The Discrete Imaginary: Thierry Kuntzel's Video Art

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To the noötechnicians to come.

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Epigraph

It is a philosophical, psychological, and social task to save phenomena by reinstalling them in becoming, by putting them back in invention, through the in-depth study of the image they contain.

Gilbert Simondon

Theoretical texts: the stakes were to open, in the "sticky" substance of the "text," a trickle, a link, an analogy, another space.

Thierry Kuntzel

Note on Translation

All translations from French to English in this dissertation are my own, unless otherwise stated.

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Preface

Thierry Kuntzel had already passed away on the day preceding the opening of *Anarchive* at the mfc-Michèle Didier Gallery in Paris, in March 2015.[1] Kuntzel's voice, recorded ten years before during an interview conducted for his DVD-rom *Title TK*, was used for the private reception. That night, in the presence of Peter Campus, Masaki Fujihata, Muntadas, Fujiko Nakaya, and Michael Snow, the guests could hear Kuntzel's voice in the semi-darkness of the reception room. While people who gathered in the gallery space were mainly paying tribute to the work of pioneers in the field of multi-media art, Kuntzel's voice, frozen in the past, infiltrated the present through technical means.

The recording of Kuntzel's voice brought to light what is central in his work: a spatio-temporal exploration concerning the technical conditions of experience. On that March night in 2015, Kuntzel's ongoing research on the power of mediation to capture and redistribute information may have felt ghostlike. The technically reproduced sound of his voice may have had an emotional effect on the audience. At that moment, those in the room encountered Kuntzel's voice, an encounter which implored them to welcome Kuntzel who came back to life through technical means. Their listening to the voice set an imaginary stage from where everybody gathered to remember Thierry Kuntzel. This imaginary stage was technically produced by an artifact. The latter allowed for the

[1] Anarchive is a collection of digital archive on contemporary art. Each book is a multi-media project dedicated to the exploration of the work of an artist via different archival supports (sound, text, image). This collection, created by art historian Anne-Marie Duguet in 1994 has already published on leading figures such as Antoni Muntadas, Michael Snow, Fujiko Nakaya, Jean Otth, and Thierry Kuntzel. Both an original creation and a database, each publication represents an attempt to stimulate debates on the mode of archiving contemporary performance and video art.

collective imagination of the audience to gather in an imaginary place where Kuntzel's presence was technically produced. This imaginary is both reflexive and performative as it allows one to reflect upon the becoming memory of a presence, and, conversely, to perform the becoming presence of a memory. The imaginary stage produced by the technical artifact is what stirs the collective work of the audience's imagination to give a meaning to the experience. In this setting, the distinction between life and artifice does not stand: the technical capture of time transformed the experience.

I was not there that night. I only know about it by talking with Anne-Marie Duguet in the fall preceding the exhibit. An art historian, co-founder of *Anarchive* and close friend of the artist, Duguet is the curator who decided to open the reception with Kuntzel's voice. While talking at the Parisian café where we met in December 2014, Duguet told me that she anticipated the moment of having Kuntzel's voice collectively heard. She had ambivalent feelings, oscillating between sadness and devotion. Knowing the recording by heart, she imagined what the experience might be. Her mental state was driven by emotions that evolved as she got closer and closer to the night of the private reception. These emotions were only based on the projection of such an event: the recording of the voice functioned as a psycho-affective transplant to guide the future of her experience. Duguet had been listening to Kuntzel's voice for many years as she prepared and selected his works for international retrospectives since his death in 2007. She knew that there was something unpredictable about leaving the intimate and secure space of a private archive to share, publicly, what has been made available through technical means. As she spoke, I remained silent. I never met Thierry Kuntzel.

Thierry Kuntzel, whose work evokes the delicate soul of a generous man, is barely mentioned in anthologies dedicated to video art. I thus have the privilege of bringing to the English-speaking scholarly world a figure that best expresses the rigorous art of a French *vidéaste*. Kuntzel's work was superbly innovative and yet remains understudied. While the videos and video installations I am about to analyze were presented within the context of museum exhibits, the only format of my encounter with the pieces was as an *après coup*. The format of the *après coup* is precisely what interests me as a writer. Since I have never experienced Kuntzel's work *de son vivant* [during his lifetime], my writing process is about leaving space open to interpretation. As this reader discovers his artistic universe, I hope that my writing will solicit the work of his or her imagination, so that the technical images that are central to Kuntzel's work, continue to concretize somewhere else, in someone else's imagination. In this way, I hope that my thesis operates as a transmitter.

Not only have I never met Kuntzel, but I am writing from a delayed encounter with him, as is perhaps always the case with powerful thinkers. For years, I took care of his work. I kept my notes and writings for myself to cultivate the time it takes for thoughts to emerge. I had to dance this *pas de deux* for a while with Kuntzel's pieces, before my writing resonated with his universe, stylistically and thematically. Kuntzel's works nurtured my writing in the most challenging way: there is no respite in his audio-visual inventions. No matter how hard I tried, I could not shake off the effects of his art. His pieces are made of a rhythm inscribed in a spiral. Images, sounds, space, and time fluctuate in the subtlest ways. It requires time and repetition in time to unfold the layers

of signification that resist mere explanations. The almost imperceptible hurly-burly of his work pushed me to adopt a tranquil strength. It was as if the images were alive, always bifurcating in front of my eyes. No matter which medium an artist employs, writing about an artist's work means letting the artist write with and within us. No one can truly remain the same after entering the world of an artist, and so Kuntzel's technical meditation on time and experience has shaped my work beyond this doctoral dissertation.

In *The Discrete Imaginary*, I attend to what Kuntzel generously had to offer: a practical engagement with moving images as a means to discuss the technical condition of experience. My goal has been to confront my work as a theorist—which takes the written form of the manuscript—with Kuntzel's work, which develops a multi-media interrogation of the cultural significance of technical images in shaping both psychic and collective life. As a writer, my challenge was to find a space from which to question the reflexive, performative, and transformative potential of technical images. This encounter between my writing and Kuntzel's moving images aims to open up a way of engaging with media art that accounts for its performative potential in shaping our modes of theoretical expression.

This research makes no attempt to exhaustively log all of the contextual information related to every single piece Kuntzel made. While I do present Kuntzel's entire body of work, the modes of display, the technical settings, the dimension and types of presentational practices that he developed, it is my hope that this examination may inspire others to take up the task of unpacking the myriad of details. This dissertation is not a historiographical account of the productive forces that shaped Kuntzel's art form. It

is a work *on* Kuntzel's work: an attempt to grasp the transformative potential of his research in a world where the technical and digital apparatuses of mediated experience are ubiquitous.

As mentioned above, the biggest challenge of this doctoral research was never about finding materials, nor did it have to do with the dust-like pleasure of the archival moment.[2] Due to the transformation of archival research and the acute gratification that finding un- or understudied objects provides, I knew that there was data waiting for me somewhere: pictures of the exhibits, press kits, journal articles and reviews, video recordings of the installations, and interviews with and by artists. Duguet has also given me unpublished materials from Kuntzel, and I have had access to the thirty years of his notes. This has been exciting—and even fun. My challenge, however, has been to address the conceptual ground from which a philosophy of video art can emerge: a ground from which *video art* can be interpreted for its insight onto the becoming digital of mediation, and *philosophy* can stand as an imperative to think those changes with dignity.[3]

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[2] Carolyn Steedman has recently combined several articles that reflect upon the experience of archival research and the writing of cultural history. In *Dust. The Archive and Cultural History*, she argues for a more hands-on understanding of the complex relationship that takes place between a researcher and the work in the archive as an administrative and institutional organization. She calls for an awareness of the "matter of history," which, like dust, cannot go away. Carolyn Steedman, *Dust: The Archive and Cultural History*. New York: Rutgers University Press, 2002. This account on the dust-quality of archival media has recently been of interest for scholars such as Jussi Parikka and Wolfgang Ernst, who develop an account of the relation between exhaustion and labor in the archive. See in particular Wolfgang Ernst, *Digital Memory and The Archive*. Ed. Jussi Parikka. Minneapolis: University of Minnesota Press, 2013.

[3] Here one easily recalls the words of Gilles Deleuze: "Ou bien la morale n'a aucun sens, ou bien c'est cela qu'elle veut dire, elle n'a rien d'autre à dire: ne pas être indigne de ce qui nous arrive." *La Logique du sens*. Paris: Éditions de Minuit, 1969. 174. "être digne de ce qui nous arrive" became, in 2012, the epigraph of the international collective I co-founded with Sara Banranzoni, Benoît Dillet, Paolo Vignola, Paul Willemarck, and Alexander Wilson. The collective organizes international events (Kent, London, Rome, Nijmegen) to foster debates between the humanities and the sciences concerning our technical condition, today's political economy, and the digital revolution. For more information concerning upcoming events and publications, please visit: www.nootechnics.org.

Introduction

Video as Process of Discretization

> So far away, the image. Nothing remains of the materiality of the photo-chemical—the materiality of the film-strip, a skin with the image still on it, visible and open to the touch, with the montage fragmented, ripped apart; the image is untouchable, literally inaccessible without the mediation of a keyboard. […] That which radically changes with video—video and the digital—is the whole relation to the image.[4]
>
> Thierry Kuntzel

Emerging in the late 1960s, video is an electronic medium that consists of signals that are kept in constant movement. In contrast with film, video can simply entail signal processes, generated in the devices without any recording. Video distinguishes itself from film and photography because it does not need to capture, nor record, in order to produce a visual and sonic manifestation. With the use of a video synthesizer, which is a device that electronically creates a video signal, one can generate a variety of visual and audio materials without camera or microphone input, through the use of internal video pattern

[4] "Si lointaine, l'image. Rien ne subsiste de la matérialité du photo-chimique—la matière-pellicule, peau sur laquelle l'image est toujours là, visible et offerte au toucher, par le montage morcelée, dépecée; l'image est intouchable, littéralement inaccessible, autrement que par la médiation d'un clavier […] Ce qui, avec la vidéo—la vidéo et l'informatique—bascule radicalement, c'est tout le rapport à l'image." Thierry Kuntzel, *Title TK*, Paris: Anarchive, 2006, 305.

generators. A video synthesizer can also enhance or distort television camera imagery, and thus produce an endless array of effects via electronic manipulations.

The relative autonomy of video reveals a central characteristic of the medium: video is based on processuality. This assertion needs to be understood in two ways. First, the notion of process and processuality is at the core of any moving image production because it connotes continuity. In the context of the moving image (filmstrip, analog, or digital), a process defines the audiovisual stream that appears both unified and continuous to its viewer. In contrast with film, digital video presents the most advanced form of a concretization of fluidity and flow of images because of the speed at which movement is created in the layers of the video material and its pictoriality. The video flow is inseparable from signal processes. Second, the continuous characteristic of a process is only relative because the process implies changes. Change, even in the digital realm, can only happen discretely. Even though the continuous modification of a digital video image looks like nothing has changed at all, images evolve and generate a time-flow that, at a micro-level, is only a succession of discrete images. Contrary to film and the materiality of its filmstrip, video imaging has a kind of inner plasticity. However, this plasticity is pushed to an extreme in a digital video. The latter is made of digital processes that cut continuities into discontinuities, making unified, homogeneous mixtures discrete, malleable, mobile, and transduceable to another machine that can later translate the data

to modulate and alter the image.[5] Change as a process of discretization in digital video is linked to the ontogenetic process of the image itself: the development of the image through its different phases, as opposed to the projection of different images captured *a priori* to the visual experience of the film. The discrete phases of the digital video image are at the core of the visual modifications, their flux, flow, and relative continuity.

The digital image confronts us with a new paradigm for thinking about process in terms of phase shift. Neither completely cyclical, nor linear, the phasual processuality of the digital image pushes us to rethink some of the fundamental questions pertaining to experience of time and space. In a short text published in the English version of his dialogue with Jacques Derrida, *Ecographies of television*, Bernard Stiegler points to an event specific to the end of the twentieth century that drastically changed our relation to images and movement:

> A great event […] is the appearance of the *analogico-digital image.* This image will have extreme consequences *for our intelligence of movement.*

[5] In this dissertation, I refer to the process of transduction in Kuntzel's video art. Borrowed from the vocabulary of Gilbert Simondon, the notion of transduction designates a processual operation by which an activity propagates itself in a given domain. This phasual propagation operates by both restructuring the domain in which the operation takes place, and by constituting the newly engendered ground from which another transductive operation can take place. In other words, this operation provokes a progressive (heterogeneous and yet constant) modification and structuration of the domain. Each constitutive layer of operation of a domain constitutes the structural basis for the formation of the next layer. As Simondon writes: "The transductive operation is an individuation in progress […] There is transduction when there is an activity that begins in the center of a structural and functioning being and that expands in diverse directions, as if multiple dimensions appeared around this center; the transduction is the correlative apparition of dimensions and structures within a being made of preindividual tensions." Gilbert Simondon, *L'individuation psychique et collective à la lumière des notions de Forme, Information, Potentiel et Métastabilité*, Paris: Aubier, 1989, 25. What interests me in the notion of transduction is that it offers a conceptual tool to tackle the way in which a signal, in my case a video signal, propagates in an audio-visual domain while restructuring the given domain of appearance and disappearance of the signal. Instead of thinking about images as static entities, the notion of transduction calls for an awareness towards the organistic constitution of images. Furthermore, the notion of transduction offers an alternative to both the notions of translation and deduction. When Kuntzel uses video, he uses it for its transductive potential to offer alternative ways of thinking about the thinking process in its relation to images in movement.

> In fact, the analogico-digital image is the beginning of a *systematic discretization of movement* – that is to say, of a vast process of the *grammaticalization of the visible*. The analogico-digital image calls into question what André Bazin calls *the objectivity of the lens* [l'objectivité de l'objectif] in analog photography, what Barthes also calls the *this was* [*le* ça a été] the noeme of the photo. The noeme of the photo is what in phenomenology would be called its intentionality.[6]

Stiegler's notion of the *analogico-digital image*, which he also names the discrete image, is crucial in identifying the drastic changes provoked by the emergence of the digital as a form of discretization of movement. In mathematics and machine learning, *discretization* designates the process through which a continuous function or model is transferred into discrete attributes. The discretization of movement, that is the process through which movement is decomposed into discrete features, goes together with the grammaticalization of the visible, a vast and systemic process in which the visible is decomposed into variables that can be analyzed.

To elaborate on video as a process of discretization is one of the tasks of this research. This investigation presupposes a reciprocal relation between media studies and philosophy. Some of the questions of mediation have already been posed as philosophical questions. The notion of mediation, has always haunted philosophy. From Plato's layering of the access to the realm of ideas, to Aristotle's notion of *metaxu* and *diaphragm*, to Descartes' conception of *cogito* as a matrix that shapes experience, to

[6] Bernard Stiegler, "The Discrete Image." Eds. J. Derrida, B. Stiegler, *Ecographies of Television.* Cambridge: Polity, 2007, 148-149.

