

The role of digital personal photography: a theoretical exploration with Deleuze-Guattari approach

Zhen Sun¹

Abstract

The innovations of digital photography are transforming people's experiences of producing, manipulating, sharing, and using their personal photographic images. The essentialist and representational dualistic viewpoints of photography that were initially developed in the era of the Daguerreotype appear no longer tenable in the contemporary photography era. This study focuses on the ever-changing role of personal photographic images in the three typical photography events, i.e., the selfie production, the real-time beautified video sharing on the social media, and the production of deepfake AI face-swaps. The study is inspired by the Deleuze-Guattari's conceptual framework that is mainly composed of the concepts of minor literature, assemblage, becoming, and de/re-territorialization, and defines personal photographic images as both an assemblage and a constitutive part of larger assemblages, i.e., personal photograph production and usage events. The tetravalent model of assemblages is used as a major analysis toolkit to achieve the research purpose. A thorough analysis and discussion shows the material and expressive components that compose different sizes of assemblages and the emergent capacities. It also discloses how digital photography apps play as a line of flight to de/re-territorialize the presumed representational association between individuals and their photographic images. The images have become one of the multiplicities or becoming of individuals, either interacting with individuals, acting on individuals, or extending individuals' disembodied experiences. This study seeks to develop alternative theoretical lenses on the role of digital personal photography in everyday life and the rhizomatic experiences that it generates.

Keywords

Self-photography; Digital Apps; Minor Photography; Assemblage; Deleuze

¹Ph.D. in Communication from the University of Utah, USA. She is currently an associate professor at Faculty of Humanities and Art, Macau University of Science and Technology (Macau SAR, China). E-mail: zsun@must.edu.mo

O papel da fotografia pessoal digital: uma exploração teórica com abordagem Deleuze-Guattari

Zhen Sun¹

Resumo

As inovações da fotografia digital estão transformando as experiências das pessoas em produzir, manipular, compartilhar e usar suas imagens fotográficas pessoais. Os pontos de vista dualistas essencialistas e representacionais da fotografia que foram inicialmente desenvolvidos na era do Daguerreótipo não parecem mais sustentáveis na era da fotografia contemporânea. Este estudo se concentra no papel em constante mudança das imagens fotográficas pessoais nos três eventos típicos de fotografia, ou seja, a produção de selfie, o compartilhamento de vídeo embelezado em tempo real nas mídias sociais e a produção de troca de rosto com IA do deepfake. O estudo é inspirado na estrutura conceitual de Deleuze-Guattari, composta principalmente pelos conceitos de literatura menor, montagem, devir e desterritorialização, e define imagens fotográficas pessoais como uma montagem e uma parte constitutiva de montagens maiores, isto é, produção de fotografias pessoais e eventos de uso. O modelo tetravalente de assembléias é usado como um importante conjunto de ferramentas de análise para atingir o objetivo da pesquisa. Uma análise e discussão aprofundadas mostram os componentes expressivos e materiais que compõem diferentes tamanhos de montagens e as capacidades emergentes. Também revela como os aplicativos de fotografia digital funcionam como uma linha de fuga para desterritorializar a associação representacional presumida entre indivíduos e suas imagens fotográficas. As imagens se tornaram uma das multiplicidades ou tornar-se de indivíduos, interagindo com indivíduos, agindo sobre indivíduos ou ampliando as experiências desencarnadas dos indivíduos. Este estudo busca desenvolver lentes teóricas alternativas sobre o papel da fotografia pessoal digital na vida cotidiana e as experiências rizomáticas que ela gera.

