with imagery found in Google Maps. Instead of using Street View however, in her series *Satellite Collections* (2009-2011) (see image 2) she uses the satellite view option in Google Maps in order to hover over her subjects. These collected objects, which are then reassembled in one image, range from famous landmarks to cargo trains and airplanes. While Odell does not, like Rafman, refer directly to the original location of these images by leaving intact the hypermediated interface, she partly refers to it in the title of her series. Moreover, it can be said that these satellite images have a clear enough aesthetic in order to leave little doubt to their mechanical origins.

Both Odell and Rafman make use of this imagery, made by fully automated cameras. While Google Maps as an application operates between 'hypermediacy' and

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[57] The emulation of the physical world through photography reminds one of the short story *On Exactitude in Science* by Argentine writer Jorge Luis Borges. The story has often been used as an analogy to describe the blurring lines between reality and mediated reality, and as such for the post-photographic condition in which reality consists of images.
[58] Bolter, Grusin (2000): 31.

'immediacy', the transparent qualities of the images are stressed by the lack of a human photographer. As Mitchell describes it, these images '*are, therefore, cultural coinage of a different kind, with different functions and values; we can meaningfully ask what such an image tells us, for example, but not what its originator was trying to tell us. They are not given credibility by recognition that the photographer was actually there, and is prepared to attest to it, but by faith in the mindless, mechanical reliability of a robot-on-the-spot.'[59] The information received through these photographs can be regarded as authentic and transparent through trust in mechanical objectivity.[60] When one regards the photographic material made by these machines in relation to the pictorial turn, it is obvious that this kind of imagery functions exceptionally well as transparent carriers of information.

The second type of photograph Flusser distinguishes is the amateur snapshot. According to Flusser, amateurs capture everything the camera can photograph, hereby exhausting the camera program. These amateur snapshots carry little intrinsic information, but can become highly informative as they deviate from the camera program.[61] This information is then deduced from the scenes that were inadvertently captured by the amateur photographer. Also, as amateurs have been responsible for the largest part of photographic production ever since the invention of the Kodak camera at the turn of the nineteenth century, the little information these images carry becomes significant through the total amount.

However, Web 2.0 has created new forms of image making and consumption through the advent of photo-sharing platforms. Through this new ideal of uploading and sharing photographs, these platforms not only ensure an afterlife for images, but also, for the first time in history, make large quantities of amateur photography visible in the public domain.[62] The arrival of camera phones, combined with high-resolution digital photography and high-speed internet connections have contributed largely to the further democratization of photography, while social media, photo-sharing platforms and the ideal of sharing have imbued photography with new social value and intensified the rate of online image circulation.

The emerging importance of the amateur is also echoed by Jorinde Seijdel in her

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[59] Mitchell (2003): 302.
[60] While the location of the notion of authenticity already lies between the camera and its referent, the omission of the subjective persona of the photographer ensures an extra sense of transparency.
[61] Flusser (1986): 330.
[62] Galani, Moschovi (2014): 172.

essay *De Waarde van de Amateur* (The Value of the Amateur).[63] Seijdel states that the figure of the amateur has risen to prominence in contemporary culture, as a reaction to the growing presence of the amateur in digital culture, where he is a provider of material in the form of photographs, videos and texts.[64] In the democratic environments of the Internet the amateur has broken away and today is not only a consumer, but also an important provider of content, causing the majority of images on the Internet today to have been made by amateurs.[65]

The enormous amount of amateur material circulating online is visible in the work of American artist Penelope Umbrico. In her work *Suns from Flickr* (see image 3), which she first posted on her website in 2011, she makes use of the over eight million photographs of sunsets she encountered on photo-sharing website Flickr.[66] Umbrico chose to select the pictures depicting sunsets, as this turned out to be the most photographed subject on the website.[67]

Flickr is described by media professor Susan Murray as a "*collaborative experience: a shared display of memory, taste, history, signifiers of identity, collection, daily life and judgment through which amateurs and professional photographers collectively articulate a novel, digitized (and decentralized) aesthetics of the everyday*", and is in this respect a good example of the social value photography got imbued with in post-photography.[68] While the images made by the satellites of Google Maps derived their information from the apparent lack of a subjective maker, the images uploaded on Flickr are informative on other levels. As Murray describes, these photographs gain their value through their status as representatives of their makers; it is through their sheer amount that these images become meaningful, rather than through their individual representations. How something is represented becomes less important than how many times it is represented.

As of March 2013, Flickr had over 87 million members, with more than 3.5 million new photographs being uploaded daily.[69] Flickr not only allows members to upload and share their images, but also to append "tags" to these pictures: adjectives

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[63] Seijdel (2010): 13.
[64] Seijdel (2010): 13.
[65] Egger (2009): front page.
[66] http://www.penelopeumbrico.net/Suns/Suns_State.html.
[67] http://www.penelopeumbrico.net/Suns/Suns_State.html.
[68] Murray (2008): 149.
[69] http://www.theverge.com/2013/3/20/4121574/flickr-chief-markus-spiering-talks-photos-and-marissa-mayer.

that describe the pictures' category.[70] The act of tagging can thus be seen as an *"essential element in the participation of the social aspects of photo sharing",* as it allows other members to search and find pictures using particular keywords.[71] The photographs being uploaded on the site therefore do not only serve a visual function, but also have a strong social value.[72] Photographs are uploaded in order to construct memory, but also as a form of self-representation. While the photographs can be seen as an outward form of self-expression, the total online oeuvre contributes to the construction of a social identity.[73] While their mainly amateur status does not allow for much information, they gain a large amount of their importance through their sense of immediacy.[74] Like the Polaroid, these amateur snapshots that have been made on a digital camera draw on experiential immediacy for their impact.[75] In this sense, sharing these amateur snapshots is like sharing experience itself. Therefore, what these pictures lack in representational information, they make up in social value and information in the form of experience.

While Jon Rafman and Jenny Odell rely on both the distinct aesthetics of the automatically made images of Google Maps and the interface that refers to this application, Penelope Umbrico directly references the location she appropriated the images from in the title of her installation. In doing so, she shows the spectator how to interpret these images, though the vernacular content of these images already seem to point to an amateur origin.

Another artist that makes use of amateur material in her works is Swiss artist Corinne Vionnet. Like Penelope Umbrico, Corinne Vionnet is also preoccupied with digging the online archive for amateur material. In her photo series *Photo Opportunities* (see image 4) Vionnet presents the viewer with compositions of hundreds of amateur photographs of famous landmarks.

While Umbrico, in her work, refers directly to the online location she appropriated her material from, the source of the images Vionnet uses, is more diffuse in nature. Instead of focusing on one particular website or community to find material, she

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[70] Palmer (2010): 158.
[71] Palmer (2010): 158.
[72] Van House (2007): 3.
[73] Van House (2007): 4, 5.
[74] Palmer (2010): 155.
[75] Palmer (2010): 158.

broadens her gaze to include multiple photo sharing websites.[76] By conducting keyword searches Vionnet accumulated thousands of photographs depicting the same touristic landmark. While the single original location of Umbrico's images made it possible to characterize them quite easily, this is not as easily done in the work of Corinne Vionnet, even though the fact that she has used material from online photo-sharing communities shows that she too has made use of primarily amateur material. Also, the representations of these photographs, all depicting famous touristic landmarks, helps identify them as touristic snapshots, "photograph-trophies" as Susan Sontag calls them.[77] This genre of photography is typically captured by amateur photographers, and will be read as such by the spectator.

These touristic snapshots are made in order to document experience for the photographer (it recalls the memory and thereby experience of making the specific photograph, of being on that particular holiday and standing on that site), but also as a way to share this experience with others.[78] While touristic snapshots already existed in the analogue era, when Susan Sontag wrote about this phenomenon, in the digital era the possibilities of sharing these pictures have gained new possibilities. In this quality, these images seem to answer to the same characteristics as the photographs Umbrico appropriated from Flickr: on the one side these online images possess a social dimension, which needs for them to be shared and to be seen by others, while at the same time they are highly personal: they document the experiences of their maker and subsequently work toward an outward form of self-expression. Unlike Penelope Umbrico, however, Corinne Vionnet does not refer directly to the online location of the images she uses. On the one hand, this is explained by the fact that she does not appropriate material from one website. On the other hand, the touristic snapshot is an amateur based practice to such a degree that the mere subject matter of these pictures calls up associations of the practice.