Hegel's mediation which defines the union of two terms by a third, mediation is at the center of some of the major reflections concerning the question of being individually and collectively in the world. Whether understood as an epistemological challenge, as a hermeneutic quest, or as an ontological endeavor, mediation compels philosophy to intervene and tackle the changes that shape our modalities of being in the world. In this research, mediation will be analyzed from a pharmacological point of view: both as a condition and a quasi-cause of experience.

The emergence of particular forms of media at the turn of the twentieth century also triggered philosophical questions. One thinks for instance of Walter Benjamin, who asked what happened to the aura in the age of the technological reproducibility of art as early as 1936,[7] or Gilles Deleuze, who asked what happened to the event in the cinematic realm.[8] Together, Benjamin and Deleuze have been fundamental figures to tackle the relation between time and movement from the point of view of apparatuses of image making. Within a post-Benjaminian and post-Deleuzian tradition, some scholars have tried to challenge the assumption that theories of mediation and media theory are related. In a sense, language put in relation to material technology has sparkled the development of different, not to say opposite schools of thought when it comes to a detailed analysis and conceptualization of mediation. On one end of the media studies spectrum, literary scholar and media theorist Friedrich Kittler is a central figure of German media theory and his *Gramophone, Film, Typewriter* remains an essential reference for scholars of

[7] Walter Benjamin, "The Work of Art in the Age of its Mechanical Reproduction." *Walter Benjamin: Selected Writings* 3. Cambridge: Harvard University Press, 2002. 1935-1938.
[8] Gilles Deleuze, *Cinéma 1: L'image-mouvement*, Paris: Critique, 1983; *Cinéma 2: L'image-temps*, Paris: Critique, 1985.

media archaeology such as Jussi Parikka, Wolfgang Ernst, and to some extent, Thomas Elsaesser. This materialist school produces scholarship rooted in film history and in an understanding of media's productive forces. On the other end of the media studies spectrum, we find someone like new media theorist Geert Lovink, who proposes a distinct trajectory by posing the question of the social in relation to media. Anchored in a post-McLuhan tradition, Lovink's work aims to question the faith of communication in today's political media system where cryptology, digital profiling, and algorithmic surveillance play an essential role in shaping social, economic, and political structures—from the stock market, to the law, and to mass media consumption. Lovink's book, *Networks without a Cause*, and Lev Manovich's *The Language of New Media*, both center on the emergence, use, and proliferation of new media technologies in the social realm.[9] Scholars such as Jodi Dean and Bernard Stiegler have fostered these new media trajectories. Their scholarship emerges first and foremost out of political concerns related to media's implications.[10] One major figure of media theory remains improperly called upon. Mark B.N. Hansen's scholarship has perhaps the least to do with a political understanding of media's implications in the social realm, and yet his body of work clearly proposes another pathway outside of the German materialist school.[11]

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[9] Geert Lovink, *Networks Without A Cause: A Critique of Social Media*. New York: Polity Press, 2011. Manovich, Lev. *The Language of New Media*. Cambridge: MIT Press, 2001.

[10] Jodi Dean, *Blog Theory: Feedback and Capture in the Circuits of Drive*. New York: Polity, 2010. Bernard Stiegler, *La télécratie contre la démocratie: lettre ouverte aux représentants politiques*. Paris: Flammarion, 2014.

[11] While Hansen's work is valuable to think about a post-phenomenologist approach to new media, or what he now calls twenty first century media, I will remain critical of the absence of clear political ambitions concerning his stakes on media theory today, especially as he starts to tackle the implications of objects such as drones and digital profiling.

The Discrete Imaginary enters debates concerning the socio-political implications of digital images by highlighting the characteristics of techno-aesthetics that connect images relationally. With the emergence of digital culture, the dynamic labor between philosophy and media studies faces a new challenge. Mediation has become systemic in our increasingly digital world, meaning that mediation is inherently supported by and produced within a system of interconnected entities. The systemic characteristic of mediation leaves very little space for processes of selection that are not preempted by the analogical-digital milieu in which we evolve. In other words, what is *new* about new media theory is not that our world is mediated. We have known since Plato that mediation is an *a priori* condition of experience. What is new is that the systematization of experience is performed via a network of interconnected digital objects that are programmable. Thus, the emergence of the analogico-digital image not only mediates the relation between humans and the world, but also drastically changes the milieu in which individuals co-evolve.

In *The Discrete Imaginary*, my goal is to tackle mediation via the angle of processes of discretization. Here, digital is not opposed to analog, but is understood as a more systemic phase of discretization. Analogico-digital images constitute a new form of industrially produced images that pervade every aspect of our lives. Video images, here understood as analogico-digital images, evoke another concept of imagery insofar as these images engage with processes of the discretization of time in subtler and systematic ways. Computers treat time as a series of discrete moments, rather than as a continuous flow. These discrete moments are phases through which operations, such as recursions,

are processed. A "system time" in a computer defines the computer's organization. Its main function is to schedule and synchronize operations to be processed according to its notion of the passing of time. However, the larger question of time in relation to the computer is a question of synthesis. An algorithm, as a set of relations embedded in a mathematical formula, projects in time the implication of its operations as new synthesis of relation.[12]

In this dissertation, the notion of process defines operations proceeding from phase to phase toward the concretion of an object, understood here as an analogico-digital image. As media theorist Wolfgang Ernst puts it:

> In analytic philosophy (as represented by Alfred North Whitehead), the "event" represents an ontological being that is not a static object but a process. Such a processual ontology is close to the essence of media technologies itself (because only when in operation is a medium in its medium state).[13]

Scholars have recently objected the rejection of Whitehead's philosophy from the analytical tradition, emphasizing the analytical nature of his takes on extension, concretization, and the datum of experience. In fact, in Whitehead's speculative philosophy, the task is the creation of a philosophical scheme made of particular instances. For Whitehead, such general scheme must be applicable, adequate, and coherent. It is from these three criteria that he creates a logical system of speculation in

[12] On this question of synthesis, see Yuk Hui, *On the Existence of Digital Objects*, especially his last chapter concerning the notion of tertiary protention. Yuk Hui, "Logic and Time." *On the Existence of Digital Objects*. Minneapolis: University of Minnesota Press, 2016, 221-252.
[13] Wolfgang Ernst, *Digital Memory and The Archive.* Minneapolis: University of Minnesota Press, 2013, 184-185.

which the texture of experience is observed.[14] The elaboration of this categorical scheme emerges from the cultivation of a "method of imaginative rationalization" in which the description and interpretation of a dynamic process is inscribed.[15] In other words, when Wolfgang Ernst draws a parallel between Whitehead's process philosophy and the processual ontologies of media objects, his goal is to highlight one of the stakes of rehabilitating Whitehead for media studies, namely, to affirm a process-oriented approach to media objects. For Whitehead, "Philosophy is the self-correction by consciousness of its own excess of subjectivity" and its task is "to recover the totality obscured by the selection."[16] In other words, process defines a non-static relation to experience.

The Grammaticalization of the Sensible

Because the digital is constantly developing toward greater concretization, it demands the reevaluation of the conceptual tools needed to unpack its aesthetical and historical conditions. In the realm of video, this process of discretization has been developed and deployed to produce what I call the *grammaticalization of the sensible*. The *grammaticalization of the sensible* arises from my engagement with Bernard Stiegler's

[14] Alfred North Whitehead, *Process and Reality*, New York: Free Press, 1978, 4.
[15] Whitehead, 5.
[16] Whitehead, 15.

work on the notion of discretization and proletarianization.[17] It presupposes an understanding of grammaticalization as the transformation of a temporal flux into discrete data. As Victor Petit notes: "To grammatize is to discretize in order to reproduce."[18] Grammatization refers to major technical revolutions, such as writing, that externalize knowledge onto artificial supports so that it can be reproduced. For Bernard Stiegler, there are three major discretizations: literal, analog, and digital. Each discretization has its own modality of implementation within the social realm. In the context of this dissertation, I limit my study to the process of discretization as developed by analogico-digital images in video art. The framework of video images defines what I regard as a laboratory to explore the grammaticalization of the sensible.

Such grammaticalization is not a distribution, in the sense that Jacques Rancière refers to the distribution [*partage*] of the sensible. For him this distribution implies an *a priori* existence of a common space that he names the sensible from which distinct and precise divisions take place. The distribution of the sensible is both the sharing of a common experience and a modality of distributing exclusive parts.[19] It is this specific distribution of the sensible that gives shape to political experience, that shows who belongs or not to a certain space and time in common. Rancière's question of politics in relation to aesthetics is distinct from the denunciation of a certain aestheticization of the political realm. He urges us to think about the distribution of the sensible as a tool to

[17] On the question of proletarianization, see Bernard Stiegler, *For a New Critique of Political Economy*, Cambridge: Polity, 2010.
[18] In the glossary of Ars Industrialis—the association co-founded by Bernard Stiegler in 2008—Victor Petit stresses that grammatization is a term that echoes the work of Sylvain Auroux and Jacques Derrida. "Grammatiser, c'est donc discrétiser en vue de reproduire." Victor Petit, "Le vocabulaire d'Ars Industrialis" in Bernard Stiegler, *Pharmacologie du Front National*. Paris: Flammarion, 2013, 401.
[19] Jacques Rancière, *Le partage du sensible*. Paris: La Fabrique, 2000,12.

question who takes part in the making of the common. The distribution of the sensible is first and foremost the question of the *part*, of who takes part into the experience of the common. In my work, the grammaticalization has less to do with such *partage*, than with the capture of the sensible. The digital grammaticalization that I elaborate in this research has to do with the sequentialization of the sensible, its translation into mathematical formulas, and its reproduction as a feature of our contemporary experience. I do not pose the existence of an *a priori* common, nor do I engage in the question of the *partage* or distribution. For me, Rancière's notion of the taking part [prendre part] needs to be reevaluated from the point of view of operations that preemptively dissect, in the texture of experience, the mere possibility of a common. Capture and sequentialization, rather than distribution, allow us to pose the urgent question of the algorithmic control and impoverishment of the sensible.

Understood as a spatio-temporal flux that gives shape to experience, the sensible is more than ever affected by newly engendered processes of discretization that track, capture, and dissect data to reproduce certain patterns. Here, the sensible is defined as *aistêsis*, as a field in which the shared act of sensing and being sensed can emerge. Fundamental in *aistêsis* is an overtaking of the distinction between subject and object: what matters is the synchronization of the sensible, sensation, perception, and sense through the conjunction of both passive and active modes.[20] While I acknowledge that Jacques Rancière has been crucial in determining different aesthetic regimes, I am more

[20] I refer here to a reading of Aristotle's *De Anima* developed by Bernard Stiegler in numerous books as well as in his recent seminars. Such a definition of the sensible has led numerous authors to question the doubling of sensation at stake in the notion of *aistêsis*. See in particular, Maurice Merleau-Ponty, *Le visible et l'invisible*, Paris: Gallimard, 1964; and Georges Didi Huberman, *Ce que nous voyons, ce qui nous regarde*, Paris: Éditions de Minuit, 1992.

interested in understanding the sensible as an open potential from within which acts of sensing and being sensed can take place. In this sense, I look at what Gilbert Simondon calls the pre-individual realm, as a means to understand the ever-expanding field from which both psychic and collective experience can arise.

By grammaticalization of the sensible, I refer to the process that selects, in the synchronic flow of the sensible, discrete moments that can be extracted and thus reproduced. This process, in the age of the analogico-digital image—the discrete image as Stiegler names it—is effectuated at the speed of light, that is, through electronic mediations.[21] A decisive example of the grammaticalization of the sensible is found in Thierry Kuntzel's videos and video installations. Kuntzel's entire body of work is an interrogation of the time that passes and the technical condition of experience within it. Kuntzel experimented with the analogico-digital image as both *image* and *meta-image,* to explore the different regimes of the sensible fostered by discrete images. Haunted by the relation between psychic, symbolic, and technical apparatuses, Kuntzel devoted thirty years of his life to the unfolding of the layered processes that produce the appearance and disappearance of images. These images oscillate in his video art between memory and imagination as a means to interrogate the passage between images, the phases that shape perception in the realm of the sensible. This dissertation therefore proposes to interpret Kuntzel's art as the subject matter of a philosophy of analogico-digital media.

[21] This process is exemplified by the use of video image profiling. More often than not, video camera surveillance is now deploying software so that the recording of the image can simultaneously be analyzed and its data extracted according to predetermined patterns, such as the face of a person, or the color of an object. The audio-visual perception at the core of the act of video-recording is now doubled by an apparatus that grammatizes space and time for the sake of extracting data.

Finally, *The Discrete Imaginary* invites the reader to engage with the political agenda of this research, which, coming out of a reading of Simondon and Stiegler's philosophical projects, concerns the search for different modes of reticulation and processes of discretization.[22] For Simondon, the opposition between culture and technique on the one hand, and human and machine on the other hand, arises out of ignorance. Simondon explains that the hatred against the machinic domain comes from a refusal to welcome a foreign reality:

> The misoneism oriented against machines has less to do with an aversion against the new than with a refusal of a foreign reality. But, this foreign being is still human, and a complete culture is that which allows one to discover the foreign as human. By the same token, the machine is the foreigner; it is this foreigner in which some human is confined, misunderstood, materialized, enslaved, while still remaining human. The strongest cause of alienation in our contemporary world comes from this ignorance of the machine, which is not an alienation caused by the machine itself, but by the misreading of its nature and its essence, by its

[22] Reticulation means the systematization of knowledge production in a network society. The newly engendered organization of relations—between machines and humans, humans and humans, machines and machines—through the development of relational technologies, urges us to consider the mutations of processes of grammatization. In this case, both *reticulated capitalism* and *analogico-digital images* have to be analyzed and interpreted so that a pharmacology of knowledge, understood as a *therapeai*, can be developed. See in particular Bernard Stiegler, *For a New Critique of Political Economy*. Trans. Daniel Ross, Cambridge: Polity, 2009; and Bernard Stiegler, *La société automatique*, Paris: Fayard, 2015.