Palavras-chave

Auto-fotografia; Aplicativos Digitais; Fotografia Menor; Montagem; Deleuze

¹Ph.D. em Comunicação pela Universidade de Utah, EUA. Professora Associada da Faculdade de Humanidades e Arte da Universidade de Ciência e Tecnologia de Macau (Macau, SAR, China). E-mail: zsun@must.edu.mo

With the development of digital imaging technology, a variety of different types of face- manipulation photographic apps, such as selfie, face filter, and face swap apps, have quickly proliferated. Lots of people get lots of fun from producing, altering, communicating, and sharing their personal photographic images. Seemingly, they achieve an unprecedented power in dealing with their own images – not only for meaningful moments, but for meaningless expressions; not only for memory and nostalgia, but for forgetting and imagination; not only for appropriating the world, but for creating a world (GOODING, 2016). The magic apps have revolutionized people’s photographic practices and redefined their relationships with photographic images, especially their self-portrait photography. The increased number of photographic faces and bodies, which are saturated on the Internet and social media, is no longer a banal representation or an “incontrovertible proof” (SONTAG, 2005) of one’s existence and identity. They cannot be simply taken as a “conjunction between here-now and there-then” (BARTHES, 1977). They escape the original “decisive moment” (CARTIER-BRESSON, 1999) or “embalmed time” (BAZIN, 1960) and take flight from the realm of resemblance and representation. As deterritorialized visual resources, they are ready to form a new digital world and pave the way for a multiplicity of existence and identity.

The issues related to the new self-photographic practices have attracted many researchers’ attentions in recent years. Most of them find their interest in selfie. They usually examine the selfie-posting motivations and behaviors and tend to disclose the underlying personality facets, such as narcissism, self-esteem, and extrovert (BLOLCATI; PASSINI, 2018; KIM; CHOCK, 2017; MOON *et al.*, 2016; QIU *et al.*, 2015; SOROKOWSKI, *et al.*, 2015; SUNG *et al.*, 2016; WALLOP, 2013; WANG, 2017; WEISER, 2015). Selfies are primarily viewed as a means of online self-presentation and promotion driven by certain psychological factors. Their concentration on the dominant and standardized usage (or major usage in Deleuze-Guattari term) of digital photography, such as representation, identity construction, and life recording, obviously reveals their adherence to the essentialized, dualistic definition of photography that were initially developed in the era of the Daguerreotype. However, the traditional representation dualism, which was criticized by Deleuze (2003) as “the hegemony of the Cliché”, appears no longer tenable in contemporary digital photography era. Alternative theoretical perspectives, such as Deleuze-Guattari’s concepts of minor literature and assemblage and Henri Bergson’s notion of duration, should be introduced to explore

the changing landscape of digital photographic practices (BLEYEN, 2012; FAWN, 2016; HESS, 2015; KRIEBEL, 2006; MCLENNAN, 2017; O/SULLIVAN, 2012; VAN GELDER; WESTGEEST, 2011).

This paper focuses on the self-photographic practices with different types of manipulation photographic apps and examine the emerging complex relationships among me, my photographic images, identity, time, and space. The Deleuze-Guattari's conceptual network that is composed of the concepts of minor literature, assemblage, becoming, multiplicity, line of flight, and de-/re-territorialization, has become a stimulating and fertile ground for social sciences and humanities (PHILLIPS, 2006). The conceptual framework is adopted to provide a theoretical foundation and approach to fulfill the research purpose. In simple terms, major vs. minor language refers to two possible treatments of the same language. The minor is a minority construct within the major and is characterized by creativity and continuous variation. Minor languages are seeds of becoming, which triggers uncontrollable deterritorializations of the majority and continuously builds new assemblages (DELEUZE, 1978; DELEUZE; GUATTARI, 1986; 1987).

This study conceives the production and manipulation of personal photography with digital apps as minor photographic practices. The digital photographic images are defined as both an assemblage and a constitutive part of larger sizes of assemblages, i.e., the production, manipulation, and usage process. These images escape along "lines of flight" and "overstep the representative threshold" of the majoritarian photographic standard (DELEUZE; GUATTARI, 1986, p. 26; DELEUZE; GUATTARI, 1987, p. 106). Specifically, the study concentrates on three typical apps-aided self-photographic practices, namely, selfieing, face beautifying, and face swapping. The specific research questions include: How do the digital self-photographic practices, as minor photographic practices, deterritorialize and reterritorialize the major representational photographic practices? What kinds of assemblages (and the constituent material and expressive components) do they produce? How do the manipulated photographic images perform as a source of limitations and opportunities for individuals to deal with personal identity, time, and space and to generate new possibilities of life?