While the automatically made images gained their transparency through the lack of an intervening individual, the amateur snapshots discussed in this fragment, too, convey notions of transparency and authenticity. The camera, mostly as a part of the smart phone, in the hand of the amateur photographer acts as both an instant capturer of experience and a vehicle for the social distribution of this content online. Through

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[76] http://www.corinnevionnet.com/site/1-photo-opportunities.html.
[77] Sontag (1977): 9.
[78] Van Dijck (2008): 60.

these notions of immediacy and transparency, these images become a form of speech; a way of communication that replaces writing.[79]

While the second category of amateur material is by far the largest category, Flusser does distinguish a third category.[80] This category opposes the amateur photograph in its control over the apparatus. The third type, the professional photograph, is defined by what is generally lacking in the other two types: intention. The first type consists of automatic photographs as instructed by a program, while the amateur photographs everything and deviates from the program by errors.[81] When the professional photograph deviates from its program, this is done with intention of experimentation. The third type thus also envelops photography made with artistic intention. It is striking that none of the artists discussed use this type of photography in their work.

The fact that these artists have chosen amateur photography and automatically made images to incorporate in their works, while omitting artistic material, is revealing of the focus of their practice. Firstly, this omission can be attributed to the scale in which photographs of these types make up the online environment. By far the largest groups of images circulating the Internet is made by amateurs, while applications such as Google Maps are also composed of millions of stitched together photographs. Professional photographs, in this extent, make up a much smaller group on the Internet. Secondly, automatically made images and amateur material may have been chosen on account of the type of information they give. Amateur photographs and images made by machines are more prone to give direct information, whereas professional photography tends to be more staged or conceptual; made with a specific intention. Thirdly, the first two categories have a large social dimension: they are made or made public for a social purpose; they need to be seen by others. In this process, characteristics such as quality and intricacy are usually left behind, as this ensures these images can be disseminated easily and can be circulated as such. These images are called 'poor images' by Hito Steyerl. [82] Poor images are typified by a low quality and resolution, and can therefore be dispersed most easily. The amateur quality and sub-par aesthetics of the images used in these works, therefore qualifies them as 'poor images' as well.

All in all, what eventually determines the use of these images is to what extent

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[79] Rubinstein, Sluis (2008): 18.
[80] Flusser (1986): 330.
[81] Flusser (1986): 330.
[82] Steyerl (2009): s.p.

these images are attuned to their role as bearers of information in the pictorial turn, as replacements or supplements of written meaning. In this quality, these images need to be transparent in meaning and to be met in relation to other signs in order to convey meaning. The types of photography that best answer to these criteria are used by these artists.

In this chapter, the implications for the photographic image in the post-photographic Era as coined by William J.T. Mitchell, have been discussed. Not only did the shift from an analogue to a digital medium spark debates on the ontological status of photography, the post-photographic era also saw the rise of new applications of photography, influenced by the immediacy of the medium and the rise of the Internet. Through this added social value and added sense of authenticity, photographic images become a sort of communication that resembles speech. Through becoming ubiquitous, images take over the role of language as a primary carrier of information. Through their ubiquity, as well as their duplicability, photographic images are rapidly replacing language as the main structure of signification.

The artists discussed seem to engage with this development by using imagery that is transparent in its representation and meant to be seen and shared by as many people as possible. These images are easily readable and derive meaning from their visual information. As such, they are equipped for social use, to be shared and circulated, without losing their initial value. These artists are not preoccupied with the value of the singular image, but with that of a type of photograph or photographic habit.

The arrival of web 2.0, which has added a social layer to the Internet, has blurred the lines between the private and the public domain. The images in Google Maps were made for everybody to see and use, while sharing and making public personal photographs adds another layer to their existence. This state of the Internet, in which most images are accessible and are made to circulate freely, also influences existing notions of ownership. The consequences this has had for the practice of the artists discussed, will be considered in the second chapter.

Chapter 2: Postproduction practice

*'Artists' intuitive relationship with art history is now going beyond what we call "the art of appropriation," which naturally infers an ideology of ownership, and moving toward a culture of the use of forms, a culture of constant activity of signs based on a collective ideal: sharing.'*[83]

What Nicolas Bourriaud describes here is the practice of contemporary artists as going beyond traditional acts of appropriation which were mainly concerned with issues of originality and ownership, toward artistic interventions better suited for a culture in which these values are no longer relevant, a practice he calls 'postproduction' as it focuses on transforming content in a stage after its production. French art critic Nicolas Bourriaud has written extensively on the practice of contemporary appropriation artists and the influence the Internet has had on these appropriation tactics. How the Internet has influenced the practice of these artists will be discussed in this chapter.

In the first chapter, the characteristics of the post-photographic era and the consequences for the reading and signification of online images have been described. It was shown that, through the shift from a print-based to a screen-based medium, post-photography is no longer necessarily connected to a fixed context. The lack of a physical carrier allows the image to circulate, to be shared and seen by others.

The ambulatory nature of the online image and the redefined boundaries of the private and the public on the Internet have also influenced the practice of these artists. They use imagery they found online, but how significant is this when most images are part of the public domain? How the characteristics of online photographic images have informed and transformed the practice of these artists will be discussed in this chapter.

The current dominance of postproduction practice can be seen as a product of the current post-photographic state of digital culture. Through the increased mobility and circulation of photographic images the necessity of *making* images has decreased, as large amounts of photographic images are available and accessible for artists to work with. Postproduction tools, then, are not aimed at achieving representation, but at shaping images and the world by effect.[84]

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[83] Bourriaud (2002): 11.
[84] Steyerl (2013): s.p.

In order to comprehend this current quality of appropriation, it is worth examining this 'traditional' art of appropriation and its evolution into the practice of these postproduction artists.

Rather than appropriation being a kind of artwork, it is a way of working, a tactic employed in order to convert the meaning of an image. An act of appropriation consists of repositioning a pre-existing image or object in order to change the meaning of the original into something else. In its widest definition, appropriation stands for *"the relocation, annexation or theft of cultural properties- whether objects, ideas or notations".*[85] The appropriationist gesture leans heavily on intertextuality, in which the meaning of a text is shaped by another text.

Appropriation has been an integral part of artistic practice ever since the dawn of the modern era. The use of newspaper cuttings and lettering in Cubist and Dadaist montages and collages can be called appropriation, but the first radical example of appropriation can be seen in the readymades of Marcel Duchamp (1887-1968). A notable example of appropriation is Duchamp's 1917 work *Fountain,* sent in under the pseudonym of R. Mutt for a New York exhibition.[86]

Throughout the rest of the modern era there are numerous examples of artists using tactics of appropriation in their work. The Pictures Generation, in the dawn of the postmodern era, would be the first group of artists that would use appropriation tactics as an integral part of their collective artistic practice. The artists of the Pictures Generation were mainly inspired by poststructuralist thinking, especially by Roland Barthes' 1967 text *Death of the Author*. In it, Barthes puts an end to the authority given to the figure of the author.[87] In proclaiming the 'death' of the author as the one who provides meaning Barthes gives the power to the reader and hereby opens a text up to polysemic reading.[88]

Through the use of appropriation tactics, artists of the Pictures Generation seized the power of readership in order to challenge the authority of art and commercial

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[85] Welchman (2001): 1.

[86] Evans (2009): 26. The work, a readymade consisting of a urinal, was intended by Duchamp as a broadening of the artistic paradigm as well as the authority of the artist. In an anonymous letter sent after the piece was withdrawn from exhibition, the writer states: '*Whether Mr. Mutt with his own hands made the fountain or not has no importance. He CHOSE it. He took an ordinary article of life, placed it so that its useful significance disappeared under the new title and point of view – created a new thought for that object.*' The significance of this letter lies in the introduction of the act of 'chosing' as an artistic act, on the same level as creating an artwork.

[87] Barthes (1967): 5-6.