> removal from the world of signification, and by its omission from the table of values and concepts that are part of culture.[23]

For Simondon, technical objects are mediators between nature and humans. This definition of the technical object implies the recognition of a human reality inscribed in technical reality. The shift toward a new understanding of the technical objects in Simondon allows us to question the real relation between technique and power. This relation cannot be shaped by the force of one individual, but is inscribed in the culture as a whole, fostering the milieu in which machines and humans co-evolve. For Simondon, it is the culture that one has received that gives an individual its power to govern others, including machines. Because culture entails values and signification, it translates into abilities to effect mastery. It is precisely this understanding of culture as being massively implemented within and among governed individuals that creates the effect of a feedback loop. It is only by changing the way that we understand culture, and by acknowledging the human reality within the technical reality, that the alienation can be addressed and dissolved.[24] For Stiegler, not only has technique been at the center of the socio-economic systems that shape the evolution of hominization, but a new consideration of *technicity* understood as *savoir—savoir-faire*, *savoir-vivre*, and *savoir-être*—is now necessary to

[23] "Le misonéisme orienté contre les machines n'est pas tant haine du nouveau que refus de la réalité étrangère. Or, cet être étranger est encore humain, et la culture complète est ce qui permet de découvrir l'étranger comme humain. De même la machine est l'étrangère; c'est l'étrangère en laquelle est enfermé de l'humain, méconnu, matérialisé, asservi, mais restant pourtant de l'humain. La plus forte cause d'aliénation dans le monde contemporain réside dans cette méconnaissance de la machine, qui n'est pas une aliénation causée par la machine, mais par la non-connaissance de sa nature et de son essence, par son absence du monde des significations, et par son omission dans la table des valeurs et des concepts faisant partie de la culture." Gilbert Simondon, *Du mode d'existence des objets techniques*, Paris: Aubier, 2012, 10.

[24] On this question, see in particular the section "Problèmes actuels" in Gilbert Simondon's *Du mode d'existence des objets techniques*, 159-203.

develop a new critique of political economy that takes into account the drastic and urgent question of the becoming technical of the human. Together, Simondon and Stiegler's philosophies lay out the conceptual ground on which to address the technical changes that are shaping today's processes of reticulation, discretization, and knowledge production. By looking at Kuntzel's extended body of work through these philosophical prisms, this dissertation aims to address what has happened to experience in the digital age.

Thierry Kuntzel: Technician, Therapist, and Amateur

In the remaining sections of this introduction, I will further explain the relation between the reflexive and the performative aspects of video in Kuntzel's work. I will first give the necessary background information for the reader to grasp why and how Kuntzel—who was a highly respected, print-based film theorist in the late 1960s in France—decided to expand his theoretical experimentations via video art. I will pay special attention to Kuntzel's creation of a reflective apparatus in the performative space of the video installation, an apparatus that allowed him to interrogate how analogical-digital images shape the experience of the spectator. In order to bring Kuntzel's creation of a reflective apparatus into relief, I will turn to the importance given to alternative modes of writing in his videos. For Kuntzel, writing with video served as a means to reflect upon processes of grammaticalization at the speed of light. What Kuntzel sensed was that in the current moment of grammaticalization, reality itself is moving at the speed of light, leaving the human's sensory motor capacity to process changes behind:

If

machines…

If machines could work by themselves,

there would no longer be any

/ staging

/ master-gaze

/ enslaved-gaze

/ to look at (especially)

/ any cinema

/ any television.

9/2/1990. Thierry Kuntzel.[25]

In Kuntzel's work, the lighting medium of the video becomes a tool to inscribe writing in the never-ending flow of the moving image, and to reveal the potential of the emergence of a new *epistémè* in the digital age.[26] This section of the introduction hopes to give the necessary tools to the reader, in order for the question of writing, lighting, and movement to be further investigated throughout the chapters of this work.

The Discrete Imaginary explores the reflective and performative function of video aesthetics as developed in the work of French theorist and artist Thierry Kuntzel (1948-

[25] "Si les machines… Si les machines pouvaient marcher toutes seules, il n'y aurait plus / de mise en scène / de regard-maître / de regard-esclave / à regarder (spécialement) / de cinéma / de télévision." Thierry Kuntzel, *Title TK*, Paris: Anarchive, 2006, 427.

[26] In this research, much of the attention will be devoted to the question of the digital *epistémè*. I will pay particular attention to the collaborative work fostered by Bernard Stiegler's consortium on Digital Studies (See in particular http://digital-studies.org/wp/en/; and Bernard Stiegler, ed., *Digital Studies. Organologie des savoirs et technologies de la connaissance.* Limoges: FYP Éditions, 2014.), but also to scholars such as Katherine Hayles, Luciana Parisi, Joanna Zylinska, and Wendy Chun who have been at the forefront of questions of attention, memory, and ethics in the digital age.

2007). I analyze Kuntzel's work outside of the putative division between theory and practice.[27] In order to do so, I situate Thierry Kuntzel as both a technician of the image, a therapist of the pharmacological characteristic of the moving image, and as an amateur, who individuates himself through the creation and realization of his tastes, understood as an intelligence of the sensible. Through these three figures—the technician, the therapist, and the amateur—I unpack the complexity of his work, offering starting points for thinking about video art as it participates in the development of techniques that are now shaping both psychic and collective life.

For Kuntzel, video installations have the potential to create spatiotemporal objects through which to reflect upon the technical condition of experience. Together with repetition and the cyclical unfolding of image and sound, his video art establishes new modalities for interrogating time in which the present of the past, as well as the preemptive power of audiovisual phenomena, shape experience.[28] For Kuntzel, video installations are literal, concrete spaces. They are also fictional spaces that entice visitors to engage technically with the art form, through the help of an imaginary practice, proposing thoughts and dialogues that are themselves technically produced. Kuntzel's work generates a precise and poetic process of construction and deconstruction of fluid pictoriality in media, to engage the mental and bodily activities of the spectators.

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[27] The mode of discretization that derives from print requires you to proceed sequentially, in abandonment of this very principle.

[28] By preemptive, I refer to an operative logic that produces the actual effects of an indeterminate cause. For instance, in the context of the war on terror, the logic of the threat is preemptive because it produces the effects of this targeted, and yet indeterminate cause. In chapter three "The Allagmatic of Race" I will analyze the consequences of this operative logic of power that not only tracks, captures, and regulates bodies in time and space, but also inscribes a limit to becoming by assigning them with a futurity that has not yet unfolded.

Kuntzel entered the artistic world of moving images as both a technician of filmic theory and an amateur of audiovisual images. He was an active writer and video-maker, who published film theory and created multimedia installation art from 1970 until his death in 2007. Kuntzel was primarily known for his contribution to film theory. With his fellow theorists Christian Metz and Jean-Louis Baudry, he contributed to what is now called the apparatus theory in the field of film studies. The apparatus theory marks a pivotal shift, from a linguistically oriented study of film, to theorizing the technologies of the cinema and their impact on viewers. In the late 1960s in France, the moving image came to be understood not only as a tool to record memorable events, but also as a means to simulate and create memory through the spectator's encounter with the screen. By focusing on the essential role played by memory in the constitution of the human subject, Metz and Baudry mobilized Freudo-Lacanian theory to demonstrate how images displayed on the screen were analogous to the imagery of the unconscious; not in the sense of mimicking these images, but in the sense of simulating how such images appear for the human subject. First, Metz and Baudry paid particular attention to the technical construction of the *basic cinematographic apparatus* as a device similar to the one that produces mental images, arguing that the filmic apparatus was likewise capable of "fabricating an impression of reality."[29] Second, they defined the film projector through its capacity for figuration. Much like dreams, the film projector transposed thoughts, especially *mnesic* thoughts, into images, giving theoretical expression to the otherwise banal but oft-heard observation: "it was like in a film." Metz extended Freud's

[29] Baudry, Jean-Louis. "Le dispositif: approches métapsychologiques de l'impression de réalité." *Communications* 23.1 (1975): 56-72.

metapsychological concepts of condensation and displacement to the textual system of the cinema. Metz understood film and dreams as formed by identical semiological processes, which he subsumed under the concept of the imaginary signifier. He elaborated a film theory that examined the function of the cinematic signifier from the point of view of an all-perceiving subject who faces a film that is "like the mirror" of Lacanian psychoanalysis.[30] In addition to exploring the psychoanalytical implications for this rethinking of the place of memory in the screen-viewer dynamic, French film theorists in the 1970s also extended their arguments to include Marxist theory. Whereas the term *dispositif* (apparatus) was first borrowed from the philosophy of science, especially from Gaston Bachelard, it was then employed in the sense developed by Louis Althusser who rethought the imaginary as "an effect of historical determination."[31] Louis Althusser's theory of subjectivity, precisely to the extent that it emphasized the ideological character of the subject, stressed that the crucial characteristic of "positioning" the filmic spectator relied on the concealment of the apparatus and its work. As Baudry notes: "the spectator's immobility is characteristic of the filmic apparatus as a whole."[32] Film theorists argued that this spectatorial position allowed the cinematic device to both address and construct the viewer imperceptibly. From this point of view, the spectator's gaze was understood as being manipulated by the film viewing-

[30] "Thus film is like the mirror. But it differs from the primordial mirror in one essential point: although, as in the latter, everything may come to be projected, there is one thing and one thing only that is never reflected in it: the spectator's own body." Metz, Christian. *The Imaginary Signifier*. Trans. Celia Britton, Annwyl Williams, Ben Brewster, and Alfred Guzzetti. Bloomington: Indiana University Press, 1977. 45

[31] Copjec, Joan. "The Orthopsychic Subject: Film Theory and the Reception of Lacan." *October* 49 (1989). 58.

[32] Baudry, Jean-Louis. "Le dispositif: approches métapsychologiques de l'impression de réalité." *Communications* 23.1 (1975). 59.

experience. A more recent take on the notion of *dispositif* was developed by Giorgio Agamben, who underlines the importance of the notion of *dispositive* in Foucault's thought. Agamben establishes the *dispositif* as a network that links power and knowledge, giving a definition that is important to keep in mind as we move forward into the discussion concerning the socio-political implications of the grammaticalization of the sensible. For Agamben: "The apparatus is precisely this: a set of strategies of the relations of forces supporting, and supported by, certain types of knowledge."[33] In this sense, the *dispositif* is both a manipulation of relations of forces and a concrete intervention in such relations.

In the late 1960s in Paris, Kuntzel combined both semiotics and psychoanalysis to develop his own contribution to film theory. Under the doctoral supervision of Roland Barthes, Kuntzel developed a perspective on the relation between the film-work and the dream-work, which revealed how the apparatus of the film recalls processes of displacement and condensation much like the images produced in dreams. I will return to this in detail in chapter one but for now, let me briefly unpack Kuntzel's move away from theory to video. As early as the 1970s, Kuntzel started to be captivated by the works of experimental filmmakers such as Chris Marker and Michael Snow, and moved away from the print medium of theoretical texts to investigate the audiovisual medium of video. This move away from the printed text was neither an abandonment of writing, nor a renunciation of theoretical reflection. In fact, Kuntzel never stopped writing but he did it with video-art and within the setting of the performative space of the gallery. This

[33] Agamben, Giorgio. *What is an Apparatus? And Other Essays.* Stanford: Stanford University Press, 2009, 2.

investigation was made possible by the commercialization of the first portable video camera in the mid 1960s, the Japanese-made portapak video camera from Sony which was first introduced in the US in 1965 and in France in 1967. Initially, video only had image recording capacity; starting in 1969 it had videotape and from 1971 it had replay and rewind technology. With the portapak video camera, the 1970s quickly became a period of media activism and experimentation, both in Europe and in the United States, where the role of the cinematic image in political and artistic movements was reconceived from the standpoint of the function it played in relation to this new medium. In the late 1970s in France, Kuntzel began considering the work of video and questioned the implication of electronically produced images for both psychic and collective experience. Centered on the relation between memory and technology, Kuntzel's experimentations where dedicated to fostering the imbrication of mind, images, and repetition through the use of moving images. Kuntzel saw in the newly accessible medium of the video the potential to interrogate how moving images could develop a message related to the complex activities of both collective and individual minds. In the mid-1970s, he began developing multi-media installations and used video images to explore the relation between time and movement, particularly its phenomenological, ontological, and cultural manifestations. His installations, notes, and video works quickly became techniques of the self, which he used to apprehend the changes that were taking place in the tele-communicative world. Kuntzel's artistic practices function as *therapeia*, or *hermeneutica*, used in order to distill and interpret the world through one's care. Here stands the meaning of the last figure I touched upon earlier: the one of the therapist.

Together, the figures of the technician, the therapist, and the amateur provide entry points to tackle the function of Kuntzel's video art in making sense of the drastic changes happening in the field of sensation, perception, and projection.

Kuntzel's Video Art as Moving Image Theory

> An apparatus for "not thinking": for transforming, thinking differently (outside the linear). Image "invention": made randomly, haphazard, by chance. […] Hazardous image. Playing on this possibility—the imperfection of the video-image in relation to cinema: its in-definition?—this chance. That the image at last might not take, but flow, be fluid. Finally: not the whole image. Finally: a selection in that material—that image of traits one 'wants' to retain: a transition, infinitely easier than in cinema, towards generality: a much closer flatness, the tree represented on the video-screen as / tree /, than any cinema image. Edge of the text, hieroglyph. //[34]
>
> Thierry Kuntzel

In what follows, I primarily discuss Kuntzel's discrete images as artworks, and I contend that they have theoretical force *qua* art—specifically in their form as video installations.[35] Kuntzel's work can be divided into five interconnected categories: multi-material

[34] "Appareil à 'ne pas penser': à transformer, à autrement penser (hors du linéaire). Une 'invention' d'image: faite souvent par hasard, au hasard, une chance. […] Image hasardeuse. Jouer de cette possibilité—l'imperfection de la définition de l'image-vidéo par rapport au cinéma: son in-définition ?—, cette chance. Qu'enfin l'image ne prenne pas, flue, soit fluide. Enfin: pas le tout de l'image. Enfin: la sélection, dans le matériel—image des traits que l'on 'veut' retenir: passage infiniment plus aisé que dans le cinéma à la 'généralité': bien plus proche aplat, l'arbre représenté sur l'écran-vidéo de la généralité d'/arbre/ que toute image-cinéma. Bord du texte. Hieroglyphe. //" Kuntzel, *Title TK*, 169-170.

[35] I adopted a perspective developed by Mieke Bal in *Thinking in Film: The Politics of Video Art Installation According to Eija-Liisa Ahtila*, New York: Bloomsbury, 2013.

installation (1974-2006), video work (1974-2002), video installation (1980-2007), text about image theory (1970-1976), and text about video (1979-1996). Because the use of different supports informs his attempt to question newly engendered forms of expression, I make a point to refer not only to his video work, but also to touch upon his other installations. The medium specificity of the video objects in Kuntzel resonates with the material specificity of his installations that use morphing, photographs, neon, marble, and doors. Kuntzel's work presents a wide variety of formats whose goal was to prevent the commodification of the work of art in museum settings by placing the artwork back in the hands of the audience.