The study seeks to develop a new theoretical approach to understand the role of personal photographic images in our daily life and the new experiences of existence, identity, and reality that they generate. The philosophy of photography is never a waste of mental effort (FLUSSER, 2000). Hopefully, the study will contribute to the current thinking in the field.

In the following sections, I will first explicate the primary arguments on photography developed mainly in the pre-digital photography era. Then the recent studies regarding digital photography will be reviewed. After that, the Deleuze-Guattari's conceptual network will be elaborated to provide a theoretical underpinning. The analysis and discussion, centering on the cases of selfieing, face beautifying, and face swapping, will unfold in three parts.

Classical arguments on the pre-digital photography

Most of previous classical theorists and writers who mainly observe the pre-digital photography tend to develop their arguments within a dualist or tripartite structure. Specifically, they concentrate on the relationships between the photographic image and reality, between human beings and photograph, and between technology and photograph, or the representational system composed of the world, photographic images, and human beings. The primary arguments and disputes are expanded below.

“Having-been-there” vs. “not the world out there”

During the early stage after the invention of photographic technology, the action of photograph-taking is differentiated from drawing and other types of image production processes. Due to the technological idolatry and the resemblance or verisimilitude to reality, photographs are endowed with great significance. Sontag (2005) regards photograph-taking as a social ritual. Flusser (2000, p. 44) takes it as a great final decision just like “the American President ultimately pressing the red button,” which may lead to a new world order (p. 39). Barthes (1977) articulates that the action leads to create “a new space-time category”. These statements imply that those who press the shutter are temporarily abstracted from the “real” world and standing between the world and what they produce. Then what is the role of photographic images? For Barthes (1977, p.44), they are a representation of “having-been-there” and “an illogical conjunction between the here-now the there-then”. The implied attribute of objectivity is also applauded by Sontag (2005, p. 3), who notes that photographs furnish evidence that something happened. However, Flusser (2000, p.15) criticized that the objectivity of photographs is an illusion. Photographs, or the technical images in Flusser's (2000, p.10) terms, magically restructure the reality and transfer it into a “global image scenario”. They are an immobile and silent two-dimensional surface that is abstracted from space and time and then projected back to them. Therefore,

they do not signify the world out there (p. 49). As Damisch (1978, p. 70) points out, the early disputes about the real nature of photographic images are a paradoxical myth, because they are a cultural object or product of human labor and never belong to the natural world.

A magical space for interpretations

According to Flusser (2000, p. 9), what exists in a photographic image is not a “frozen event” but a magical space for interpretations. The significance of the elements within an image and the relationships among them are determined, to a great extent, by viewers’ scanning and gazing process. Therefore the magical space actually is “the space of mutual significance”, which is repetitively reconstructed by scanning (p. 9). In other words, there is no the so-called true meaning underneath a photographic image (BATCHEN, 1997). An image never speaks for itself or delivers a “sumptuary assertion” (MCWILLIAM, 2016, p. 12). What’s inside an image has never been suffocated, but liberated, by the scanning and gazing enacted upon it. Barthes (1977) provides another set of discourse to explain the polysemy of photographic images. As noted, underlying the signifiers of photographic images is a “floating chain of signifieds”, among which viewers can choose some and ignore the others (BARTHES, 1977, p. 39).

“Snapping out” or “living into”

Sontag (2005, p.8) states that photograph is an encounter event, within which photographers have peremptory rights of interference with and intrusion into what is happening. When they photograph people, they actually objectify them as something that can be symbolically possessed. Sontag (2005) uses the metaphor of murder for photography to epitomize how the photographed subject is recorded, seized or appropriated in a phenomenological way. According to Damisch (1978), the photographed people are utilized by light to create its own metaphor of reality through a physio-chemical process. In this sense, the people in the photographic plate are neither really us nor a composed part of us. A story told by Benjamin (1972) vividly shows how people are frightened by their own photographic images in the Daguerreotype era. People are afraid at first “to look for any length of time” at their photographs and “embarrassed by the clarity of these figures and believed that the little, tiny faces of the people in the pictures could see out at them” (BENJAMIN, 1972, p.8). The long exposure compels the photographic subjects to stand still for a long

time, and as the result, to put on a synthesized facial expression. This procedure seems to make the subject “live inside rather than outside the moment” and grow into the picture (BENJAMIN, 1972, p. 17).