[88] The relationship between photography and semiotics, as described in chapter 1, is reconfirmed in this part. As polysemic reading became widely accepted in linguistics, so too, photographic images became polysemic structures.

photographers. Artists such as Sherrie Levine attacked ruling artistic values such as originality by copying Walker Evans' photographs, while Richard Prince targeted the idealization of masculinity in American society by rephotographing Marlboro commercials upholding this ideal.[89]

Bourriaud, in his text, refers to the use of appropriation as a way to contest ideologies of ownership by using the term 'détournement', originally coined by French Marxist writer Guy Debord.[90] In his 1956 text *Directions for the Use of Détournement,* Debord provides a theoretical background to the practice of appropriation through his concept of 'détournement' (literally 'diversion'), which he separates into two categories: the 'minor détournement' and the 'deceptive détournement'.[91]

In the case of the 'minor détournement' the repositioned element has no importance of itself and draws all its meaning from the new context, while the 'deceptive détournement' revolves around the repositioning of an intrinsically significant element.[92] With the concept of the 'deceptive détournement', Debord introduces an important characteristic in the working of this particular tactic of appropriation, as the status of the element in this particular form of 'détournement' must be known by the viewer in order to derive part of its meaning from. Debord then later adds *'..the main force of a détournement is directly related to the conscious or vague recollection of the original contexts of the elements'.[93]* It is thus in the act of recontextualization, with the viewer knowing the original context, from which the 'détournement' derives its power. Within this frame, the acts of appropriation of the artists discussed in the first chapter seem to answer to the description of the 'minor détournement', as the images in themselves have no significance. Bourriaud, however, introduces his own term to account for these acts of appropriation.

In his essay, Bourriaud expands on this notion of 'détournement', by introducing the concept of 'detourage' in order to describe contemporary appropriation practices. He describes 'detourage' as *'the way our culture operates by transplanting, grafting, and decontextualizing things. The frame is at once a marker – an index that points to what should be looked at – and a boundary that prevents the framed object from lapsing into*

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[89] Evans (2009): 219.
[90] Evans (2009): 35.
[91] Evans (2009): 35.
[92] Evans (2009): 35.
[93] Evans (2009): 35.

*instability and abstraction, i.e., the vertigo of that which is not referenced, wild, "untamed"*
*culture. Meanings are first produced by a social framework."[94]* 'Detourage' is explained by
Bourriaud as a new development in appropriation practice. While 'détournement' refers
to the forceful act of de- and recontextualization, Bourriaud posits 'detourage' as a form
of appropriation in contemporary culture, where the lines between producer and
consumer have blurred and where ownership of forms has been abolished.[95] The
gesture of appropriation has been deradicalized as a consequence of the open-access
Internet culture, and therefore does not convey the same meaning as it did in the 20th
century. As such, the act of appropriation is only a small part of postproduction practice.

Postproduction is positioned by Bourriaud as a consequence of global culture,
influenced by the information age as well as presentation forms that appear on the
Internet. The Internet, functioning as an environment of universal access to cultural
property, is at odds with existing notions of copyright.[96] While copyright still exists in
the digital age, in many cases images can still be used freely.[97] With images existing as
'pure surfaces' and being freely available online, every online visit is to an extent an act
of appropriation. Where Barthes declared the death of the author in the 1960's, the
makers of photographs that are uploaded and shared online, seem to have given their
authority away themselves through the act of sharing. In this respect, it is perhaps more
valid to speak of the 'suicide of the author'.[98] At the same time, however, appropriation
is still a strategy that is used by these artists today, but no longer meaningful enough as
an end in itself. Rather, it is used as a presupposition, as a first step in their artistic
practice. The prefix in 'postproduction' refers to "a zone of activity", as the practice is
situated after the pictures have been produced.[99] Postproduction practice thus does not
consist of producing images, but of inventing protocols of use for all existing modes of

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[94] Bourriaud (2002): 41.
[95] Bourriaud (2002): 35.
[96] The website of Creative Commons, an organization enabling the sharing and use of creativity and knowledge through free legal tools, states: '*The idea of universal access to research, education, and culture is made possible by the Internet, but our legal and social systems don't always allow that idea to be realized. Copyright was created long before the emergence of the Internet, and can make it hard to legally perform actions we take for granted on the network: copy, paste, edit source, and post to the Web. The default setting of copyright law requires all of these actions to have explicit permission, granted in advance, whether you're an artist, teacher, scientist, librarian, policymaker, or just a regular user. To achieve the vision of universal access, someone needed to provide a free, public, and standardized infrastructure that creates a balance between the reality of the Internet and the reality of copyright laws.*': http://creativecommons.org/about.
[97] Under the current legal system, it is permitted to use images made by others, when the image is transformed or when the meaning of the image is altered. Furthermore, the 2013 UK Enterprise and Regulatory Reform Act, also dubbed the 'Instagram Act', allows one to use 'orphan works'. Orphan works are copyrighted images of which the owner cannot be found and contacted through diligent search: http://www.bbc.com/news/technology-22337406.
[98] Cheroux et al. (2013): 105.
[99] Bourriaud (2002): 17.

representation and all formal structures, and as such is positioned after the point of appropriation.

*"Appropriation is indeed the first stage of postproduction; the issue is no longer to fabricate an object, but to choose one among those that exist and to use or modify these according to a specific intention"*, Bourriaud states.[100] What Bourriaud pinpoints here is the act of appropriation as a culmination of a process of selection. The necessity of producing material has waned in a society filled with images, the importance of production obliterated. In postproduction, the act of consumption is also seen as closely tied to the act of production, functioning both as its motor and motive.[101] Additionally, in contemporary digital culture as in postproduction practice, the gap in content and time that separates production and consumption narrows every day. As such, these artists are consumers as they come across these images on the Internet, but by altering their representation and meaning, they also take on the role of producers of meaning.

The production of these consumer-artists is aimed at the forms in which these artworks appear. '*Postproduction*', according to Bourriaud, '*apprehends the forms of knowledge generated by the appearance of the Net (how to find one's bearings in the cultural chaos and how to extract new modes of production from it).'[102]* What, then, are these forms and how are they translated to the works of these artists? As described in the first chapter, the work of Jon Rafman makes use of imagery derived from the online-mapping application Google Maps in order to compose his ongoing photographic project *'9 Eyes'.* In *9 Eyes*, Rafman creates screenshots of scenes found in the photographic archive of Google Street View. However, instead of following the function of Google Street View as a visual mapping device, Rafman selects the shots that were inadvertently recorded by the automated cameras: the inane, bizarre scenes. These screenshots are, subsequently, presented as standalone photographic images. It is through the presence of the Google Maps interface, that the viewer knows they are dealing with a reality that is mediated through an application. Rafman keeps the interface of Google Maps as a direct referent to the online environment of the images, ensuring the legibility of these images as automated images.

The screenshots are appropriated directly from the screen, leaving the interface

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[100] Bourriaud (2002): 26.
[101] Bourriaud (2002): 23.
[102] Bourriaud (2002): 14.

intact, and as such, seem to show little of the artistic process of the artist. It is only when the series as a whole is regarded that the practice of the artists can be considered to its full extent. While in the individual works the act of selection and appropriation plays an important role, the practice of Rafman in regard to his *9 Eyes* series is more precisely described as the compiling and assembling of images, in order to create a new, alternative collection of photographs, or rather: an archive. Rafman thus first digs through this archive in order to find his material, and subsequently compiles his own, alternative archive which consists of this material. Through this preoccupation with digging through archives and compiling other, alternative archives, Rafman's works may also be referred to as 'archivist art'.

The preoccupation of artists with the archive is not a new development, as the notion of the archive has had a growing importance over the course of the modernist era.[103] The archive, a term deriving from ancient Greece referring to public documents, usually constitutes a repository or ordered system of documents and records.[104] The definition of an archive breaks down in two parts: first of all, an archive is composed of documents or records, and second of all; an archive is an organized entity, a complete body in itself.

In the writings of philosopher Michel Foucault, the archive is not only regarded as a place of storage, but also as a possible vehicle for domination. Foucault suggests older archival deposits, incorporated of material on important individuals, were be used with a view towards the past.[105] With the individualization of society, archives would keep records on common people, such as prison or hospital records. This shift signals a new use for the documents these archives consist of in the modern era: no longer are they monuments for future memory, but documents for possible use.[106]

As places consisting of material, but also as vehicles of domination and subjection, archives have been used by appropriation artists as a vantage point for their practices.[107] A range of websites incorporates archive or database forms in order to arrange data or images, and the Internet itself is even often referred to as a digital archive. A scholar who has been preoccupied with the notion of the archive in the digital age is Wolfgang Ernst. He refers to the Internet as a "digital an-archive", which is to say:

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[103] Merewether (2006): 10.
[104] Merewether (2006): 10.
[105] Brouwer, Mulder (2003): 8-9.
[106] Brouwer, Mulder (2003): 9.
[107] Merewether (2006): 14.

something that *is* and simultaneously *is not*.[108] According to Ernst, the Internet has characteristics of an archive, for example a storage function that is often connected to archives.[109] However, as the Internet is ever-expanding and its content is constantly changing, it cannot be classified as an archive. As such, the Internet simultaneously meets and escapes a definition as an archive.[110] While according to Ernst the Internet does not comply to all characterizations of an archive, the urge of understanding archives is more pressing than ever, according to writers Arjen Mulder and Joke Brouwer: *'We do not live in a society that uses digital archiving, we live in an information society that is a digital archive. Understanding the world means understanding what digital databases can or cannot do.'[111]* According to them society at large functions as an archive; this would entail that everything is a 'document for possible use'.