This movement took the form of a continuous attempt to postpone the possibility of a completed and closed experience of the work of art. In Kuntzel's artworks, writing with the moving image is deployed as a technic. This technic is used to ensure the viability of the textual, of that which inscribes its traces onto the realm of signifiers. In Kuntzel's work, the continuous and fluid movement of the writing process is transferred into shadow and light. There is no pen, no caméra-stylo either.[36] The video is employed as a tool whose usage is open-ended. Closer to the brush of a painter whose technics opens up a whole world of expression, Kuntzel uses the video so that writing, in realizing its fundamental lack of coincidence with itself, would not have to interrupt its movement.

[36] The caméra-stylo is a concept developed by Alexandre Astruc in 1948. Alexandre Astruc, "Naissance d'une nouvelle avant-garde: la caméra-stylo." *Écran français* 144 (1948), 5. While Astruc argued for an understanding of the camera as a pen that writes with light, his goal was different from Kuntzel's whose interest lies in experimenting with light as that which writes in one's eyes. On that point, see the superb notes written by Jacques Derrida after Helene Cixous' laser operation on her myopia. Hélène Cixous, and Jacques Derrida, *Veils*. Trans. Geoffrey Bennington, Stanford: Stanford University Press, 2001.

In one of his numerous notes, one can read his deliberate attempt to use video as a new mode of existence for writing:

> 3/2/79
>
> (Video.)
>
> No, never like today, I never had the impression that writing, the fluid ink, the liquid in movement, traced drawings—/to write is not writing, this thing that felt/that to write was light and shadow, lighting movement: text, yes, Text, he wrote, wrote, "kilometers of writing"—That it never stops, that the writing "thing" never falls. Video, that was it. Video is this: that writing never interrupts its movement, sketch thrown like a continuous burst onto the screen, trace maintain without the fall of the trace, to project without a project. Desire, desire: it never stops.[37]

Writing with video is thus a modality of expression that sustains the inherent movement of the "thing" which is written about. Kuntzel aims to preserve the textual quality of the writing format while developing it onto a new support: that of the screen. The continuous movement of the written thing never stops; it never falls into a dead-like dimension. There is no attempt to capture or to fix. On the contrary, Kuntzel's aesthetics plays with the pulsing of colors and the modulations of light to draw the path toward another perceptual scheme. This scheme is performative in the sense that it compels its audience

[37] Non, jamais comme aujourd'hui, jamais je n'ai eu l'impression que l'écriture, fluide de l'encre, liquide en mouvement, dessins tracés—/écrire n'est pas écriture, chose tombée/qu'écrire donc était lumière et ombre, mouvement lumineux: texte, oui, Text, il écrivait, écrivait, "des kilomètres d'écriture"—Que ça ne s'arrête jamais, que la "chose" écrite ne tombe jamais. Vidéo, c'était cela. Vidéo, c'est ceci: que l'écriture ne cesse jamais son movement, esquisse jetée à jet continu sur l'écran, tracer tenu sans tombée du tracé, projeter sans projet. Désir, désir: ça ne s'arrête jamais. Kuntzel, *Title TK*, 168.

members to be carriers of a message that is in the process of becoming, a message in gestation, in genesis. Kuntzel's work functions then as an attempt to access a space both inside and in-between images so the emergence of the message can appear as it is emerging onto the realm of signification.

The expressive potential of the video process relies on its ability to put time in movement, to inscribe writing as an ongoing and expressive experience. In Kuntzel's work, the absence of representation reveals the expressive movement of writing:

> 12/2/80
>
> Video.
>
> s.c.r.i.p.t.e.l.
>
> speed of the letter.
>
> movement of writing.
>
> multiple writing, letters knocked about,
>
> toppled over, like:
>
> shower of marbles, electrons, atoms,
>
> "origin" of the world.
>
> Before.
>
> [Science serving as (only) a poetic mediation.][38]

Refusing representation, Kuntzel's work gains serious weight by experimenting with seriality in the domain of pre-figuration. Seriality appears both on the level of the art form and on the level of the themes. On the level of the form, Kuntzel has developed

[38] Kuntzel, *Title TK*, 549-550.

several installations that question the art of the tombeau. In French, a *tombeau* is both a gravestone raised in memory of a deceased person and a poetic composition written by an artist.[39] Kuntzel created alternative media formats of the written *tombeaux* for figures such as the French linguist Ferdinand de Saussure (1979) [see plate 1], the American writers Henry James, Herman Melville [see plate 22], Edgar Allan Poe [see plate 24], the English film director Michael Powell [see plate 27], the Austrian-German filmmaker Fritz Lang and the French film director Jacques Tourneur [see plate 36]. These *tombeaux* deploy a reflection on the legacy of an artist as well as the transferrable quality of the artist's work into new settings, often revealing the importance of the medium in shaping the message displayed. If such an approach resonates with the so-called statement made by communication theorist Marshall McLuhan "the medium is the message" from 1956, Kuntzel's *tombeau* series pushes this line of questioning even further. For him, moving image experimentation is a means to interrogate the continuous relation between the machinery of the mind and expressions of time. In his work, the medium, and more specifically the screen and its multiple avatars (painting, frame, photograph, mirror, door), become the block from and out of which new expressive forms can arise. Kuntzel also uses the shape of the triptych such as in his video installations *Abandon (Ne me quitte pas)* [see plate 28], *Hiver (La mort de Robert Walser)* [see plate 17], *Printemps (pas de Printemps)* [see plate 20], *Été (double vue)* [see plate 16]. His video installation refers to the shape of television monitors assembled into one giant square such as in

[39] One famous *tombeau* is the poem by Stéphane Mallarmé "Le tombeau de Charles Baudelaire" dedicated to Charles Baudelaire in which the marble of Baudelaire's tomb is compared to a seat where his shadow comes to rest. *Le tombeau de Charles Baudelaire* is also a book published by Stéphane Mallarmé in 1896.

Nostos II [see plate 15], to the shape of photographs displayed in large format to create a gradual and spherical space in which the audience experiences the slow morphing of images, such as in *Tu* [see plate 23], in *Tampico (Non Lieu)* [see plate 21], and in *Une lettre* [see plate 31].

On the level of the themes, Kuntzel's work continually questions the different modalities of experiencing time through artistic means. In that vein, Kuntzel's work deals with notions of memory, anticipation, consciousness, and projection. His aesthetic deploys a wide array of technics to deepen the reflection on our experience of time and its relation to the machinery of the mind. Kuntzel sees in the video format the ideal tool to experiment with modalities of expressing time in both an analytical and theoretical way. In *Time smoking a picture* [see Figure 4], a video installation from 1980, Kuntzel interrogates the various phases that take place between under-exposed and over-exposed images, pointing to the renunciation of an impossible image. This image, he recalls in a note from 2/21/80, is the "'femininity lost, forgotten, barred, denied, killed. The 'woman' he was, what he could have been before the choosing of his sex, the losing of the other."[40] While the "he" refers to the man that appears onto the *mise-en-abyme* of the frames in the video, such reflection examines the apparatus of constraints imposed upon gender dynamics.

Kuntzel's work consistently raises questions that are both theoretical and aesthetic. His 1984 work *Nostos II* [see plate 15] imagines the passage from page to screen, in which the eye no longer has the power to separate, or distinguish between

[40] Kuntzel, *Title TK*, 554.

images. *Nostos II* is an installation consisting of nine black and white video monitors set out to give the effect of cinema screen dimensions. The nine screens are connected to nine video-recorders, each playing a different tape. The video is presented as a codex, a writing tablet in which images function as hieroglyphs. *Nostos II* engages in what Jacques Derrida calls "another mode of reading a book-like text."[41] Kuntzel's piece comes out of the numerous experimentations with cybernetic principles developed in video art at that time, and gives a strong entry point to the notion of cryptology in the age of digital computing. *The Wave* [see plate 34] from 2003 is an interactive video installation where the video rejects its viewer from accessing its content. If the audience gets too close, the audio-visual content is withdrawn. The use of sound, adds to the effect of rejection central to the piece.[42] This audio-visual installation creates what Michel Chion calls "the first synchronic audiovisual performance" in *Le promeneur écoutant.*[43] This installation prompts us to think about memory formation in today's mediascape, where most of our memories are kept and stored outside individuals, in technological devices that now have the agency to reject their users form accessing their content. The installation *La peau* [see plate 37]—the French word for the skin—functions as an homage to cinema and its filmic

[41] The text *VIDEOR* from which I borrow a short excerpt was part of Gary Hill's video *Disturbance (among the jars),* 1988, in which Jacques Derrida plays a part. Derrida, Jacques. *Penser à ne pas voir. Écrits sur les arts du visible 1979-2004.* Paris: La Différence, 2013, 306.

[42] The dimension of the rejection is central to Kuntzel's experimentation of our relation to media and media technologies. His very first video essay was titled *La Rejetée* [the rejected] [see plate 2], while several of his installations audio-visually reject their spectators from accessing the content displayed. It is for this reason that I refer to the notion of the reject in Kuntzel's piece, thus paying attention to the erasure of the subject and its replacement with a reject, rather than an agent.

[43] "Théâtre Océan. Loin, très loin dans l'histoire du monde, on peut s'imaginer que le premier spectacle audio-visuel synchrone—vagues et bruit des vagues—a dû être le bord de mer. L'océan étant la scène et le rivage la salle, il suffit de s'installer sur une plage ou au haut d'une falaise, puis d'ouvrir ses oreilles et ses yeux au spectacle qui s'y déroule—à toute heure, il y aura forcément des évènements, c'est garanti. Ce qui est rassurant, en plus, dans le show maritime, c'est l'illusion qu'il donne d'une solidarité entre vu et entendu." Michel Chion, *Le promeneur écoutant*. *Essai d'acoulogie.* Paris: Plume/Sacem, 1993, 20.

apparatus. In Kuntzel's last creation, the micro-element of the skin becomes the material for the visual experience, creating an environmental texture that recalls what film scholar Laura Marks calls the skin of film.[44] This installation demonstrates how our sense of touch and our relationship to the caress have been transformed through the proliferation of tactile devices. For this installation, Kuntzel used a 70mm projector, which projects the roll horizontally as opposed to vertically. There is no frame in the filmstrip, it is a digitally produced image transferred back to the strip. The movement of the moving image projected coincides with the movement of the *défilement* [scrolling] on the screen.[45] This horizontal *défilement* produces what Kuntzel called *l'émouvoir* [move], a word in French that condenses the idea of the movement of the filmstrip into film-projection, and of the spectator who is visually moved by the filmic experience.[46]

Video Art as a Field of Critical Inquiries

[44] In her excellent account of the memory of smell, touch, and caress coaxed in audiovisual form, Laura Marks points out to the often neglected aspect of bodily response to film and media. She argues for a reading of cultural sensoria as hybrid and voluptuous experience. Laura Marks, *The Skin of Film*, Durham: Duke University Press, 2000.

[45] Thierry Kuntzel, "Le défilement, a view in close-up." Trans. Bertrand August, *Camera Obscura* 1.2 2 (1977): 50-66.

[46] For Kuntzel, *l'émouvoir* is the key feature of the cinematic apparatus, it resides between "the generation of the projected film by the film-strip" and "the negation of this film-strip by the projected film." Kuntzel, "Le défilement, a view in close-up," 59.

Video does not simply remove the cinematographic passage from frame to frame. Video has the potential to make such a passage visible and to contextualize the transitions from the single unit of an image to its pictoriality. What makes video aesthetics so specific is that it features both components of design—that is, the way an object or a system is constructed—and also those of mediality—which define the conditions governing the framework of the appearance of media forms, including those of sounds. Both design and mediality are mechanisms that allow artists to engage in the medium of video for its potential to create powerful technological settings. Whether electronically written or digitally programed, the video image is a locus from which to analyze other media forms. As Paul Virilio puts it, "Video is an electro-optic milieu resulting from the undulation of reality."[47] Video is the direct and electronic production of a place as opposed to the mechanic representation of a fact.

In media studies, much emphasis has been placed on the reflexive aspect of the video medium, or video's ability to reflect upon both itself and other media forms.[48] Because video can echo preceding media forms such as music, sculpture, painting, text, film, and theater, its aesthetics is concerned with a reflexive function. The reflexive

[47] "Comment ne pas apercevoir ici le caractère essentiel de la vidéo: non plus la 'représentation' plus ou moins actualisée d'un fait, mais la *présentaion en direct d'un lieu*, d'un milieu électro-optique, résultat apparent d'une *mise en onde du réel* dont la physique électromagnétique offrait la possibilité?" Paul Virilio, "La lumière indirecte." *Communications* 48 (1988), 45.

[48] In *Video: the Reflexive Medium*, where video presents itself as a field of investigation for media theory, Yvonne Spielmann engages with a wide corpus of international artists such as Nam Junk Paik, Dara Birnbaum, Klaus vom Bruch, Peter Campus, Les Levines, Jean-François Guidon, Richard Sierra, Robert Cahen, Valie Export, Joan Jonas, to only name a few. The missing figure of this rigorous work on the reflexive medium of video art is Thierry Kuntzel. For that matter, my research develops in close relation with her work, in an attempt to continue the discussion concerning video's potential to be a medium of reflection, while emphasizing what Kuntzel's specific artwork may add to this interrogation concerning our audio-visual culture. Yvonne Spielmann, *Video: the Reflexive Medium*. Trans. Anja Well and Stan Jone. Cambridge: MIT Press, 2008.

function of video art is embedded in its hybridity and intermediality, two characteristics that create openness toward video technologies' potential for aesthetical change. In this dissertation, my goal is to analyze the reflexive function of video aesthetics. I focus on the staging of the video medium, its mode of display, distribution, and the proliferation of its usage in daily life to reveal the implications of analogico-digital images in shaping both psychic and collective life. In particular, I analyze how video is embedded in specific operations—from the pixelisation of the image to its algorithmically produced materiality. These operations, I argue, have come to be fundamental to thinking about how media grammaticalize our sensitive milieu.

Milieu refers both to that which surrounds the individual and that which is in between individuals. In my research, much importance is given to what Gilbert Simondon call an associated milieu, which defines a milieu in which the technical, the individual, and the ensemble are components that create a metastable environment, where both psychic and collective individuation is promoted.[49] However, more often than not, the milieu in which individuals evolve is not made of co-contributive tendencies. On the contrary, and as Bernard Stiegler points out, the milieu can be dissociated, meaning that it does not encourage the process of individuation because one of these tendencies has alienated the possibility of a metastable environment.