Deleuze-Guattari's conceptual network

Minor literature and minor photography

Deleuze (1978) makes a distinction between the majoritarian and the minoritarian literature/language. The notion of minor literature is elaborated in Deleuze and Guattari's (1986) work “Kafka. Towards a minor literature”. The major and minor language does not refer to two different kinds of languages, but two possible usages or treatments of the same language (DELEUZE; GUATTARI, 1987, p. 103-104). A minor language is not a sublanguage or dialect under a major language, but a minor practice of major language (DELEUZE; GUATTARI, 1986, p.1). Thus, it does not exist in itself (DELEUZE; GUATTARI, 1987, p. 105). It makes the major language enter into a becoming-minor of all its dimensions and “oversteps the representative threshold of the majoritarian standard” (DELEUZE; GUATTARI, 1987, p.106).

Minor literature has three characteristics. At first, they are affected by a strong coefficient of deterritorialization (DELEUZE; GUATTARI, 1986, p. 17). As the seeds of becoming or continuous variation, they function to trigger uncontrollable deterritorializations of the majority (DELEUZE; GUATTARI, 1987, p. 106). Secondly, everything in minor literature is political. The narrow space in which they exist “forces each individual intrigue to connect immediately to politics.” (DELEUZE; GUATTARI, 1986, p. 17) Thirdly, everything in minor literature has a collective value. The rarity of talent in minor literature allows authors “constitute a common action” and provide a collective, and even revolutionary, enunciation (DELEUZE; GUATTARI, 1986, p.17-18).

Deleuze and Guattari do not have much direct arguments or comments on photography. Basically, Deleuze disputes the presumed fixity, objectivity, and reality of photography. Inspired by the Deleuze-Guattari concept of minor literature, some scholars propose the notion of minor photography. The concept of minor photography allows us to break with the traditional concept of representation, which is labelled by Deleuze as “the hegemony of the cliché”, and never think of photography as a representational medium and never believe in the presumed objectivity of photography. Bleyen (2012, p. 13) argues that we should question the long-held view of photograph “as a slice of time, as a transparent window on reality and as an objective

representation”. Minor photography deterritorialize the dominant and standardized way of photographic practices and overstep the representative boundaries of majoritarian photography. It does not aim to develop a great individuated utterance, but to pave the way for collective multiplicity and a future community. Minor photographic practices are a rupturing of representation and a breaking of making sense, of being human (O’SULLIVAN, 2012, p. 6).

Assemblage and de/re-territorialization

In Deleuze-Guattari’s theory landscape, the notion of minor literature is closely interconnected with a series of complicated concepts, including assemblage, de/re-territorialization, becoming, multiplicity, lines of flight, and affect. Literally, an assemblage is a process of arranging or organizing a set of things, objects, or spaces, which are neither predetermined nor randomly collected (WISE, 2005). According to Deleuze and Guattari (1987), an assemblage is a multiplicity and a provisional contingent whole in which a set of heterogeneous elements establishes interrelations and co-function together. The elements are selected from semiotic flow, material flow, and social flow (DELEUZE; GUATTARI, 1987, p. 23, 406). Thus, an assemblage is “a veritable invention” (DELEUZE; GUATTARI, 1987, p. 406).