Not only is it important to understand the workings of an archive, but also to comprehend how photographs function as part of an archive. The relationship between archives and photography has been long established, and can be brought back to a photograph being seen as an objective part of reality and its status as a document. With this view of photography providing a truth-based document, it logically follows that a lot of archives consist, at least partly, of photographs. But the relationship between the photograph and the archive goes further than this. It can even be reasoned that photographs and archives behave in the same manner: both consist of traces of past events, documenting them and hereby creating a link between the past and the present. Susan Sontag describes a similar relationship, as she writes how, through being photographed, a subject can become part of a larger system of information and can, subsequently be classified and stored.[112] The act of photographing then becomes an instrument for classification, and the photograph a document that functions as an element in this larger process.

Google Maps, as an application composed of photographic images, also functions as an archive of photographic documents. However, as these images are stitched together, the Google Maps archive is not brought down to individual photographic records, nor structured according to subject matter. A similar issue is raised with the alternative

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[108] Ernst (2013): 115.
[109] http://www.imageandnarrative.be/inarchive/digital_archive/laermans_gielen.htm.
[110] http://www.imageandnarrative.be/inarchive/digital_archive/laermans_gielen.htm.
[111] Brouwer, Mulder (2003): 6.
[112] Sontag (1977): 156.

archive Rafman compiles in his work. While it acts as an image repository, it is not organized and therefore lacks one of the main characteristics of an archive.

A practice concerned with digging the archive is then not only visible in the work of Jon Rafman, but also in that of Jenny Odell as she engages with the same domain by employing Google Maps. In the series 'Satellite Collections', she presents works consisting of isolated objects from Google Satellite View pasted against a neutral background. The isolated elements are arranged in various shapes: squares, circles or random tessellation. These elements range from landmarks to farms and waterslides, all viewed from above and pasted on a monochrome background.

Even though both she and Jon Rafman appropriate images from Google Maps, their aesthetics are radically different as Rafman uses the images directly as they appear online, while Odell cuts elements from these images and then combines all these elements in one works.

Despite this difference from the work of Rafman, however, their practices are similar: from digging the archive, to isolating elements and compiling alternative archives from this material. An element that is visible in the practice of Jenny Odell is the preoccupation with the arranging of the information she uses. For her arrangements, she uses geometrical figures or spreads out the element in a more abstract way. These non-hierarchical ways of arranging information are reminiscent of database forms. The use of these structures can be seen as being inspired by the appearance of forms on the Internet.

As already described, the notion of the archive has become increasingly significant over the course of the twentieth century. Likewise, the notion of the database has become one of the most prevalent organization forms of the computer era. A database can be described as a structured collection of data, which can manifest itself in multiple forms – in example as a list or network.[113] The database form can be seen as a manifestation of the archive in an online environment.

Lev Manovich states *'Many new media objects do not tell stories; they don't have beginning or end; in fact, they don't have any development, thematically, formally or otherwise which would organize their elements into a sequence. Instead, they are collections of individual items, where every item has the same significance as any other.'[114]*

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[113] Manovich (1999): 80.
[114] Manovich (2001): 218.

With the rise of the Internet, the database has become one of the dominant ways of structuring data, so much so, that Manovich presents the database as the symbolic form of the computer age, following on Ervin Panofsky's branding of linear perspective as the symbolic form of the modern age.[115]

Presenting images in a database form has consequences for the way they are read. As Manovich writes in his text *Database as a Symbolic Form*, the database form is the opposite of a narrative, as it does not have a beginning or an ending.[116] Instead, the database as a cultural form represents information as a list of items, which it refuses to order.[117] However, the fact that a database form is antithetical to the linear narrative form does not mean that items presented as a database do not have meaning.

Databases convey meaning in other ways than traditional linear narratives, as they are more interactive in their relationship to the 'user'.[118] The user can derive meaning from databases by linking certain elements in a particular order, as created by the maker of the database. As the database allows for different links and various trajectories, it is an interactive form, wherein the actual narrative remains virtual and therefore implicit. The use of interactive forms is a reference to the forms used online. The Internet, as an immersive environment, flourishes by promoting a sense of *agency* in its users.[119] Agency can be described as 'the satisfying power to take meaningful action and see the results of our decisions and choices.'[120] The Internet is a public network with user-generated content and therefore thrives by promoting a sense of agency in its users through interactive forms, such as the database form. As not as much agency is generally experienced in a narrative environment, online structures tend to shy away from using these forms.[121]

By arranging the elements in her works in cloud forms, Odell creates an overview of the various elements she found in Google Maps. At the same time, she presents these objects as isolated elements, relying on the viewer to establish links and connections. In presenting the images in this form, she gives each element equal importance, while, at the same time, establishing an interactive relationship with the spectator.

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[115] Manovich (1999): 80.
[116] Manovich (1999): 80.
[117] Manovich (1999): 80.
[118] Manovich (1999): 84.
[119] Murray (1997): 126.
[120] Murray (1997): 126.
[121] Murray (1997): 126.

From the practices of the first two artists, a certain preoccupation with the search for and organization of data can be discerned, one that can be characterized as archivist. As such, the artistic practice of both Jon Rafman and Jenny Odell can be seen as informed by the workings of the Internet as an archive, and photographic images as documents in this archive. Whereas the Google Maps archive is not structured according to its visual content, the image repositories Corinne Vionnet and Penelope Umbrico make use of, function differently.

The archives of social images they refer to are structured by their makers in order to be found and retrieved from the archive. This added information is called metadata, and can be described as data about data, keywords given to an image in a database.[122] Metadata comes in two categories: mechanically captured metadata and descriptive metadata. Mechanically captured data is created in the production process of the photograph and contains information such as date and type of camera, which is carried inside the picture file. The other type of metadata consists of linguistic information connected to the image by its maker in order to structure its content and make it readable for the machinic processes.

Metadata aim to reduce the meaning of a photograph to a denotative function: an objective description of the representational aspects of photography.[123] The presence of metadata also shows the relationship between the image and its semantic properties. The second is brought back to an explanatory function, an invisible marker. Also, the dominance of the image is thus asserted; as it is impossible to translate the meaning of an image to a purely denotative function, metadata are always a reduction of the various representational tasks of a photographic image.

As discussed in the first chapter, Penelope Umbrico uses amateur material in her installations. For her installation 'Suns' she incorporated thousands of the pictures she found on Flickr, all depicting the sunset. These photographs were not incorporated in their totality, but were cropped by the artist in order to only focus on their common subject.[124] Umbrico does not only isolate the subjects of the pictures she found, but she also organizes these photographs in a grid form. From this way of presenting information, a preoccupation with database structure can also be discerned; the grid

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[122] Manovich (2003): 13.
[123] Barthes (1983): 197. Barthes distinguishes two functions in photography. On the one side the connotative function, the invested, culturally defined meaning, and on the other side the denotative function, a neutral description of its representation.
[124] http://www.penelopeumbrico.net/Suns/Suns_State.html.

form prevents linear reading and permits a more associative way of attributing meaning to it.

Umbrico, however, goes further than just referring to the way photographic images are organized online. Through the title of the work, as well as the cropping of the images, it is clear that she is making a connection to the metadata of the images.

The fact that metadata reduces online images to a limited amount of information can also be seen in the installation by Umbrico. Instead of showing the original images she found on Flickr, she has singled out the shared element, which is the keyword she used to search all the images on Flickr. All of these images have thus been reduced to a single iconic aspect by the artists, like the images have been reduced to a single keyword on the website. Accordingly, Umbrico recreates her online search in a physical way, hereby trying to imitate the digital archive she encountered as a physical archive. As was also the case in the works of Rafman and Odell, through her practice Umbrico creates an archive that is an alternative to what exists online.