My work reevaluates our media culture from the standpoint of our relation to technics and technology. In order to present the socio-political implications of video art in the broader system of media, I analyze video aesthetics in different contexts such as

[49] See Simondon, *Du mode d'existence des objets techniques*.

performance, installation art, and social media to reveal the performative quality of the medium. I argue that video is not only self-reflexive, in the sense that the video medium has the capacity to produce forms that reflect upon their own medial components. Video also engages both the user and the spectator in its audio-visual operation. In attending to the ways that video engages those that surround it, I seek to help bridge a disciplinary gap between performance and media studies. This contribution is crucial in a world where media technologies perform with and without us, at a time when the algorithmic procedures of the big data economy shape the environment in which individuals evolve. As Anne-Marie Duguet suggests in her interpretation of video installation art, the medium of staging is central to video installation art:

> The [video] image becomes a stage that can be travelled across and browsed, without resistance. The stage is everywhere. […] Architectural image, stage to be explored, Volume of representation, it is always a question of conferring time upon space, nuances to artificiality, resemblance to the *informe*, to increase the multidimensionality of a representation. Finally, in its interactive condition, the image depends upon—ultimate loss of claim of autonomy—both the machine and the visitor that comes to actualize it.[50]

[50] "L'image devient scène qui se parcourt, se travers sans résistance. La scène est partout. […] Image architecturée, scène à explorer, volume de la représentation, il s'agit toujours de conférer du temps à l'espace, des nuances à l'artifice, de la ressemblance à l'informe, d'accroître la multidimensionalité d'une représentation. Dans sa condition interactive enfin, l'image dépend—perte ultime de prétention à l'autonomie—à la fois de la machine et du visiteur qui va l'actualiser." Anne-Marie Duguet, *Déjouer l'image. Créations électroniques et numériques.* Paris: Champon, 2002, 9.

In video installation art, technological settings offer a stage from which the image can be experienced, analyzed, and explored. The mode of presentation of video installation art is theatrical: it is a stage from where images can be seen as images.[51] Theatricality is an essential category of video installation art: it stands both as a principle for theorizing new modalities of perception and as a mode of existence of the analogico-digital image itself. As Mathilde Roman recently points out, "The apparatus for exhibiting the animated image, be it a monitor, a screen or a simple ray of light, is conceived as creating aesthetic conditions to be explored."[52] However, video installation art challenges the notion of a privileged space of seeing: it is not an object at the center of the representation, but a process that interrogates the condition of possibility of the moving image. The exhibition of a particular system of representation challenges the traditional form of theatrical representation. Instead of being positioned by the visual apparatus—a theater from where a play is presented or a film is projected—the spectator of video art is invited to turn around, to *flâner*, to skip, to stand.[53] The spectator of the installation is encouraged to be in his/her body the way his/her body responds to the space. As Claire Bishop points out,

[51] Video installation art is a modern form of *theatron*, an ancient Greek term that designates the place from which an action is seen. However, and contrary to the historical moment of Greek tragedy that coincides with the birth of history in the western sense of it, the digital forces a different relation to political engagement. For a discussion on the relation between theater and media as well as for the different ways of distinguishing theater itself as a medium, see Samuel Weber, *Theatricality as Medium*, New York: Fordham University Press, 2004.

[52] Mathilde Roman, *On Stage. The Theatrical Dimension of Video Image*, Bristol: Intellect, 2016, 5.

[53] In *Window Shopping: Cinema and the Postmodern*, film scholar Anne Friedberg argues that nineteenth century visual experience anticipated the contemporary virtual mobility through time and space that is characteristic of postmodern cultural identity. Anne Friedberg, *Window Shopping: Cinema and the Postmodern*. Berkeley: University of California Press, 1993.

"Installation art […] addresses the viewer directly as a literal presence in the space."[54] This insistence on the *embodied viewer* is a fundamental characteristic of video installation art. The visitor in the gallery—where most video installation art finds refuge—is introduced into a spatio-temporal journey delivered by a "*dispositif éléctronique*" [electronic apparatus], where both the design and the mediality of the image are placed at the center of the experience.[55]

By moving toward a conception of video aesthetics as both reflexive and performative, my research aims to situate video praxis as a medium that engages in a broader media genealogy where the role of the gaze, the presence of the body of the spectator in space, as well as its mobility play a specific role in redefining our relation to the image in our contemporary culture. Furthermore, such a genealogy situates the artist as an "image technician" to borrow the term developed by Yvonne Spielmann.[56] In the context of this research, an image technician defines an artist of the image who uses materiality, space, tools and technics to shape the ground from which a particular critical media form emerges. As we will see in the next section of this introduction, such an image technician produces both a reflexive and performative contribution to the technical condition of experience. It thus pushes us to reevaluate the notions of movement, time, and technics.

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[54] "Rather than imagining the viewer as a pair of disembodied eyes that survey the work from a distance, installation art presupposes an *embodied* viewer whoses senses of touch, smell and sound are as important as their sense of vision." Claire Bishop, *Installation Art. A Critical History*, New York: Routledge, 2005, 6.
[55] Duguet, *Déjouer l'image. Créations électroniques et numériques,*18.
[56] Spielmann, 73.

Media-theoretical Considerations

Kuntzel's work offers the ground on which to enter the realm of operations, functions, and invention of audio-visual phenomena. In other words, his work provides an allagmatic of time, which is a theory of the operations of time in relation to technical forms of expression.[57] Kuntzel's goal is thus not to represent but to open, in the realm of expression, possible pathways to foster the diverse modalities of experience. The endlessness of his aesthetics are embedded in specific art works such as *The Wave* [see plate 34] and *La Peau* [see plate 37] which deploy some gradualness rich in hermeneutic potential. His entire work is made of *and* becomes the basis for the development of a reflection on memory, the machinery of the mind, and the dynamic encounter between the audience and the art form. Kuntzel's work inscribed the materiality of his medium of expression in the forefront of his early museum installations: *Le Tombeau de Saussure (Double Entrave)* 1974 [see plate 1] which used a quotation from Saussure engraved in marble, and *Memory* [see plate 3] which used neon light to signal the inscription of a "memory" in space.

[57] In "Allagmatique, théorie de l'acte analogique," which constitutes a supplement to the first part his doctoral thesis titled *L'individu et sa genèse physico-biologique*, Gilbert Simondon outlines the project of an *allagmatique* as a theory of operational relation. In this text, Simondon defines operation as that which releases or transforms a structure. The allagmatic establishes the relation between operations and between operation and structure to reveal the transoperational relations that are concomitant to both. Such theory gives an entry point to reevaluate concepts of modulation, control, and governmentality. The notion of the allagmatic will be central in chapter three: "The Allagmatic of Race."

Video installations, understood as spatiotemporal objects, define the production of an experience in which time and space are put at the center of the performance. In the case of video installation art, the *durée* of the object, and its spatial mode of display, are two fundamental components of the experience. A temporal object is an object whose flow coincides with the flow of consciousness of which it is the object, in our case, the one of the spectator. In other words, a temporal object is an object constituted by time itself, such as a melody, a theatrical performance, or a film. The time flow of the object coincides with the time flow of the consciousness of the spectator. Drawing on Husserl's interrogation concerning the temporality of consciousness as a structure of flow, Bernard Stiegler points out in *La Technique et le Temps 3. Le Temps du cinéma et la question du mal-être* that it is only with the help of a technically produced spatio-temporal object that one can grasp the structure of consciousness.[58]

Since consciousness is constantly intentional, it is only via a temporal object that can be experienced more than once that one can grasp the structure of the flow as it constantly selects, retains, and apprehends through time. Husserl's notion of the temporal object has as much to do with memory, i.e. the selection in the flux of consciousness that it has with imagination, i.e. the projection and anticipation in the temporal flux of what will or should come next. Video installations are "technical objects," as explained by Gilbert Simondon in his seminal work *Du mode d'existence des objects techniques* that

[58] In this work, I will refer both to Bernard Stiegler, *La Technique et le Temps 3. Le Temps du cinéma et la question du mal-être.* Paris: Galilée, 2001; and *Technics and Time 3. Cinematic Time and the Question of Malaise*, Trans. Stephen Barker, Stanford: Stanford University Press, 2010.

highlights their autonomous evolutionary skills.[59] However, video installations are also analogical-digital objects, in the sense that they produce new forms of grammaticalization.

The Discrete Imaginary necessarily concerns the socio-political potential of discrete images. By the term socio-political, I refer to the effects of the production, distribution, and consumption of images in today's society. I locate this potential in the individual's ability to invent relational practices with tools, objects, and techniques. By placing the notion of invention at the core of the socio-political effects of discrete images, I stress the importance of redefining the notion of the imaginary outside of the so-called notion of ideology. While ideology was concerned with the content of thought and the *dispositif* that produced such content, my goal is to develop a theory of the operations of thought that are anchored in the associated milieu in which bodies, minds, and *techné* co-evolve. The allagmatic, or theory of operation as Simondon puts it is dedicated to the systems of information that shape today's fields of knowledge.[60] I do not oppose mental images (i.e. memory, phantasy), and discrete images (i.e. video, photographs, hologram). However, I stress the power that both discrete and mental images have to shape the potential for becoming singularized and non-calculable individuals. Or, following Simondon, I argue that discrete images do not only have the ability to affect the genesis of mental images, they are part of their evolution. While this genesis is understood as being structured as a cycle of phase shifts, starting with anticipation, then perception, and

[59] Simondon, *Du mode d'existence des objects techniques*.
[60] Gilbert Simondon, *L'individuation à la lumière des notions de forme et d'information*, Grenoble: Éditions Jérôme Million, 2013, 529.

symbolization, and finally invention;[61] I argue that the proliferation of technically and digitally produced images have the potential to interfere with such structure, thus challenging the possibility of reaching the last phase of a cycle, that is, the one of invention. The point of this work is to account for the co-constitutive characteristic of both discrete and mental images in shaping individual and collective's ability to invent new socio-political environments.

My argument concerning the notion of the imaginary and the phasual structure of images is twofold. In line with Gilbert Simondon, I argue that images are central to both the psychology and sociology of individuals. In this context, individuals do not refer only to the human. By individuals, I then refer to a category that has two other aspects: the *element* and the *ensemble*. In this work, I will explore the different ways in which the individual, the *element*, and the *ensemble* operate and are co-constitutive of their milieu.[62] One of the aspects of the image I discuss is the specific effect of discrete images in shaping socio-political behavior. This imaginary quality is activated in space and mediates effects that are not bound to the traditional ways of meaning making. Images do not evince one-on-one relationships. Discrete images are only relevant collectively. The different chapters explore the contributions to the production of collaborative-based meaning production afforded by different elements of the *dispositif* of video installation.

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[61] Gilbert Simondon, *Imagination et invention:1965-1966*, Paris: Presses Universitaires de France, 2014.

[62] In the introduction of *Du mode d'existence des objects techniques,* Gilbert Simondon defines the modalities of the genesis of a technical object through three different levels that are temporally coordinated: the element, the individual, and the ensemble. The non-dialectical and yet relational structure of these three levels of apprehension of the technical object are at the center of Simondon's philosophical project. Simondon, 17.

The flow of the dissertation intentionally oscillates between dense theorization—which includes the clarification of positions and differentiation of concepts—on the one hand, and descriptive, exemplary episodes drawn from Thierry Kuntzel's artworks on the other. I hope this rhythm will not be too disorienting. My intention is to present a text that opens onto different modes of theorization, where description and conceptualization share categories of knowledge production. The openness of this interpretative process allows me to engage with Kuntzel's work as the main object of my investigation while contextualizing the categories of knowledge that the reading of such object solicits. In other words, this research proposes a reading of Kuntzel's video object as the object itself solicits its reading, by reconstructing the immanent structure of perception, operation, and function embedded in Kuntzel's production of analogico-digital images.

Chapters Outline

To help with navigation, here is a quick tour of the dissertation's thematic drift. The main argument of this study is found in the tension between two tendencies, which I call *the discrete life of images* and *the imaginary life of analogico-digital images.* Both of these tendencies locate the potential of a discrete imaginary in its psychic and collective dimensions. This research targets three digital objects and pairs them with a concept: big data center and memory, network and language, and algorithmic governmentality and race. Each of these pairs are explored through Kuntzel's visionary work, which

constantly challenges the theoretical framework set up to understand the technical condition of experience. In addition, I employ specific philosophical methodological traditions in order to elucidate the dynamics associated with each pair: phenomenology, hermeneutics, and epistemology. The project is divided into three analytical and theoretical chapters on memory, language, and race to unpack the notion of the discrete imaginary from different angles, underlying the potential of its theoretical contribution to the field of media studies and philosophy.

In chapter one, "Open-Access Memory," I move away from a definition of media object as a static form of memory, to consider artificial retention in relation to open-access in today's media networks. This chapter tackles the automatization of memory-networks where the *sub*ject is more a *re*ject-rejected than an agent of the milieu in which he/she evolves. For instance, when someone takes pictures on a digital device, this simple action sets in motion a series of algorithmic tasks in which the subject has very little agency. The photos participate in the building of an algorithmic architecture of encoded souvenirs over which the subject has little control. This chapter focuses on Kuntzel's interactive video installation *The Wave* from 2003 [see plate 34].

In chapter two, "Technically, Speaking," I engage in a discussion on the rise of a linguistic and communicative capitalism as theorized by Jodi Dean and Frederic Kaplan. This chapter opens with Kuntzel's series of *tombeau*, and pays particular attention to *Le tombeau de Saussure (Double entrave)* [see plate 1]. This installation provides an opportunity to reflect upon the performative quality of digital networks and their capacity to exist outside the communicative sphere while simultaneously shaping its contours.

Drawing on the notion of double articulation, I question the semiotic relationship between meaning and audience in time-based viewing experience, and I argue that mediation operates across a network of technical systems that "technically address" its audience.

In chapter three, "The Allagmatic of Race," I consider the use of medical devices such as scanners and biometric passports in regulating transnational flows of migration. This chapter plots the development of algorithmic modes of control that extract data from bodies based on medical criteria, and I reevaluate theories of race from the standpoint of such bio-discrete operations. The chapter analyzes Kuntzel's video installation *Hiver (la mort de Robert Walser)* [see plate 17], which was first shown at the MoMA in New York in the summer of 1991. In this installation, Kuntzel used a computer-programmed camera set on a track to scan the body of African American performer Ken Moody. The movement of the camera resembles the one of a scanner and the setting, the one of an operational theater from which surgeons are watched. In the case of *Hiver (la mort de Robert Walser)*, a triptych that resonates with Nicolas Poussin's *L'hiver ou le déluge* 1660-1664 and the death in the snow of poet Robert Walser, the camera functions as a scalpel that dissects the body into discrete parts. Kuntzel's *Winter* gives an opportunity to question the new form of govermentality being deployed by devices that track, capture, and mine the body.