Assemblages comprise two crossed axes. The horizontal axis is between two independent segments, i.e., the form of content and the form of expression. The former as a machinic assemblage presents corporeal modifications. The latter as a collective assemblage of enunciations expresses incorporeal transformations. They are imbricated with one another in multiple ways and in various combinations (DELEUZE; GUATTARI, 1987, p. 88). The vertical axis is between territorialization and reterritorialization (that is, territory made and remade) on one side and deterritorialization (that is, territory unmade) on the other side. Along this vertical axis, the assemblage contains three types of lines, which are interrelated with each other and constantly make and unmake the assemblage. At first, the molar or rigid segmental line frames people into different aggregates or groups. The flight line, also called a line of rupture or crack, marks a real or clean break with the segmentation line. This line triggers the explosion of rigid segmentarity and leads to a kind of absolute deterritorialization. Between the molar line and the flight line lies the molecular line, along which small changes or tiny cracks occur and disorientation or deterritorialization might also be brought about. As shown in Figure 1, what the two axes construct is a tetravalent (or quadripartite) model of assemblages.

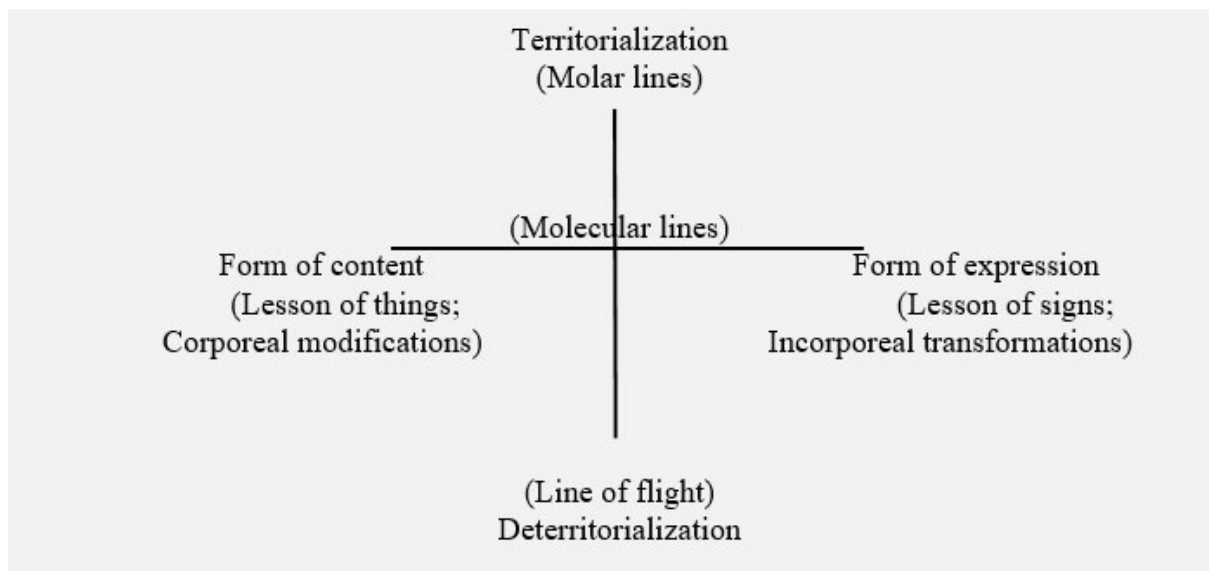


Figure 1 - The tetravalent model of assemblages.

Source: Deleuze and Guattari (1987)

When applying the assemblage to research contexts, one of the risks is the floating and ambiguous connotations of the concept. No one can just claim his or hers is a “correct” way to deploy the notion (ANDERSON; MCFARLAN, 2011; KAMALIPOUR; PEIMANI, 2015). Another risk is “an ambiguity in the referential frames in the uses of assemblage” (MARCUS; SAKA, 2006). Rizzo (2012) also suggests that anyone who applies the concept of assemblage will confront a methodological difficulty, that is, how the concept with multiple variations can be fit into a particular research context. Fortunately, the concept is open to reinvention for various research contexts.