In her series *Photo Opportunities* Corinne Vionnet shows depictions of famous landmarks as photographic compositions, compiled of dozens of pictures found in online searches. While her focus is quite similar to that of Penelope Umbrico, and both artists use amateur snapshots in their works, the forms of their works are different altogether. While Umbrico compiles an archive by presenting each individual image, Vionnets works consists of multiple, superimposed images.

This composite image form is discussed by Allan Sekula in his 1986 text *The Body and the Archive* through the photographic works of Francis Galton. Galton, an English statistician, created composite photographs of portraits he took of criminals.[125] By creating these composite images, Galton hoped to construct a "purely optical apparition of the criminal type" in order to create a profile of potential criminals.[126] In order to create his composite images, Galton superimposed numerous photographs of criminals, which originated from a police archive. These photomontages can therefore be seen as a processing of the archive in a single image, which Sekula refers to as a "collapsed archive".[127] He writes: *"In this blurred configuration, the archive attempts to exist as a potent single image, and the single image attempts to achieve the authority of the archive,*

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[125] Sekula (1986): 19.
[126] Sekula (1986): 19.
[127] Sekula (1986): 54.

*of the general, abstract proposition."[128]* While Corinne Vionnet represents the archive in another way than Penelope Umbrico or Jenny Odell, she stresses the same values in the way she organizes the images: non-hierarchy and non-linearity.

The practice of postproduction is largely informed by the post-photographic state of the digital era, in which images are omnipresent and circulation is gaining speed. While this state of hyper-accessibility provides artists with photographic material, at the same time this state has deradicalized the act of appropriation. These artists are no longer concerned with the shock value of 'stealing' original content or challenging the ownership of an image. Appropriation is practiced collectively when one goes online. It is this collectivity that seems to be the real focus of post-Internet practice.

From their works it becomes evident why these Post-Internet artists use images that carry little information; they are not preoccupied with the representational aspects of a single picture, but with the information images convey in relation to other images. These artists aim at the photograph as a part of a larger narrative; an archive or database. This preoccupation with archives is visible in their practice: the act of selecting and organizing. The act of appropriation is more of a presupposition than it is really a part of their practice anymore. The loss of value in appropriation is connected to the omnipresence and circulation of the photographic image: truly owning and holding onto an image has never been harder. The preoccupation with archives can be explained through the preoccupation of these artists with ways to find meaning and position themselves in the chaos of the Internet. Their postproduction practice focuses on searching through archives of images and constituting alternative archives of selected images. The meaning of this postproduction practice in relation to the role of online photographic images is further explored in the third chapter.

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[128] Sekula (1986): 54.

## Chapter 3: Post-Internet

*'Images are mediations between man and his world, a world that has become inaccessible to him immediately. One must learn how to decipher these images, one must learn the conventions that give them their meaning (...) The purpose of images is to mean the world, but they may become opaque to the world and cover it, even substitute for it.'*[129]

This is how Vilém Flusser described the role of images in society, and the relation between the viewer and the image. However, Flusser laid down these characteristics in a period in which digitization was still in an early stage and in which the Internet did not yet play a dominant role. The role of photographic images, to which the selected artists are referring in their artworks, has therefore been subject to drastic changes since this description by Flusser. How the role of images and the image-viewer relation can be regarded in the computer age will be discussed in this chapter. In order to describe these characteristics and the way these post-Internet artworks are referring to them, the findings of the first two chapters will be applied in this chapter.

As discussed in the first chapter, Post-Internet Art positions itself to a society in which the influence of the Internet is all-encompassing and all-informing to such an extent, that online paradigms are shifting to offline space as well. As Hito Steyerl stated: '*The internet persists offline as a mode of life, surveillance, production, and organization—a form of intense voyeurism coupled with maximum nontransparency.*'[130] As such, offline thinking has been influenced by online paradigms, such as ubiquitous authorship, attention as value, the collapse of physical space and the mutability of digital imagery.[131] The very fact that these artists are referring to these online paradigms without needing their artworks to exist online is symptomatic of the spreading influence of this condition to the offline world. Furthermore, appropriating photographic images from their online environment and placing them in physical artworks, and the fact that their aesthetics and characteristics are recognized by the spectator can also be seen as prove of the expansion of online paradigms to the offline world.

This moving offline of Internet art was already described by Marisa Olson in a

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[129] Flusser (2002): 65.
[130] Steyerl (2013): s.p.
[131] Vierkant (2010): s.p.

2006 interview.[132] Olson describes her practice as 'art "after" the Internet', while fellow artist Cory Arcangel states that anything can be Internet art.[133] However, this shift does not signal a preference of materiality over immateriality. As Post-Internet artist Artie Vierkant describes '*the work of art lies equally in the version of the object one would encounter at a gallery or museum, the images and other representations disseminated through the Internet and print publications, bootleg images of the object or its representations, and variations on any of these as edited and recontextualized by any other author.*'[134] Vierkant, here, describes a form of art that is not dependent on medium or context in order to convey meaning. This type of art signals a shift away from Internet art, which only exists online and therefore can be regarded as medium-specific art, towards a form of art that is not bound to the Internet as such, but can exist online and offline, in material and immaterial form, simultaneously; while the artworks discussed all exist in material forms, they also exist digitally on the websites of the artists.[135] While material artworks offer economic advantages for these artists, the fact that these artworks exist both in material and immaterial state, signifies that the meaning of these artworks is not attached to their materiality. This signifies that meaning in these artworks must be intrinsic to their representation structures, rendering obsolete notions of reification and objecthood in the process. Therefore, it is no longer enough to define these practices in terms of medium.[136]

How can this new form of art, largely independent of medium and location, be comprehended? Art theorist David Joselit aims to characterize this new art form in his 2013 publication *After Art.* In this book Joselit introduces the concept of 'formats', which he describes as '*dynamic mechanisms for aggregating content*', in order to do so.[137] Whereas a medium is static and often site-specific, the 'format' establishes a pattern of links or connections and is, as such, preoccupied with channeling content.[138] This form of art, disinterested in reification, but engaged in conveying meaning through creating intelligible patterns between images, is inherently informed by the attention economy that is prevalent on the Internet.

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[132] http://www.timeout.com/newyork/art/net-results.
[133] http://www.timeout.com/newyork/art/net-results.
[134] Vierkant (2010): s.p.
[135] http://www.corinnevionnet.com/site/1-photo-opportunities.html / http://www.jennyodell.com/satellite.html / http://9-eyes.com / http://www.penelopeumbrico.net/Suns/Suns_Index.html.
[136] Bazzichelli (2008): 19.
[137] Joselit (2013): 55.
[138] Joselit (2013): 52-55.

The attention economy attaches value to the visibility of an image. The act of uploading an image comes with a potential reward; the possibility that it is seen and enjoyed by others.[139] The aim in uploading images online is therefore to be seen by other individuals, to be looked at by another human.

To be seen in contemporary digital culture is a matter of becoming visible in the enormous amounts of images online. Viewers can perform search requests in order to find images according to their subject matter. In order for images to be retrieved in such a fashion, they need to be connected to linguistic keywords, as also explained in the second chapter. In connecting these keywords to images, they not only serve as captions, but also as a way of creating connections between images with matching keywords, hereby creating archives of images with matching keywords. The more images an image is connected to, the more visible it will be in online image circulation. Image visibility and value is, in this respect, dependent on how widely and easily images are connected, and signals a step away from classical modernist art history, in which value and currency of an image is dependent on the aura of unicity.[140] Nowadays, paradoxically, it is the ubiquitous image that gets valued in the form of attention. The scarce image will get lost in the overproduction of images, whereas the connected images will be seen. This state of being is the aim for online images as it creates the best opportunities for them to receive attention from human spectators.

This step away from classical values such as singularity and originality can be seen in the works of the artists discussed. The artworks by Penelope Umbrico, Corinne Vionnet and Jenny Odell either spatialize or otherwise visualize these image archives consisting of heaps of visually similar images, whereas the works by Jon Rafman function in reference to these online archives. From the plentitude of images these artists invoke or reference in these works, it is clear that they are engaging with the ways in which images gain visibility and attention in digital society, venturing away from classical notions of singularity and rarity. The visualization forms that are prevalent in the works by Odell, Umbrico and Vionnet can be described with the term 'information aesthetics'.[141] Lev Manovich already expressed the need for '*a theoretical analysis of the aesthetics of information access as well as the creation of new media objects*

[139] Rubinstein, Sluis (2008): 18.
[140] Joselit (2013): 56.
[141] May (2011): 2.