There are two major aspects of Kuntzel's work that I have not been able to rigorously develop in this dissertation. The first one concerns the notion of emotional prostheses in his work, while the second one concerns the notion of totemic sounds. In

the future, these respective chapters will focus on Kuntzel's photographs and morphing installation *Tu* from 1994 [see plate 23], as well as the different sonic aspects of Kuntzel's work found in *Echolalia* [see plate 8], *La peinture cubiste* [see plate 14] and *Moins une (autobiographie d'un autre)* [see plate 20]. As I develop this project further, these chapters will be opportunities to analyze the proliferation of emoticons in media writings and the practice of selfies in digital communication, as well as the proliferation of ambient sound in today's environment, thus constituting two remaining aspects of what I call the discrete imaginary.

In the conclusion of this dissertation, I question the origins, parameters, and context of the concept of discrete imaginary. I take the software as my main object of departure to question the complex relation between technique, culture, and theory in today's digital media landscape. In this section, I move away from a conception of the imaginary as usually depicted in relation to the moving image. The *cinéma de l'imaginaire* was crucial for establishing film theory and a certain understanding of the filmic apparatus in relation to its spectator. It is such *cinéma* that now needs to be reevaluated from the standpoint of the proliferation of media's algorithmic modes of operations. For that matter, Kuntzel's work is fundamental. Whereas film theory, as a printed medium, operated to supplement the film from a specific outside, Kuntzel's video work disassembles such outside by interrogating the moving image operation from within. Kuntzel's work thus collapses the distinction between film and theoretical commentary, granting the moving image medium of the video the transductive force from where theoretical implications emerge. While this research is the first sustained attempt

to analyze Kuntzel's theoretical contributions *qua* art for its anticipated visions on the digital condition that now shapes experience, it does not claim to have been the first attempt to rethink the relation between imagery and the cinematic form. On the contrary, this research has beneficiated from the work of scholars such as Pavle Levi and Christophe Wall-Romana more explicitly in their efforts to think of the cinematic outside of the cinema. In his book *Cinepoetry*, Wall-Romana points out to the cinematic origin of the notion of the imaginary and suggests that the imaginary "arose as a new term […] when cinema emerged as a dispenser of automorphic images that began by informing the very process of our visual imaginings."[63] For Wall-Romana, the imaginary is haunted by cinema.[64] As processes of image making, the imaginary and the cinematic are understood as apparatuses of image inscription. My work is highly influenced by such perspective.

However, my object of study is taking another direction. Wall-Romana is looking at the emergence of a cinematic imaginary in the print culture of poetry and reveals the grounding forces that shaped imagination in relation to techniques and apparatuses such as writing and phantasmagoria. In my research, I am looking forward to the rise of another kind of image making: the algorithmic production of the digital image. I anchor my work in Kuntzel's video work which encompasses the shift from analog to digital at the turn of the twentieth century. For that matter, I draw from Bernard Stiegler's concept of arche-cinema that underlies the cinematic structure of consciousness, and from Gilbert Simondon's notion of images as live organisms. This conclusion asks what kind of imaginary structure is the software implementing onto consciousness. This last section

[63] Christophe Wall-Romana, *Cinepoetry*, New York: Fordham University Press, 2013, 23.
[64] Wall-Romana, 30.

fosters a discussion concerning the notion of the imaginary in relation to algorithmic modes of creating and distributing moving image artifacts.

By putting in dialogue the work of Thierry Kuntzel and the critique of misoneism to be found in Gilbert Simondon and Bernard Stiegler, my research stresses the importance of a visionary relation to culture and technology. Kuntzel's work anticipated the deployment of a discrete imaginary that short-circuits the flows of emotions, desire, and investment in today's digital world. By feeding forward digital patterns extracted by the preemptive power of digital devices, the digital realm has created a discrete imaginary that calls for an awareness toward the pharmacological dimension of these operations. It is by placing the notion of artistic anticipation along with the poetic meditation of analogico-digital moving image that this research hopes to foster a discussion concerning the plan of consistence in today's ever-expanding media world. In this context, perception as offered by the work of Kuntzel is understood as a neguentropic action that creates, within the real of experience, different bifurcations. These bifurcation, or *espacements* to borrow a poetic operation fostered by Mallarmé, are also *frayages* in Kuntzel's moving image universe and *disparation* in the theoretical work of individuation developed by Simondon. Together, these notions wish to open up a field of critical inquiry to anticipate the drastic changes imposed by the obscure—in the sense of unreachable—and yet omnipresent realm of digital artifacts.

CHAPTER ONE: OPEN-ACCESS MEMORY

The accent I have placed on the problem of the digital epistémè and the systemic grammaticalization of the sensible calls for elaboration and development. In this chapter, I question the link between memory and the rise of big data center in today's digital economy. At a time when scientific research found a way to crack open DNA in order to store data, the question of where memory emerges, what purpose it serves, and where it is stored are burning ones.[65] In this chapter, I look at several of Kuntzel's videos to argue that Kuntzel's work anticipated the drastic changes in our modality to collect, recollect, and perceive. I develop the notion of open-access memory not to say that the humans have open-access to the data that are being collected upon them, but that the newly engendered relational entities of the algorithm are creating a global system of artificially extracted memory. It is from the standpoint of a mimicry toward a so-called open-access to our own digital data that I aim to question the development of an open-access memory network in which the human subject is more a *re*ject, rather than an agent of the milieu in which he evolves. While open-access designates online access outputs that are free of restrictions both on the level of access and use, in this chapter I question the limits of the open access in terms of memory storage and data recollection.

Data Centers and the Memory E-Book to Come

[65] Bioengineers and geneticists Georges Church and Sri Kosuri from the Harvard's Wyss Institute found a way to treat DNA as any other type of storage devices. Because DNA, which contains instructions for the development of life, is the only thing so far that cannot age in the same way that magnetic tape can age, it has quickly become the most efficient place to store data. Sebastian Anthon, "Harvard Cracks DNA storage, crams 700 terabytes into a single gram." August 17, 2012 http://www.extremetech.com/extreme/134672-harvard-cracks-dna-storage-crams-700-terabytes-of-data-into-a-single-gram.

Over the last decade, data storage has become a multi-million-dollar industry, with substantial investment going toward the development of backup power supplies that can support the overall explosion of digital information. The most significant is the Digital Reality Trust, which owns the world's largest data center: the 1.1 million-square-foot Lakeside Technology Center in Chicago.[66] Inside, you do not get to see typical forms of recorded media such as photographs, cinematic moving images, or video files. On the contrary, you see what seems to be an infinite number of shelves holding processors and networked machines that store bits of data. In here, you cannot grab a folder and have access to the content not because you need another machine to translate it into a readable form, but because the center does not hold data for you. The center operates by and in the service of other machines: humans are not the main receptors of Big Data's informational circuit.

While traditional media gathered information directly drawn from the realm of human experiences, data storages—like the Digital Reality Trust—are fed by machines that automatically extract and capture information to which we lack any direct access. Mined from the technological operations that punctuate our daily life, data is produced by digital networks such as Google Map, Facebook, and Amazon that represent an extensive databank of individual information, social associations, and consumerist behaviors.[67] As media theorist Mark Hansen puts it: "recordings now occur in the service of myriad of

[66] http://www.datacenterknowledge.com/special-report-the-worlds-largest-data-centers/worlds-largest-data-center-350-e-cermak/. 30 Sept. 2015.
[67] Martyn Thayne, "Friends Like Mine: The Production of Socialized Subjectivity in the Attention Economy." *Culture Machine* 13 (2012), 1-23.

small-scale technical processes to construct the connections that underlie contemporary media networks." [68] In our digital age, humans are not the main agents of the recorded traces they produce.

With an Internet population that grew nearly 20% since 2013, and is now exceeding 3.3 billion people, the need for digital storage has not only increased, it has also drastically changed the way people relate to the past.[69] The Big Data industry has changed the way we relate to information in two major ways: a) data storage is intended for machine usage, restricting humans from accessing the content; b) data storage functions by extracting information from operations that occur beyond the realm of human perception. These changes not only alter the human relation to information but drastically modify memory formation.

Memory relies on input, storage, and processing. In this sense, memory offers a conception of time that is anchored in the layering and intermittence of these three concomitant functions. Central to input, storage, and processing is the retention of information by different means. As philosopher Bernard Stiegler stresses, expanding upon his reading of phenomenologist Edmund Husserl's theory of time consciousness, there are three different types of retention. Primary retention defines the selection of information in the perceptive flux of consciousness. Primary retentions are thus anchored

[68] Mark B. N. Hansen, *Feed-Forward: On the Future of Twenty-First-Century Media*. Chicago: University of Chicago Press, 2015, 40.
[69] http://www.internetlivestats.com/internet-users/. 2 April. 2016.

in the here and now of temporal experience.[70] Secondary retention defines that which is retained in memory from the first selection that constitutes the primary retentions. Secondary retentions are no longer perceptive but imaginative: they require imagination as an internal capacity to make us aware, in the present, of formerly retained information. In other words, secondary retention shapes the selection of primary retention based on information already collected or stored. Finally, tertiary retention, a notion specific to the work of Bernard Stiegler, defines that which is specific to human beings: the *hypomnesic* sedimentation created through several generations and exteriorized in space and time via artifacts.[71] In *De la misère symbolique. La* catastrophè *du sensible*, Stiegler emphasizes that tertiary retention is a condition for the emergence of primary and secondary retention: "Tertiary retention is not a mediation because it does not come after: it is not that which gives a mediated access to the immediate, but that which constitutes its possibility."[72] Understanding tertiary retention as a condition of possibility for accessing the immediate flow of consciousness is crucial, not to say urgent, when our contemporary forms of tertiary retention are being produced at the speed of light. It is because the sensible, which allows the selection in time (primary retention), is technically constituted by formerly exteriorized memory that the noetic soul has inherited, that the notion of

[70] In *On the Phenomenology of Consciousness of Internal Time (1893-1917)*, Edmond Husserl points to the distinction between momentary grasping and enduring act. While the duration of the act of selection is crucial to thinking about notions of attention, we will focus for now on a notion of primary retention as a non-differentiated act.

[71] A concept central to Bernard Stiegler's philosophical and political project, the notion of tertiary retention is everywhere to be found in his work, starting with the first volume of *Technics and Time* where he analyzes it in terms of epiphylogenesis. Bernard Stiegler, *Technics and Time, vol 1. The Fault of Epimetheus*, Trans. Richard Beardsworth, Stanford: Stanford University Press, 1998.

[72] "La rétention tertiaire n'est pas une médiation, parce qu'elle ne vient pas après: elle n'est pas ce qui donne mediatement accès a l'immédiat, mais ce qui en constitue la possibilité même." Bernard Stiegler, *De la misère symbolique. La* catastrophè *du sensible*, Paris: Galilée, 2005, 189.

tertiary retention is crucial for understanding the remodeling of humans' relation to memory in the age of the Big Data industry. This original memory forms a sediment through which one cultivates her or his own relation to the psyche and to the collective. Psychic and collective individuation, understood as a phasic expansion of the realm of the sensible, depends upon our relation to the pre-individual milieu produced by technics, understood as tertiary retention. Tertiary retention includes artifacts that function as memory supports, *hypomnemata*, that are essential in the process of both psychic and collective individuation.[73] These *hypomnemata* are supports such as notebooks, photographs, and recordings created and used to retain information. They function as exterior forms of memory, as prosthesis that supplement the finitude of our internal capacity.

From *mnesic* externalization to data extraction

Media theorist Wendy Chun insists on the conflation of memory and storage in today's digital media, a conflation that is "due to how everyday usage and parlance arrests memory and its degenerative possibilities in order to support dreams of superhuman digital programmability."[74] Such programmability is a response to and a product of the

[73] Concerning the notion of *hypomnemata*, see Michel Foucault, "L'écriture de soi," *Dits et Écrits*. Paris: Gallimard, 2001, 1234-1249.
[74] Wendy Chun, *Programmed Visions: Software and Memory*. Cambridge: MIT Press, 2011, 149.

continuing change in relations between objects and subjects that are brought about by computing as a neoliberal form of governmentality.[75] For Wendy Chun, the programmability of social behavior resuscitates dreams of sovereign power and depends upon the incorporation of "historical programming hierarchies within the machine."[76] In this context, computers structure individuals' behavior to be determined by the fulfillment of certain desires that imperceptibly and yet materially support a larger system, thus becoming the most powerful form of neoliberal management. Important here is that the algorithmic extraction of information not only shifts the regime of production of tertiary retention in the digital age, but it also changes the way individuals perceptively select in time and imaginatively recollect through time.

While the externalization of memory onto technical supports—such as writing a note, downloading a picture, and creating a file—was mainly performed by individuals for their individual uses, the digital introduces a drastic shift in the production and transmission of tertiary retention. Memory has become *aphaeretic*: it is extracted by external and interconnected devices that run at an infra level, below human's sensory-motor capacity. Not only do algorithms extract data from us but also they transform this data according to a set of instructions to which we lack any access. Here the figure of the programmer plays an important role in both creating a set of instructions and developing a platform from which data can be accessed. In the age of Big Data, the figure of the programmer carries the weight of enabling a paradox: he is the person in charge of opening a set of instructions to be performed, and yet no one else should have access to

[75] On this point, see chapter three, "The Allagmatic of Race."
[76] Chun, 34.

the encoding structure he creates. With such a figure in mind, one can sense the paradox of the notion of access in open access. Memory is not only *prosthetic*, or exteriorized onto technical objects. Cellphones, tablets, and computers do not simply help us keep track of events that punctuate space and time: they algorithmically extract data from us and store it into "ubiquitous networks and distributed digital storage devices."[77] This algorithmic mode of extraction, i.e. data-mining, has created a global network of tertiary retentions that is in constant expansion. This expansion occurs at the speed of light, leaving no time for humans to catch up with the applied formulas that are producing data before and around them.

Because the production of tertiary retention has become computational, the dynamic system of selection (primary retention, hereafter PR) and recollection (secondary retention, hereafter SR) is being remodeled. The speed at which algorithms track, capture, and stock information is superseding the enduring process of *mnesic* trace formation, its sedimentation and evolution over time. The moment of selection that defines PR is being overridden by a saturation of recollected information that now defines SR. The overflowing amount of stocked information in tertiary retention (here after TR) destabilizes both processes of selection and recollection, flooding the individual with data that he or she can no longer process on his own. The ever expanding horizon of tertiary retention disarms the individual by destroying his or her ability to make a decision based on his or her own data bank, i.e. organic memory. Decision-making has

[77] Steve Goodman, and Luciana Parisi, "Machines of Memory." *Memory: Histories, Theories, Debates* (2010), 343.

gone computational by the ongoing process of data-mining which produces a data bank that now leads and drives individual's behavior.