De Landa (2006; 2010; 2016) as one of the major interpreters of the Deleuze-Guattari assemblage thinking critically theorizes the assemblage approach to explore the complexities of our society. De Landa (2006) thoroughly interprets the implied meanings of assemblages as a whole, which differs from a seamless whole. First, an assemblage is composed of a set of heterogeneous parts and the properties and capacities of assemblages emerge from the interactions between the parts. Second, the relations between the components are extrinsic and contingently obligatory. It means that “a component part of an assemblage may be detached from it and plugged into a different assemblage in which its interactions are different” (DE LANDA, 2006, p. 10). Third, the components work to stabilize the assemblage’s identity or transform it into a different assemblage. Fourth, “the identity of any assemblage at any level of scale is always the product of a process and it is always precarious” (DE LANDA, 2006, p. 28).

Case analysis and discussion

This study defines digital personal photography, the relationship between me and my photograph, and photography-related events (such as photo production, manipulation, sharing, and communication event) as assemblages with different sizes. The roles and properties of personal photographs are mainly examined in the latter two larger assemblages, within which it is one of the material or expressive components.

In the production assemblage of pre-digital photography, photograph taking as an event-assemblage is composed of both material and expressive parts. The former includes photography devices, the light, the photographed human, photographers, which are co-present in a space. The latter refer to the mutual knowledge of producing a photograph and the gestures and facial expressions of the photographed people. The photographic images, as an emerging capacity of the production assemblage, are taken as an objective representation of the photographed subjects in reality. This kind of representation system is territorialized not only by the resemblance between people and their images, but by the determinate duration of a person's appearance, which fuses a person's present and past moments. Therefore, in the pre-digital era, a personal photograph as a component in the assemblages of viewing, collecting, or inheriting is coded by evidence and memory.

The proliferation of digital photography apps has de/re-territorialized the role of personal photograph in the different sizes of assemblages. The selfieing, face beautifying, and face-swapping apps function as a "line of flight" to rhizomatize our experiences with photography and personal images (DELEUZE; GUATTARI, 1987). The following sections will thoroughly explicate the process of de/re-territorialization in three assemblages of events - the selfie production and manipulation, the real-time beautified video sharing on the social media, and the production of face-swaps, and try to analyze the complicated relationships among people, photographic images, identity, time, and space.

The "me" determined by "the me of the moment"

This section focuses on the relationship between people and their photographic images during the selfie production and manipulation. The roles of photographic images and the photographed people are examined in three historical stages, i.e., in the stages when self-photography is technologically impossible, when it is possible,

and when selfie is popular. The analysis shows how the co-functioned material components change through the stages and how the roles of the photographed people has been de/re-territorialized from objectified subjects to active subjects, and to reactive subjects. The primary argument is that, when I make a selfie, my image in the screen of the digital camera device is no longer only the objectified me of the (past/current) moment determined by my gesture and under my gazing and scanning, but also the digitally-manipulated/delayed me that determines our (future/current) gesture outside the screen. Thus, to some extent, we may argue that the “me” in the selfie production process is the “me” decided by “the me of the moment.”

The becoming of my face

This section pertains to the relationship between people and their images manipulated by the face-beautifying apps during the process of real-time video sharing on the social platform. As noted by Deleuze and Guattari (1987), the body and identity of an individual is formed in its relations with the world. A relational body is constituted in encounters among multiple others, situations, and environments. The analysis focuses on how people sharing their personal videos can use different types of face filtering and beautifying apps to create a desired face on the video sharing interface. The study mainly argues that one’s face and identity is constantly becoming through the encounters or inter-experiences between the face and the manipulated images with different resemblance intensities. The images capture or fix a face as a particular spatial-temporal moment (COLEMAN, 2008), which is mediated by the digital apps, and produce face as one of the multiplicities and becoming of face.

The rhizomatic life experiences

This section concentrates on the relationship between people and their photographic face images that are transplanted into a movie or TV show scene to replace a role’s face. Although the deepfake-style AI face swap apps, such as the popular Chinese app ZAO, have caused great concern about privacy and the security of information, they are quickly gaining popularity among young people. If you want to star in a movie, the only thing you have to do is to upload a series of self-photographs with some basic facial expressions. The study mainly discusses how the face swap app functions as a “line of flight” to de/re-territorialize both the self-photograph and the movie scene. One’s photographic image of face is not only transferred from one

two-dimensional plane to another, but become a material and expressive component in the app-created assemblage. Thus, it acquires lots of new bodies and identities, a capacity to be in motion, and different living spaces blurring past and present. The life experiences of people are enriched by using the app, but, more importantly, they are rhizomatized by the disembodied spatial travel and temporal fusion.