*that "aestheticize" information processes'*.[142] These 'information aesthetics' show a combined awareness of information society, human experience, and visualization techniques.[143] As such, these artists employ these visualization forms in order to show how images function and create value on the Internet.

To explain how images convey meaning online, Joselit dismisses the original concept of the 'aura' and introduces the concept of 'buzz' in order to account for the value an image gets when it reaches a point of saturation.[144] Once an image becomes ubiquitous in online culture, it achieves a state of 'buzz'. 'Buzz' is connected to a state of image saturation; the more visible and accessible the online image is, the more likely it is to reach this state of 'buzz'.

Just like Joselit, artist Artie Vierkant signals a similar move away from medium-specificity, but uses another vocabulary. He describes a strategy of contemporary artists to create projects *'which move seamlessly from physical representation to Internet representation'*, something he calls the 'Image Object'.[145]

Both Vierkant and Joselit describe this form of art that lends its artistic meaning from ways of image presentation. Just as the value of an online image is dependent on the ways it is connected, meaning in these artworks is established through the 'formats', the links and patterns that are created between the images. As discussed in the second chapter, this kind of signification is enabled by the use of database forms that allow a non-hierarchical and non-linear way of reading, based on the 'formats' that are established between the images. As an interactive form, databases are open to interpretation by the public. Meaning is constructed in the ways patterns emerge through reiteration, reframing and capturing.[146] As a consequence, the individual image thus becomes subordinate to the ways it interconnects with other images in the networks presented. Networks consist of 'nodes' which are interconnected and produce meaning and function according to these links. [147] The more elements a network consists of, the more information it can absorb and the more important the network becomes in effect. The more 'nodes' a picture is connected to, the more likely it is to reach a state of 'buzz', and therefore to receive attention. These 'nodes', then, acquire meaning in their

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[142] Manovich (2001): 217.
[143] May (2011): 2.
[144] Joselit (2013): 16.
[145] Vierkant (2010): s.p.
[146] Joselit (2013): 56.
[147] Bang Larsen (2014): 180.

interaction or format with other 'nodes'. The network the image is part of becomes the signifying structure over the individual representations.

The notion of the network is also discernible in the discussed artworks. In the artworks, networks are visualized by the artists. While online networks are invisible, instantaneous and dynamic vehicles, driven by computational logic, these artists translate or react to these online networks in a physical, static manner. Penelope Umbrico and Jenny Odell make these networks into spatial installations, while Corinne Vionnet overlays various nodes within a single frame, visualizing their interrelations. Even the works by Jon Rafman can be seen as a network when the series is considered as a whole, the works functioning as singular elements and generating a larger narrative when regarded as a whole. While the artists are focusing on different aspects of online image economy, it is visible that they are all either translating and modifying online archives or reacting to them. The visualizations that are an integral part of their aesthetic then serve as a way of interpreting online networks and making visible the invisible processes that govern them.

Value in an online image is based on its visibility among other images, which is in turn affected by the ways images can be traversed and searched. The invisible workings that govern these processes and the consequences this has from the point of view of the spectator is allegorized in these artworks.

As described, a way of isolating images from the online image circulation is through performing a search request, which is dependent on the connection of images to keywords. Search requests make visible the invisible interrelations between images through an instantaneous, invisible process. Some of the artists discussed make use of these automatically called up archives. This is the case for *Suns* by Penelope Umbrico and Corinne Vionnets *Photo Opportunities*, which both, at least in part, consist of automatically assembled imagery. When Jenny Odell and Jon Rafman present their collections of imagery, these are the images that they themselves collected. As this act of collecting is not part of the artistic practice of Umbrico and Vionnet, the focus in their work lies in the presentation of the already existing networks. The connections that were established through the adding of metadata are thus kept intact, and are therefore defining for the meaning of the artworks.

Metadata, in this respect, functions as a mediator between humans and

computers.[148] As described in the second chapter, through adding linguistic signs to visual signs, control is asserted over these images, but also a subjective layer is added in the process. In connecting images to equal metadata, they become part of network of images. This network can be visualized by entering a search request in the form of these metadata. As such, metadata are also influential for the network in which the image is placed.

In a society where search engine optimization has become key, manipulation of metadata can have far-reaching consequences for what a computer 'sees' in the image and for the network in which the image is placed.[149] The forming of networks is an automated process, but one that is established only through the linguistic information connected to these images. As computers are not (yet) able to recognize the abstract visual language of photographic images, they need to be connected to linguistic metadata in order to become readable for the computer.

In the first chapter, it was described how images were slowly replacing language as important carriers of information. However, it seems that images, paradoxically, are dependent on linguistic markers for their organization. While these markers remain separated and subordinate to the representation of the image, it is through their connections to these keywords that images gain visibility online. At the same time, this connection creates an awkward relationship between language and image, in which the complex language of visual representation is reduced to linguistic information. This reduction can also be seen in Penelope Umbrico's *Suns*, as she crops the picture plane of the original images in order to fit the keyword that connects these images. In doing so, she literalizes the connection between the linguistic metadata and the visual representation of the image, hereby reducing and standardizing the visual information of the individual images. The installation *Suns* can therefore be seen as a visualization of the invisible linguistic connection that forms the network, making the visual information subordinate to its linguistic marker.

This example of metadata can be seen as symptomatic of a larger dichotomy these artists are referring to in their work, and which in part can be seen as an after-effect of the digitization of photography: the discrepancy between human image interpretation and computer image reading. Humans have the capacity to understand

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[148] Rubinstein, Sluis (2013): 151.
[149] Rubinstein, Sluis (2013): 152.

the complex, abstract representations of photographic image. The amateur photographers on Flickr, for instance, upload and share their images in order for them to gain attention from other humans, which is to say: in order for other humans to understand their meaning and value. The capacity of humans to read meaning and intention in photographic images, even when no intention is present, is exhibited in the works by Jon Rafman. The images which Rafman appropriated show scenes that were inadvertently shot by the automatic cameras of Google Maps. When isolated, the impression is created that these shots were taken on purpose, while this is actually a result of Rafman's search through the Google Maps archive, imbuing these automatically made shots with human vision.

While humans are capable of deducing meaning and intention from photographic images, computers are not able to interpret or read images in a meaningful way. At the same time, however, humans are dependent on computational processing and logarithmic logic for image circulation and image visibility.[150] In the current state of the Internet, a great amount of human intervention is still required in order for machines to process photographic images in the correct way. At the same time, a contradictory development can be signaled, in which more and more online imagery is created by machines without human intervention. While acquired objectively according to a certain program, these images cannot be interpreted in a meaningful way until they are scrutinized by humans. The dichotomy between machinic logic and human interpretation, as also signified in Penelope Umbrico's *Suns*, is then reversed in the Jon Rafman's *9 Eyes* series. The photographs, made without human intervention, are imbued with a human gaze by Rafman. By selecting images that appeal to subjective notions such as humor and inanity, or by referencing the visual language of well-known photographers, Rafman plays with the tendency for humans to interpret images and to look for meaning. While enormous amounts of images on the Internet are made without human intervention, the complex visual imagery can only be comprehended by a human gaze. This work by Jon Rafman can therefore be seen as an example of the current state of the Internet, in which machines can be used to provide images, but not yet to understand them. In this respect, human vision is capable of other actions than machinic reading.

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[150] This new dynamic that is emblematic of Web 2.0 can actually be seen as the culmination of the debate that has always plagued photography; the role of technology versus the role of subjective looking practice. With the advent of Web 2.0, the debate has expanded to not only include the photographic process, but also photographic reading.

At the same time, machinic reading and processing has become increasingly important in the digital era as humans can only read a tiny amount of the enormous numbers of photographic images proliferating on the Internet. The ever increasing discrepancy of what humans are able to read and process and what is dispersed by both humans and machines, creates a condition in which humans are no longer able to read what they write. This condition of unreadability, as a consequence of the enormity of the Internet, is dubbed the 'new illegibility' by Claire Bishop. [151] This state is caused by a limit of what a human is able to read, but also by a lack of limit in what is created and dispersed. The human scale is at ever greater odds with the size of the Internet, causing a state of 'illegibility' and lack of control. Corinne Vionnet's *Photographic Opportunities* are an allegorical allusion to this state of illegibility. Whereas the individual image online becomes 'illegible' through the enormity of the Internet, in the case of Vionnets work it becomes 'illegible' through the collapsing of the network it is part of. Instead of this state of unreadability being a spectatorial condition, it is intrinsic to the visualizations of Vionnet. As such, the visualizations are not an emulation of this condition, but can rather be interpreted as a metaphor for it.