A decisive shift in temporal orientation thus takes place. Whereas memory was an act of commemoration, a means through which one makes sense of the past, computer storage looks toward the future, revealing the program-driven quality of daily operations. Media no longer run for us, instead they have become thoroughly embedded in our environments, acting at an infrastructural level to shape the very ground of our perceptions and thus our experience. Media such as cellphones, GPS, smart TV, and computer are generating data that anticipate for us our future choices. In this chapter, I ask how digital platforms are reconfiguring relations to media time in networked society. Specifically, I examine how the rise of Big Data reconfigures the selection, recollection, and retention dynamics at the core of human memory, and I pay particular attention to the data-driven dimension of today's futurity. This chapter aims to tackle the shift that tertiary retention faces in a world where media can no longer be conceptualized as mere prosthesis for expanding cognitive capacities. I ask: What if we read Big Data as an ever-expanding network of tertiary retention that has a material agency of its own, not as a mere consequence of the finitude of our retentive aptitudes, but as a symptom of the development of a memory-environment where the *sub*ject is more of a *re*ject, rather than an agent, of the milieu in which he or she evolves? By agency, I refer to the media object's capacity to operate by rejecting or certainly bypassing the realm of our sensory-experience. In this context, I question the relationship between memory and moving image to reevaluate the milieu in which human and machine co-evolve. Such a

relationship creates or disrupts the metastable environment in which an associated milieu can emerge.[78] In questioning memory in relation to media futurity—that is, media's tendency toward programmability—this chapter considers the performative agency of media objects as operating in a proliferating techno-scape of memory retentions.

Caring for the Ghost: Kuntzel's Invention of a Haunting Machine

To address the concern of memory in relation to algorithmic modes of data-collection, I turn to French media theorist and video artist Thierry Kuntzel whose video works propose alternative ways of writing in media time. Because Kuntzel's work is haunted by the question of memory in relation to technique it offers a ground from which to analyze selection, recollection, and retention in relation to audio-visual movements. Mostly exhibited in museum galleries, his video projects appear in settings where the screen is turned into a surface of visual materialization, thus offering a dynamic place from where to interrogate the becoming of a *mnesic* trace in relation to time and movement. In his series of experiments with the hybridity of screen surfaces, beginning with the neon installation *Memory* in 1976 [see plate 3], passing through video installations such as *Time Smoking a Picture* in 1980 [see plate 12], Kuntzel has staged the emergence of the visual onto the materiality of the video object. For him, the video functions as a surface

[78] On the notion of associated milieu and the notion of metastability, see Simondon, *Du mode d'existence des objets techniques*, especially "L'homme et l'objet technique," 121-209.

that is being activated by multisensory modalities (image, text, sound) to reflect upon the function and significance of the screen in new mediatic forms. For Kuntzel, the media technology of video becomes a means through which to inquire into the audiovisual traces that are erased, redrawn, and appearing again onto media surfaces.[79]

In the first part of the chapter, I analyze *Nostos I* [see plate 6], an electronic art video from 1979 in which Kuntzel experiments with the link between the surface of the screen and the use of electronic light as a brush that reveals patterns of time embedded in the image. This section is dedicated to the fluidity of the emergence and disappearance of the trace into continuous image-flow the video. In the second part, I examine *Echolalia* [see plate 8], a video from 1980 in which images are traces that visually echo other traces. In the manner of a palimpsest, the video becomes spectral traces to develop an expressive form of electronic writing. This video, based on audiovisual echoes, creates the opportunity to rethink the legacy of Freud's theory of the psyche understood as an optical system and as a system of inscription. This section will be dedicated to the development of an archaeological work of the gaze in Kuntzel's video work and aims to reevaluate the relation between the dream-work and what I call the video-work, namely the work of the analogical-digital image in shaping our relation to memory. Finally, I explore *The Wave* [see plate 34], a digital and interactive video installation from 2005 in which the video rejects its viewer preventing him or her from accessing its audio-visual content as, when an audience member gets too close to the screen, the video stops both

[79] Here and throughout the chapter, I refer to the screen as a surface, a notion that I use in relation to art historian Giuliana Bruno's use of the term in her recent book *Surface. Matters of Aesthetics, Materiality, and Media,* where she examines how the visual manifests itself on the surface of things. Giuliana Bruno, *Surface. Matters of Aesthetics, Materiality, and Media.* Chicago: University of Chicago Press, 2014.

movement and sound and turns the screen into a black and white postcard-type of visual. This last piece provides an entry point for rethinking the Freudian theory of the psyche—as optical system and system of inscription—from the standpoint of interactive media work. Such a standpoint directly questions what has happened to the palimpsestic process of *mnesic* impressions in an ever-changing media world where archives are being produced at the speed of light, by and for machines.

These detailed analyses of Kuntzel's media artwork demonstrate the theoretical value of his artistic insights for thinking about how the digital platforms are reconfiguring relations to the past in today's networked society. At the center of this chapter will be an interrogation regarding media objects, i.e. tertiary retention, as acquiring an agency of their own thus remodeling the relation between memory and futurity.

The Brush of Time

> Nostos: the return—return from which proceed all images, always full of an already, always already inscribed, returned: never simply present.[80]
>
> Thierry Kuntzel

In Kuntzel's artwork, the video is a locus from which matter, such as lights, colors, and shapes, manifests itself onto a screen, allowing one to see the genesis of forms. In one of

[80] "Nostos: le retour—retour d'où procèdent toutes les images, toujours bruissantes de déjà, toujours déjà inscrites, revenues: jamais simplement présentes." Kuntzel, *Title TK*, 156.

his notes, Kuntzel explains his intention to work with the screen as a surface: "Not window but surface, not depth but skin. There is no volume other than time—layered—not space, the imaginary plunge."[81] The screen is used to suggest the unfolding of lights and the passing of time in the image. In her meditation on the layers of depth that the mediatic surface can unfold, Giuliana Bruno accounts for the surface as a "generative and defining aspect of the aesthetics of modernity."[82] For her, "a non-linear sense of time and layers of temporal density" emerges from the surface of media.[83] In Kuntzel's work, the ongoing emanation of impression shapes the temporality of the video form. Kuntzel uses the video screen as a thick and opaque surface to analyze the enabling condition of moving images and to engage with the becoming of the visible into formal traces.

Nostos I [see Plate 6], a video from 1979 shot with a *paluche* camera, presents a series of temporal experimentations on screen: 1) slow variation of intensity made visible by the passages between white, blue, and black; 2) inscriptions and withdrawals; 3) intermittences of a rapid luminal pulsation. What *Nostos I* does is effect a constant interplay of these three temporalities within the united temporal continuum of the videotape. In this video figures appear and disappear to create an aesthetic of emanation where forms are at the center of an exploration of different modalities of vision:

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[81] Kuntzel, *Title TK*, 489.

[82] "Here the surface is considered a generative and defining aspect of the aesthetics of modernity, and reconsidered as an element of mediatic transformation as we observe a 'resurfacing' taking place on the contemporary screen." Bruno, 55. Much needs to be said of the relation between the surface and the screen. While this chapter attempts to rethink such relation, it will need to further develop the question of the surface in relation to Jean-François Lyotard's work on the question. See especially, Jean-François Lyotard, "After Six Months of Work…(1984), *30 Years After* Les Immatériaux*: Art, Science, and Theory*. Eds. Yuk Hui, and Andreas Broeckmann. Lüneburg: Meson Press, 2015. I will turn my attention to Kuntzel's video *La desserte blanche* [see plate 10] presented in 1985 for "Les immatériaux" at the Centre Georges Pompidou Paris.

[83] Bruno, 116.

"movement of the object or 'movement' of light, […] the movement is only a name for intensities."[84] The screen displays moving traces that are continuously being erased, redrawn, and traced again. Made of the color blue, theses traces appear on a white background. These series of traces are composed of visual sequences of the same movement and operate as visual models to question the becoming of a visual form on screen. In one of his notes, Kuntzel deliberately addresses the screen as a memory volume, a videogram that expresses "the mad desire to make light visible:"

> Under the image. The silhouettes, actions, objects appearing on the screen are never simply *this*, simply nameable: representation is lacunary, uncertain, hypothetical. Everything is always in the process of being traced, erased, redrawn, erased again. A sketched that would never finish being sketched. The fluidity of before the picture, the scene, the cut, the effect of presence, the conclusion. Something like the mad desire to make light visible.[85]

The impression of fluidity is only one result of exploring the temporal dimension—the flow—of the video image. *Nostos I* weaves multiple temporalities in a single videogram: the time of the trace (the frequencies make the image waver at varying speeds), the time of inscription and erasure (follow spotlights are used like light-bearing paintbrushes), the time of color variations (where the color literally "passes" from white to blue, from blue to black, from black to blue, from blue to white), and the time of repetition:

[84] Kuntzel, *Title TK*, 135.
[85] Kuntzel, *Title TK*, .

> Etymologically, *nostaligia*: the pain of the return. *Nostos I* – the return then, without the pain –proceeds through repetition, inserting short bursts —at times bordering on the subliminal—of sequences to come or already seen into the series of images that appear as loops in the slowed rhythm. Taking up the motifs again, all treated as flat surfaces, the videogram becomes a volume: images placed one on top of the other—a memory volume.[86]

The videogram is a tool with which Kuntzel writes with light. The trace is that of a lighting brush that emerges in space, thus making visible the unfolding of time. Through series of traces, the screen functions as the chromatic revelator of shapes. Images manifest themselves like a precipitate during a chemical reaction: the screen is the liquid from which the visual emerges.

> Fluids.
>
> Uncertainties of
>
> Perception.
>
> Liquidity of the picture.[87]

As it unfolds in colors of mediatic impressions, the work of Kuntzel's video thematizes the screen as a support upon which processes of blending traces appear. These imprints are of different visual intensities: their colors change to melt with the background or to stick out, their shapes evolve, passing from lines, to circles, spheres, and dots. In *Nostos I*, the light is used as a brush for the making of the visual onto the surface. In one of his

[86] Thierry Kuntzel's dvd-rom, *Title TK*, section archive.
[87] Kuntzel, *Title TK*, 491.

personal notes on his video experimentations, Kuntzel explains his deliberate attempt to use light as a paint brush:[88]

> A beam—a light brush—traverses—scans—the elements of a scene--of a picture--which is never reconstructed, which never becomes entirely visible. The time of the course, of the gaze, of deciphering, of the trace, of beating a path, time of seeing and of memory — what have I seen, what do I see, how does it now take place, does it have a sense (direction)? —. […] …Like the exploration of a hole, as one would say a chasm, speleology, of a memory hole…[89]

In using a *paluche* camera as a brush, Kuntzel expands on his long-standing practice of exposing the appearance and disappearance of traces, suggesting the making of visual intensities into material forms. In his particularly insightful account of Kuntzel's video work, Raymond Bellour emphasizes the multi-layered composition of the video and the genealogy of the image it allows:

> It has neither surface nor depth; it is immaterial to say that the surfaces sink back into it, or that its depth is shrunk to that of a layer of a film. Nor can we really make the distinction between light and darkness (in which fiction finds its pretext); it is more a stratification of blackness and of colored vibrations, as if they were lit or darkened from within, inside the mass of form and lines. This image is multi-layered, mobile, translucent; it

[88] One aspect that I would like to develop is the relation between the brush in Kuntzel's video and the trace of calligraphy.
[89] Kuntzel, *Title TK*, 481-482.

> is made up of super-imposed layers, of dissociating strata. We could just as easily say: there is no body in this image. Or on the contrary: this image is only that, body.[90]

The visual stratification and the layered quality of the image open up a visual aesthetics where the passing of time is made visible. One distinctive quality of Kuntzel's work is that the modulations of light function as the main temporal component displayed on screen. In other words, the lighting produces the movement of colors and patterns of time. In one of his many notes, Kuntzel refers explicitly to the video screen as a trace surfacing:

> Unlike projection-cinema, the picture comes as if from the interior, from the back of the screen--from the "canvas," from the blank space--: to materialize the "depth" of the block, infinite depth, language-image volume, from which each utterance, each particular image seems to spring, to rise up (surface of the screen, skin, contact zone, my eye against this skin: gaze).[91]

In the context of Kuntzel's video, the repetition, acceleration, and suspension of traces on the screen create the rhythmic visuality of video-time. The textural quality of the surface of the screen functions as an exploration of patterns of time where the traces emerge from "gradual variations of intensity," "etching and erasing," "intermittences," to often "rapid lightbeat."[92] To think of screening in the sense of lightbeat and textural quality directly

[90] Raymond Bellour, *Between-the-Images*, Zürich: JRP Ringier, 2012, 193.
[91] Kuntzel, *Title TK*, 483.
[92] Kuntzel, *Title TK*, 482.

reference to the work of Hungarian painter and photographer László Moholy-Nagy (1885-1946) who emphasized light as a way to texturally connect painting to photography, architecture, and film. Moholy-Nagy's work strongly resonates with Kuntzel's experimentation with the surface of light as a material form of passage. This passage on the surface of the screen is link to a process of appearance and disappearance that punctuates the visual experience, like the signals produced by a lighthouse that appear within the darkness of the sea.

By steering away from the cinematic form of representation, Kuntzel's work radicalizes the image displayed on screen and opens up a space of varying amplitudes and visual intensities. This space becomes the critical stage from which cinema can be questioned, repositioned, and extended. What matters is not so much how video is not cinema, but rather how video renews the conditions of the cinema-image.[93] In other words, Kuntzel's video work attempts to create a visual apparatus that questions the cinematic medium.[94] As Raymond Bellour suggests, the traces are the ones "that memory leaves behind, wipes out and recaptures again, the agitation and pain of a memory at work."[95] The screen becomes the visual field onto which processes of remembrance and disappearance are explored through the modulation of intensities.

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[93] Bellour, *Between-the-Images*, 172.

[94] Keeping in mind the analogy between the emergence of an image and the chemical reaction produced by the fluid quality of the screen, one could argue two things. First, that Kuntzel's visual work operates a transduction in the sense proposed by Simondon. Second that Kuntzel's aesthetic is in direct resonance with Bachelard's phenomeno-technics. See specifically *L'eau et les rêves.*

[95] Raymond Bellour, "Video Writing." *Illuminating Video*. Eds. Doug Hall, and Sally Jo Fifier. *An Essential Guide to Video Art.* New York: Aperture, 1990, 422.

The Archeological Work of the Gaze

> Writing will then enter on the scene.
> Trace will become *gram*;
> and the region of fraying a ciphered spacing.[96]
>
> Jacques Derrida

> The real media archive is the *arché* of its source codes.[97]
>
> Wolfgang Ernst

Central to the media experience in Kuntzel's work is an internal movement—the brush of time, the beam of light—that pertains to the image. The images on screen are given an internal movement that is the result of the assemblage of different time patterns: variation of color intensities, tension between inscription and withdrawal, intermittence of lighting pulsation, oscillation between presence and absence. These patterns are made sensible to the viewer through the appearance and disappearance of audiovisual traces that give a spectral quality to the experience.