References

ANDERSON, B.; MCFARLANE, C. Assemblage and geography. **Area**, v. 43, n. 2, p. 124-127, 2011. Disponível em: <<https://www.jstor.org/stable/41240473>>. Acesso em: 15 abr. 2020.

BARTHES, R. **Image, music, text**. Londres: Fontana Press, 1977.

BARTHES, R. **Camera Lucida: Reflections on photography**. Nova York: Hill and Wang, 1980.

BATCHEN, G. **Burning with desire: The conception of photography**. Cambridge: The MIT Press, 1997.

BAZIN, A.; GRAY, H. The ontology of the photographic image. **Film Quarterly**, v. 13, n. 4, p. 4-9, 1960. Disponível em: <<https://fq.ucpress.edu/content/13/4/4>>. Acesso em: 15 abr. 2020.

BENJAMIN, W. A short history of photography. **Screen**, v.13, n.1, p. 5-26, 1972. Disponível em: <<https://fq.ucpress.edu/content/13/4/4>>. Acesso em: 15 abr. 2020.

BLEYEN, M. Introduction. BLEYEN, M. (ed.). **Minor photography: Connecting Deleuze and Guattari to photography theory**. Bélgica: Leuven University Press, 2012, p.9-18.

BLOLCATI, R.; PASSINI, S. Narcissism and self-esteem: Different motivations for selfie posting behaviors. **Cogent psychology**, v. 5, 2018. DOI:10.1080/23311908.2018.1437012

CARTIER-BRESSON, H. **The mind's eye: Writings on photography and photographers**. Nova York: Aperture, 1999.

COLEMAN, R. The becoming of bodies: Girls, media effects, and body image. **Feminist Media Studies**, v.8, n.2, p. 163-179, 2008. DOI: 10.1080/14680770801980547

DAMISCH, H. Five notes for a phenomenology of the photographic image. **October**, v.5, p. 70-72, 1978. Disponível em: <<https://www.jstor.org/stable/778645>>. Acesso em: 15 abr. 2020.

- DELEUZE, G. **Francis Bacon: The Logic of Sensation**. Londres: Continuum, 2003.
- DELEUZE, G.; GUATTARI, F. **A Thousand Plateaus: Capitalism and Schizophrenia**. Mineápolis: University of Minnesota Press, 1987.
- DE LANDA, M. **A New Philosophy of Society: Assemblage Theory and Social Complexity**. Londres: Continuum, 2006.
- DE LANDA, M. **Deleuze: History and Science**. Nova York: Atropos. 2010.
- DE LANDA, M. **Assemblage theory**. Edinburgh: Edinburgh University Press, 2016.
- FAWNS, T. **Blended memory: Distributed remembering and forgetting through digital photography**. A dissertation submitted to the University of Edinburgh, 2016.
- FLUSSER, V. **Towards a philosophy of photography**. Londres: Reaktion Books Ltd., 2000.
- GOODING, M. Visions of the real: The desire and will of the blind photographer. In J. ROTHENSTEIN, J.; GOODING, M. (eds.). **The blind photographer**. Nova York: Princeton Architectural Press, 2006, p. 23-27.
- HESS, A. The selfie assemblage. **International Journal of Communication**, v. 9, p. 1629-1646, 2015. Disponível em: <<https://ijoc.org/index.php/ijoc/article/view/3147>>. Acesso em: 15 abr. 2020.
- KAMALIPOUR, H.; PEIMANI, N. Assemblage thinking and the city: Implications for urban studies. **Current Urban Studies**, v. 3, p. 402-408, 2015. DOI: 10.4236/cus.2015.34031
- KIM, J. W; CHOCK, M. Personality traits and psychological motivations predicting selfie posting behaviors on social networking sites. **Telematics and Informatics**, v. 34, p. 560-571, 2017. DOI: 10.1016/j.tele.2016.11.006
- KRAMP, M. Unburdening life, or the Deleuzian potential of photography. **Rhizome**, v. 23, Online, 2012. Disponível em: <<http://rhizomes.net/issue23/kramp/>>. Acesso em: 15 abr. 2020.
- KRIEBEL, S. Theories of photographs: A short history. ELKINS, J (ed.). **Photography theory - The art seminar 2**. Nova York: Routledge, 2006, p. 1-49.
- MCFARLANE, C.; ANDERSON, B. Thinking with assemblage. **Area**, v.43, n.2, p.162-164, 2011. Disponível em: <<https://www.jstor.org/stable/41240481?seq=1>>. Acesso em: 15 abr. 2020.
- MCLENNAN, T. **Photography's album: An autoethnography on mediating time with smartphones, Kodaks and camera obscuras**. A doctoral dissertation submitted to the University of Technology Sydney, Sydney, 2017.