A work in which this state of illegibility is emulated, is Penelope Umbrico's *Suns*. While the amount of images she uses in her installation may be only a fraction of the total amount that circulates the Internet, an output tested against the human scale through intervention of the artist, the number of images still enforce a state of illegibility. Through introducing this *pars pro toto*-relationship between the installation and the online archive, she inserts a human scale into the online enormity, while at the same time still being able to engage with the condition of new illegibility.

Unlike the works of Corinne Vionnet, the illegibility is not intrinsic to the structure of the works, but an effect that is created in the spectator through the amount of images used; Penelope Umbrico exemplifies this condition of illegibility in her installation. This effect, then, has consequences for the way spectators read these images.

In order to deduce meaning from large amounts of images, spectators adopt a way of reading that is more accustomed for this condition. Instead of scrutinizing every individual image, images are glossed and skimmed in a restless manner. [152] As it is impossible to take in millions of images, the surface is scanned and subsequently

[151] Bishop (2012): s.p.
[152] Rubinstein, Sluis (2008): 22.

dissected in order to comprehend meaning through elements as opposed to through scrutinization of every individual image. Kenneth Goldsmith, who originally coined the term 'new illegibility' in order to address the growing amounts of text on the Internet, refers to this habit as 'parsing': sorting language, more than reading it, in order to comprehend information.[153]

Penelope Umbrico's *Suns* not only facilitates such a reading pattern, but enforces it through creating visual repetition in the installation. As such, the need to assess every individual image is negated for the possibility to parse the surface and to deduce meaning from the elements and their interrelations. The installation functions as a catalyst for the parsing habit that proliferates on the Internet.

This parsing habit, sorting elements as a way of processing information, can be seen in the images in Jon Rafman's *9 Eyes*. While Google Maps as an application is not constructed in order to be viewed in the same manner an archive of amateur photographs is, but to be navigated as it was the real world, when one lifts this veil of hyperreality, it still consists of legions of photographs stitched together. Google Maps, as an archive, then becomes illegible not only because of the enormous amount of imagery that it is comprised of, but also because it is not possible to gain an overview of these images as it is only possible to see one image at a time.

The images Rafman collected in his series can be seen as a reaction to this illegibility, parsing the images in order to filter their content and exert control over them. As there is no way to filter or organize the imagery of Google Maps according to content, Rafman searched the fabric and selected the marginal scenes he presents in *9 Eyes*. In doing so, Rafman simultaneously shows the difference between human vision and machinic vision, with only humans being able to parse the imagery according to content. The selection of marginal scenes, scenes that show errors in the photographic images or shots that capture subjects that counter the purpose of the shots, presuppose a lengthy search of the artist in order to find these images. Simultaneously, the fact that these kinds of imagery exist in Google Maps, shows that they were not deleted or removed as machines are not able to recognize these errors. Only when they are seen by humans do these errors become meaningful as humans are able to attribute meaning to the content of these images.

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[153] Goldsmith (2011): 158.

This emphasis on visual content as demonstrations of an imposed human gaze is also visible in Jenny Odell's *Satellite Collections*. The parsing habit as a consequence of the illegibility can be seen visualized in Odell's work as she isolates elements from their photographic environment. The collections she creates in her works can be seen as reflections on the photographic content of the imagery; through parsing the visual plane Jenny Odell tries to process its contents, to gain an overview of this imagery and to gain control to a certain degree over these images. At the same time, these images are collections, the output of the labor of the artist, collected in an associative manner. As such, these images, as signaled in Umbrico's work as well, do not present an absolute number of the elements present in the fabric of Google Maps, but only become meaningful in relation to the effort of the artist. These parsed elements are symbols of the search of the artist, trying to capture the content of the archive through collecting bits and pieces from it, inserting a human scale into the mechanically photographed archive. In this quality, these works are metaphors for the consequences of the 'illegibility' of large quantities of information. These artworks are simultaneously the outcome of this parsing behavior and an effort of the artist to control part of the imagery by forming an archive of his own. Simultaneously, these collections are the outcome of a search with a human eye, and as such signify a human effort to break down the information in Google Maps in order to process it in pieces.

The difference in approach, with Vionnet and Umbrico focusing on the plentitude, and Vionnet Umbrico and Odell focusing on interrelations, may be caused by the feeling of control over the images. As the images used by Vionnet and Umbrico have already been archived by their makers through adding metadata, their content is controlled. Therefore, when these images call up a visual network through a search request, their connection is already known to the artists through their shared metadata. Also, as both artists make use of imagery depicting unique subjects, their interrelationships become immediately visible as well as promoting a skimming way of reading through visual similarities.

Faced with the amount of images on the Internet, each individual image is not read, but the totality of image is skimmed in order to comprehend all the information that is presented.[154]

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[154] Bishop (2012): s.p.

The fact that these Post-Internet artists are reassembling online archives or are searching, dissecting and recreating alternative archives shows that these artists are reflecting on the ways that photographic images function on the Internet and what the consequences are for the ways humans perceive these images. Through emulating these online archives, these artists transpose a state of illegibility through quantity in their artworks.

The artworks by Vionnet and Umbrico revolve around the notion of the photograph as a vehicle for unique experience versus the formal similarities between photographic images that proliferate on the same online circuits and that are further emphasized by the need for their makers to reduce their content to linguistic terms and to, subsequently, place their images in an archive with similar images. Reiteration in these images *'erases indexical singularity, the uniqueness of the instance, in favor of uniformity and recurrence – the systematic iconic repetition of staged image types.'*[155] As such, through the network, the repetition of the shared subject matter becomes dominant over the function of these images as purveyors of personal experience. In placing these images in a network, they are no longer primarily unique images, but visualize the collective photographic presence of online humans. Therefore, the amateur photograph as a personal document becomes embedded in an abundance of images which then acts as a document of collective photographic practice.

Through imposing computational logic onto images made by humans, and imbuing mechanically made images with the human ability to interpret content, these artists are adding an ironic layer to their works. Appropriation art has, since Duchamps *Fountain*, been connected to humor through negating expectations in the spectator, as well as through criticizing existing artistic notions. However, the irony in this case is reached through the postproduction practice, and stems from the juxtaposition of machinic processing and human reading, human content and machinic reading. With this juxtaposition, these artists are delineating the interaction between machines and humans. Through emphasizing shortcomings in the ways computers mediate in image circulation, as well as stressing the limits of human action in searching photographic material and reading its content, the tension between humans and technology is heightened. As such, these artists are not only critical of the role machines play in online

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[155] Rubinstein, Sluis (2008): 24.

image economy, but also point to the limits of human action in this abundance of images. In contemporary digital culture, images have become prevalent to such an extent, that machinic intervention is necessary in order to still gain control over these amounts of photographic images. In examining the limits and capabilities of humans and machines, these artists are considering the place of photography as a medium in contemporary society. Photography can, in the post-Internet age, best be described as a cybernetic medium, positioned between machines and humans.

How do these artworks function as works of Post-Internet art? First of all, these artists make use of photographic images that they appropriated from their online environment, hereby establishing a direct link between online content and the artworks. The images have a clear aesthetic that points to an online location, or are prevalent on the Internet to such an extent, that it can be said that most spectators recognize the online paradigms they invoke, even when the original location is not explicitly mentioned by the artist. Moreover, these artists are employing forms of representing information that are inherently informed by computational forms such as databases and networks.

Furthermore, the artworks discussed all seem to focus on a larger issue that is innate to the Internet: the relation between humans and computers. Human action has its limits and therefore has become a scarce commodity in a society which is more and more mediated by machines. The limits of human action are stressed in several of these artworks. Penelope Umbrico partially rebuilds an online archive as the complete archive cannot be reassembled through mere human action through its enormity. A similar juxtaposition between the complete, automatically assembled archive and human feedback is visible in the works of Jenny Odell as she appropriates objects from their online environment. The objects she collected are not significant as the total amount present in Google Maps, but only as the result of her parsing actions. By stressing the limits of human action, these artists are juxtaposing it with the unlimited action of digital devices, and as such, with digital photography as a limitless medium. Human action, and with it attention, has become scarce in relation to the endless amounts of images that circulate online, the content of which becomes obscured to humans in turn. Image repositories that are not controlled by computers can only be interpreted by imposing a human vision. Appropriating elements from an automatically assembled archive such as Google Maps then becomes a performative action, as the artist simultaneously imbues the photographic images with human vision.