MCWILLIAM, C. Eyes that feel. ROTHENSTEIN, J.; GOODING, M. (eds.), **The blind photographer**. Nova York: Princeton Architectural Press, 2016, p. 11-16.

O/SULLIVAN, S. From stuttering and stammering to the diagram: Towards a minor art practice? BLEYEN, M (ed.), **Minor photography: Connecting Deleuze and Guattari to photography theory**. Bélgica: Leuven University Press, 2012, p. 9-18.

PHILLIPS, J. Agencement/assemblage. **Theory, Culture & Society**, v.23, n. 2-3, p. 108-109 2006. Disponível em: <<https://bit.ly/2XDwCFh>>. Acesso em: 15 abr. 2020.

RIZZO, T. **Deleuze and Film: A Feminist Introduction**. Nova York: Continuum International Publishing Group, 2012.

QIU, L.; LU, J.; YANG, S.; QU, W.; ZHU, T. What does your selfie say about you? **Computers in Human Behavior**, v. 52, p. 443-449, 2015. [DOI:10.1016/j.chb.2015.06.032](https://doi.org/10.1016/j.chb.2015.06.032)

SOROKOWSKI, P.; SOROKOWSKA, A.; OLESZKIEWICZ, A.; FRACKOWIAK, T.; HUK, A.; PISANSKI, K. **Personality and individual difference**, v. 85, p.123-127, 2015. DOI:10.1016/j.paid.2015.05.004

SUNG, Y.; LEE, J; KIM, E.; CHOI, S. M. Why we post selfies: Understanding motivations for posting pictures of oneself. **Personality and Individual Differences**, v.97, p. 260-265, 2016. DOI: 10.1016/j.paid.2016.03.032

GELDER, V. H.; WESTGEEEST, H. **Photography theory in historical perspective**. Case studies from contemporary art. Boston: Wiley-Blackwell, 2011

WANG, R.; YANG, F.; HAIGH, M. M. Let me take a selfie: Exploring the psychological effects of posting and viewing selfies and groupies on social media. **Telematics and Informatics**, v. 34, p. 274-283, 2017. Disponível em: <<https://bit.ly/3bdwEHY>>. Acesso em: 15 abr. 2020.

WALLOP, H. Selfies - how the world fell in love with itself. **The Telegraph**, Online, 2013. Disponível em: <<https://www.telegraph.co.uk/technology/social-media/10460202/Selfies-how-the-world-fell-in-love-with-itself.html>>. Acesso em: 15 abr. 2020.

WEISER, E. B # Me: Narcissism and its facets as predictors of selfie-posting frequency. **Personality and Individual Differences**, v.86, p. 477-481, 2015 DOI:10.1016/j.paid.2015.07.007

WISE, J. M. Assemblage. STIVALE, C. J. (ed.). **Gilles Deleuze: Key concepts**. Montreal: McGill- Queen's University Press, 2005, P. 77-87.