As the gap between the limits of human attention and the amount of online photographic images broadens every minute, humans become more and more dependent on computers to mediate between the abundance of images and the human user. The role of computers as mediators is also limited however, as they are not able to grasp the abstract visual language of images. As such, visual information needs to be decomposed into linguistic information in the form of metadata. The networks that are established conform these metadata filter these images according to their visual information, and hereby serve as a manner of controlling these images and providing oversight over them. At the same time, however, the networks that are established as a result of this computational mediating, still requires a way of deducing information from image pools that is not based on scanning every individual image. Instead, parsing these image pools in order to deduce information from the interrelationships between images is seen as a way of coping with the abundance of information. This parsing behavior is exemplified in the works of Penelope Umbrico and Jenny Odell, who present quantities of information for the spectator to comprehend. The works by Corinne Vionnet can be considered an allegory of this manner of processing information, visualizing the interrelationships between various images by superimposing them.

In invoking this parsing mode as a way of processing the information these artworks offer, they are transferring a manner of looking that originated online. In referring to these online paradigms, and even invoking them in the spectator through physical artworks, these works can be seen as Post-Internet. Artworks such as Penelope Umbrico's *Suns* and Jenny Odells *Satellite Collections* rely on this parsing behavior in the viewer in order to comprehend the interrelations between the various elements, and hereby answer to David Joselits description of 'formats'. As this new form of art is inherently informed by the workings of the Internet, it is symptomatic of the influence online paradigms have on every part of society. By visualizing the mediating role of computational processes between the image and the viewer or showing ways to deduce meaning from online image pools, these artists are emphasizing the conventions that give meaning to these images and ways to decipher them.

Conclusion

*'The Paleolithic hunter crawls into the dark, hidden, and secretive cave to leave the open tundra behind and "come to himself." He looks for and finds images that keep him from losing himself in the tundra. Together with other hunters, he uses the images there to help orient himself. In this manner, the world becomes meaningful to him. Shimmering in the torchlight, the images on the cave walls are responsible for making him into a hunter. They are a revelation of himself and his world. They are sacred.'*[156]

As also described by Vilém Flusser, images have played an important role in giving shape to ideas and reflecting on the world for thousands of years. This thesis has considered the characteristics of the online photographic images in contemporary digital culture, which can be regarded as the latest stage in this evolution, through analysis of the practices and artworks of contemporary Post-Internet appropriation artists.

A first shift that has impacted the role and function of photographic images in society has been the digitization of the photographic process and the ushering in of the post-photographic era. While the debate surrounding the digitization of photography was first centered on the question of veracity, from a contemporary viewpoint the shift from picture attached to a carrier to a disembodied image has been more influential for the way images are used and experienced. As this lack of surface has been essential to the dissemination and duplication of photographic images online, the digitization has created a medium that has become practically limitless. Notions of immediacy and transparency that are connected to the post-photographic image, as well as the blurring lines between the private and public sphere on the Internet, have made it a popular medium for both personal and applied use. In addition, the added social use to share images has greatly accelerated online image circulation.

The omnipresence of photographic images, as a result of the surfaceless post-photographic image and the vanishing boundaries between private and public, also has impacted the appropriation tactics of contemporary artists. As the digitization of photographic images has created a state of hyper-accessibility, appropriation tactics have been deradicalized and have become but a vantage point in the practice of these

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[156] Flusser (2002): 72.

artists. This postproduction practice expresses itself in the ways these images are organized and or brought in relation to each other and the online image repositories they were appropriated from. The links between images are established through the use of interactive and non-hierarchical database forms. The use of these forms is inherently informed by computational forms and serves to shift the focus from the photographic image as a standalone representation to the photographic image in relation to other images. This shift, simultaneously, is essential in comprehending the online photographic medium positioned between the human spectator and the machinic mediating.

The characteristics of the online photographic images, the underlying structures that govern their signification, and the consequences these factors have for the reception of these images from the perspective of the viewer, is reflected on by the four artists in the discussed artworks. In appropriating images from the Internet they establish a direct link with digital culture, which then serves as a context for further signification. In the case of some artworks, the act of appropriation gains a performative character, as by selecting photographic image these automatically become imbued with a human vision. The visualizations which these images are then placed in can be read as reflections on the organizational structures that govern online image circulations through invisible and instantaneous processes. These processes are replaced with the labor of these artists in these artworks, which as an effect of this interference, subjectivizes the gaze that opposes these images, while also inserting human measure. The insertion of human labor, and with it, human properties into processes which are commonly executed by machines, signifies the Internet as an environment mediated by machinic processes and logic. The difficulty does not actually lie in the lack of veracity of the digital image, as predicted by scholars, but in the state of illegibility that can be seen as a direct consequence of the characteristic of the digital image: disembodied and, as such, duplicable and ambulatory. The contemporary digital image, both its content and its status as a carrier of information, has outstretched human measure to such an extent that humans need to comply to inhabit machinic logic and trust in machinic processes in order to get a grip on these images. These artists exemplify the fact that photographic information comes to the viewer more and more through mediation of machinic processes. As in turn computers are unable to interpret their meaning, this mediation requires interpretation of humans in order to be comprehended. Ironic humor is used to

point to the limits of this interaction between human and machines, and undermines the position of computational information as trustworthy. In doing so, these artists are trying to emphasize the limited capacity of computers to mediate between humans and photographic images as they are not able to comprehend the content of these images. At the same time, it is necessary for humans to adapt to these conditions in order to still comprehend the images that reflect reality. Like the images on the cave walls reflect the maker and his world to the viewer in Flussers analogy, so too the Internet reflects a human made image of the world. While the role of computers in providing a feedback of these images becomes ever larger, these images only become meaningful in the eyes of other humans. As only in the eyes of the human spectator, these images become sacred.

Future Research

This research has focused on the artworks of four appropriation artists that worked with photographic images and that were part of the *From Here On* exhibition at Les Rencontres d'Arles. As the scope of this research has been quite narrow in order to be able to reach a meaningful conclusion, this research could be expanded to include other works of these artists as well, in order to see how these fit in to the post-Internet debate or relate to the discussed works. Future research can also focus on the works of other artists in the *From Here On* exhibition. Artists such as Kurt Caviezel (1964) and Jens Sundheim (1973), who appropriate footage from surveillance cameras, can be an interesting addition to the points raised in this thesis. Further examinations of these works could expand the debate to include moving footage as well.

Another addition to this research can be made by examining the works of other Post-Internet artists. In researching the works of these artists, who are not necessarily appropriation artists, a light can be shed on other parts of the offline world that are influenced by online paradigms.

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Images



Image 1: Jon Rafman, *A reindeer running down Rv888, Finnmark, Norway* (from the series '9 Eyes'), ongoing. Source: http://www.designweek.co.uk/whats-on/the-nine-eyes-of-google-street-view/3034975.article (accessed 26-09-2014).



Image 2: Jenny Odell, *104 Airplanes (from the series Satellite Collections,* 2009-2011. Source: http://www.jennyodell.com/satellite.html (accessed 26-09-2014).
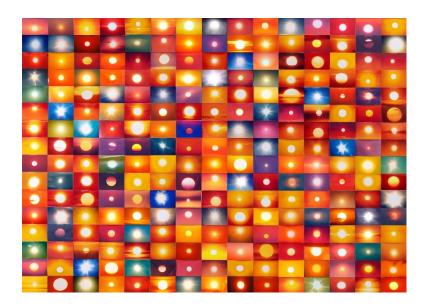
Image 3: Penelope Umbrico, *Suns (from Sunsets) from Flickr,* 2006-ongoing. Source: http://www.penelopeumbrico.net/Suns/Suns_Index.html (accessed 26-09-2014).



Image 4: Corinne Vionnet, *Photo Opportunities,* 2005-2013. Source: http://www.corinnevionnet.com/site/1-photo-opportunities.html (accessed 26-09-2014).