In his video *Echolalia* [see plate 8] from 1980, the profile of two seated silhouettes appears from the back of the screen via an ongoing visual pulsation of appearance and disappearance. At first glance, the organic quality of the image recalls the internal organs of a body. In an almost medical imaging aesthetic, the screen seems to

[96] Jacques Derrida, "Freud and the Scene of Writing" *Yale French Studies* 48 (1972), 84.
[97] Ernst, *Digital Archive*, 57.

suggest the breathing of lungs, or the neuronal activity of a brain. Kuntzel's effort to work from within the inside of the screen permits him to develop a rather suggestive and ongoing exploration of the visible. In one of his notes from November, 19 1979, Kuntzel suggests the audiovisual ritual that emerges from *Echolalia*: "May it be of this mirror-type of relation, of this false-mirror, of doubtful symmetry as like in a secrete ceremony (*Mutus liber*) of which the spectator would ignore the terms—would imagine them."[98]

This video is a secrete ceremony in which the key to access meaning resides in the imaginary of the spectator. In *Echolalia*, the traces echo the potential of a figuration and yet, their ongoing movements and pulsations escape the realm of fixed figuration. To become full signification, these traces need to inhabit the imaginary space of the spectator. Furthermore, and in an almost *musique concrète* fashion, traces on screen are explored for their resistance, i.e. persistence in echoing and producing aesthetic *ricochets*. The vibratory pulsations of the sound and the image create meaning through imperceptible touches of change.[99] It is in the fluctuating persistence of the audiovisual trace that a spectral aesthetics emerges from the video, granting the spectator's experience with a ritual atmosphere of initiatory-like composition.

This spectral aspect of the image recalls what Jacques Derrida says in a film interview with Bernard Stiegler transcribed in *Ecographies of Television*, where the two theorists discuss the need for a politics of memory after the publication of Derrida's *Specters of Marx*:

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[98] "Qu'il soit de ce rapport de miroir, de faux miroir, de symétrie douteuse comme d'une cérémonie secrète (*Mutus liber*) dont le spectateur ignorerait les termes—les imaginerait." Exhibition catalog, *Thierry Kuntzel*. Paris: Éditions du Jeu de Paume, 1993, 96.

[99] Especially important in this piece is the phenomenon of the echo that I want to further develop.

> What has, dare I say, constantly haunted me in this logic of the specter is that it regularly exceeds all the oppositions between visible and invisible, sensible and insensible. A specter is both visible and invisible, both phenomenal and non-phenomenal: a trace that marks the present with its absence in advance. The spectral logic is de facto a deconstructive logic.[100]

The spectral quality of the trace is that which deconstructs oppositional binaries such as the inside and the outside, the living and the dead, the visible and the invisible. What is at stake here is a compositional, rather than oppositional, presence. As in *Echolalia*, where the assemblage of visual traces slowly gives shape to an organic and yet undefined image, the compositional quality of the trace is made of different patterns such as pulsation, repetition, variations, and echoes to form a temporal form that exceeds perception. Kuntzel uses the screen for its textual and textural qualities, revealing an archaeological work of the gaze.[101] In Kuntzel's work, the ghost-like movement of the trace is linked to the textual and palimpsest qualities of the screen explored as a thick surface. As with the specter that "resists the intuition to which it presents itself," the trace in *Echolalia* is intangible, and yet persists, in the eye of its viewer.[102] The trace haunts the screen and its images to come, opening a line of inquiry concerning the fate of visibility and perception in the production of trace formation.

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[100] Derrida and Stiegler, *Ecographies of Television. Filmed Interviews,* 117.
[101] The archaeological resonances that I keep mentioning are closer to the work of Vilém Flusser and have to do with the specific work of the archive as a time critical media in the work of the video.
[102] Derrida and Stiegler, *Ecographies of Television. Filmed Interviews*, 115.

Video: A Device to Write with Time

> Nothing of a film can be understood, if one
> avoids the question of memory—of forgetting.
> Thierry Kuntzel

In Kuntzel's video work the screen functions as a palimpsest, as a piece of parchment allowing old traces to appear and be co-present among more recent ones. This notion of the palimpsest runs throughout Kuntzel's work. The leitmotiv of the palimpsest is exemplified in *Buena Vista* [see plate 7] a video from 1980 where Kuntzel plays with both the layering of the perspectival field—the background is a view of San Francisco from Buena Vista hill—and the modulations of colors and shapes in the video. In a note written for the creation of the DVD-Rom collection of his work for *Anarchive*, Kuntzel describes the palimpsest-like effect brought about in the video work:

> Buena Vista circulates between photography and cinema or video—within a unique space. For the essential part, the post-production work involved stopping the image, slowing down its projected speed, taking it apart. The space taken by the camera follows, though neither perfectly synchronized nor focused, the trajectory of a character—moving back-and-forth, in the manner of a palimpsest (with the panorama of San Francisco in the background). Far from upholding the spectator's view, this stratified vision never stops changing, blurred by movement or repetition—the

> superimposition of an already formed panoramic view. The illusion of another gaze: not a point of view, but a line, multiple overlapping lines, light coming to settle on light—beneath the present trace, memory of the former trace.[103]

Buena Vista is deeply influenced by the work of Chris Marker to whom Kuntzel dedicated a now lost video essay *La Rejetée* that consisted in the re-editing of the first six shots of *La Jetée* [see plate 2]. The stratified vision of the spectator in *Buena Vista* recalls the stratified and lacunary memory-image that prompts the narration in *La Jetée*. As one recalls, Marker's *photo-roman* opens with a voice in a background announcing: "This is the story of a man, marked by an image from his childhood."[104] Here, the power of this opening line serves as an auditory trace that will condition the signification of the visual photographs to come in *La Jetée*. Both the violence of the marking and the repetitive insistence of the trace transform the symbolic space before any consideration of thought can emerge. The trace layering aspect of Kuntzel's video work is dedicated to an experimentation with media temporalities and a new modality of audio-visually writing with time: "Between seeing and seeing again: the distance between what is projected and what is introjected, between the presence of a projected image on the screen—The Jetty—Seeing."[105]

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[103] Kuntzel's dvd-rom, *Title TK*, section archive.
[104] "Ceci est l'histoire d'un homme marqué par une image d'enfance. La scène qui le troubla par sa violence, et dont il ne devait comprendre que beaucoup plus tard la signification, eut lieu sur la grande jetée d'Orly, quelques années avant le début de la troisième guerre mondiale." Chris Marker, *La Jetée. Ciné-roman*, New York: Zone Book, 1992.
[105] Kuntzel, *Title TK,* 468.

In *Nostos* I [see plate 6] and *Echolalia* [see plate 8], Kuntzel uses the superposition of layers of traces as if the screen needed to be opened and accessed like an old manuscript whose materiality calls the viewer to scan, touch, and explore the layers only with his eyes. The metaphor of the book is useful for understanding the distinction between the video medium and the cinema medium: while the latter is specifically structured by the vertical movement of film strips, Kuntzel's video suggests a more horizontal movement, similar to that of reading. One of his video installations exemplifies precisely such horizontal movement. In his last work *La peau* [the skin] from 2007 [see plate 37], Kuntzel creates an homage to cinema by going back to the film-strip and the projector. However, there is no frame in the strip, there is only a continuous slow motion that matches the motion projected onto the wall. Kuntzel used digitally recorded images of skins in close-up that he transferred back to a large and continuous film-strip that required the use of a 70mm projector that projects horizontally as opposed to vertically. The continuous filmstrip (a single frame) projects various skins onto a wall, referring back to the relation of touch that has been lost during the transfer to the digital. Kuntzel refers to this installation as a skin-film, which makes direct reference to film scholar Laura Marks's book *The Skin of Film*.[106] The touch in *La peau* directly recalls Kuntzel earlier attempt to think of video as that which can be held and entered like a book that opens up so time itself can unfold according to the turning of the pages.

The page-turning aspect of the images on screen is central to Kuntzel's attempt to use video art not so much as a way to project images toward the spectator, but as a means

[106] Laura U. Marks, *The Skin of Film.* Durham: Duke University Press, 1999.

to make visible the appearance and disappearance of traces. In *Echolalia* [see plate 8], the seriality of the visual composition recalls the structure of a book where similar pages unfold in a successive and yet discontinuous way.[107] Five years later in *Nostos* II, a video installation from 1984, Kuntzel concretizes the development of his former experimentations concerning new modalities of writing with time [see plate 15]. *Nostos* II presents 9 video monitors arranged 3 x 3 to reproduce the form of a cinematic screen, inside which pages of book and lighting signals unfold. In *Nostos* II the book and the movement of the pages have replaced, within the continuous flow of the video, the cinematic movement of the film-strip, allowing him to reveal another form of writing with moving images. In a note written after the shooting of the videos for the installation, Kuntzel remarks the tension that he created concerning the relation between different modalities of compositing with gesture in order to deepen a reflection concerning the relation between remembering and forgetting:

> Three by Three
>
> *Nostos* II was conceived as the second panel of a triptych devoted to remembering-to forgetting-the image, by way of very similar figures and the exploration of different materials. From 1979, the subtitles of the parts were, respectively: "Perceptions, passages," "Persistence, fluids," "Powders, gels."

[107] This is an instance of formal remediation, that is, the integration into video of print.

"The little piles of color that come apart in minute particles, these movements, and not the final moment, the picture, that's what I love. In short, what I appreciate the most in painting is cinema." (Henri Michaux)
The image, in black and white, is produced by a *paluche*, a miniature camera which, because it is held like a microphone, allows composing with gesture, which is impossible with conventional equipment.

This camera, modified to produce a very strong effect of luminous "trailing," allowed me to a surprising degree to modulate figuration; so that, in stillness or slight movement the image is recognizable, while the movement of the object being filmed or of the camera makes any resemblance evaporate, opening the way to a luminous substance-depending on the speed, milky pools, running or gushing. The reverse process of stabilization produced the impression of a figure emerging from shapelessness. In order for this balancing act to be obvious between representation and the movement that exceeds it—where in the fastest moments there is an effect of electronic *dripping*—a single screen is not enough. […]

The installation found its coherence from the idea of its title (*nostos*: the return): repetition and difference, the feeling of the already seen (*déjà-vu*) and the always already forgotten, amplified by a few

> borrowed fragments of sound from *Letter from an Unknown Woman* by Max Ophuls.[108]

As Kuntzel suggests, in *Nostos* II [see plate 15], it is the proliferation of screens that makes the modulation of figuration possible. The composition of gesture via the handling of the *paluche* camera creates a movement that is then duplicated on the nine monitors of the installation, generating an ongoing modulation of layers of movement. As film theorist Philippe Dubois suggests, such layering of movement in *Nostos* II is exemplary of the modalities of convoking memories through the video apparatus and its multiple screens. But more importantly here, Dubois suggests that memory is not a simple souvenir, a simple image that reemerges from the darkness of forgetfulness. He explains:

> It is the music and mainly the voice that lead to memory, to the desire of memory; it is they that allow the black and white to spring; but it is the silence that gives birth to the memory-image. Obscurity: it talks, silence: it shows. And when *Nostos* II calls images in, these images are from before cinema—a book flipped through from screen to screen (almost infinitely) […]. It is the memory of these moments that is trying to find a way through the interplay of screens, in the lighting trace; it is about rediscovering the first instants, the first encounter with light. When the light from within the inside of the individual meets the one of the screen, video can become writing. Cinema's writing, the writing of the origins of

[108] Kuntzel's dvd-rom, *Title TK*, section archive.

> men or the writing of a time even buried more, a time of the origin of being.[109]

For Dubois, the lighting in *Nostos* II is about remembering the very first encounter with light. But what he does not tell us is that this remembering of the original light has as much to do with fire as it has to do with the writing mechanism of the psychic apparatus. Writing with light, writing-memory, the burning of the image or *Time smoking an image* are leitmotivs in Kuntzel's work, all used to question the layering of experience, the impossible return *Nostos* / nostalgia and the insisting echoes of forgetfulness.

The Memory-Image

> Rather, time of the representing: time of the trace (of the image and the sound), the traced, the tracing. Time of writing. Film time, insisting again on the image of the spooled film, a space other than that of the stream of images.[110]
>
> Thierry Kuntzel

[109] "Ce sont la musique et surtout la voix qui mènent au souvenir, au désir de mémoire; ce sont celles qui permettent au noir et au blanc de jaillir; mais c'est le silence qui accouche de l'imagé-mémoire. Obscurité: ça parle, silence: ça montre. Et quand *Nostos* II convoques des images, ce sont des images d'avant le cinéma—un livre feuilleté d'écran en écran (presque infiniment) […]. C'est bien la mémoire des ces moments-là qui se cherche dans les jeux entre les écrans, dans la trace lumineuse; il s'agit de retrouver les premiers instants, la première rencontre avec la lumière. […] Quand la lumière du dedans de l'être rejoint celle de l'écran, la vidéo peut alors devenir écriture. Écriture du cinéma, écriture des origines de l'homme ou écriture d'un temps plus enf(o)ui encore, de l'origine de l'être. Philippe Dubois, *La question vidéo entre cinéma et art contemporain.* Crisnée: Yellow Now, 2011, pp.180-181.

[110] Thierry Kuntzel, "The Other Film." Trans. Bernard Wooding. *Title TK*, 476.

In Kuntzel's work the movement of images rising up from the interior of the screen produces traces that are the basis for the formation of other visual traces. Like a writer facing the emptiness of the blank page, Kuntzel approaches the screen as a space of infinite depth in order to create the uniqueness of an expression. The screen is like an opaque skin, a contact zone from which each visual expression interrogates the making visible of traces. This generative process of trace formation is what gives motion to the images on screen. In her essay "Entre, dessus/dessous, à peine, imperceptiblement…" Anne-Marie Duguet has distilled the process of appearance and disappearance of images in Kuntzel's video work to its core:

> It is not a random project of modern flatness that this palimpsestic screen raises, but an analogy with "screen memory," a zone of outcrop made of psychic events, a spawning view. […] Additionally, the electronic surface is always available for new inscriptions in a writing-pad fashion similar to the one that is compared to the functioning of the psychic apparatus by Freud.[111]

Duguet thus underlines two fundamental aspects of Kuntzel's video work. First, the palimpsestic quality of Kuntzel's video screen recalls the particular functioning of "screen memory," or "screen memories" as titled by Freud, a process through which a memory functions to hide a mental, usually unconscious, content. Central to these mechanisms of screen memories is the replacement of a psychic content by a mnesic-

[111] "Ce n'est pas d'un quelconque projet de moderniste de planéité dont relève cet écran palimpseste, mais d'une analogie avec l'"écran de la mémoire", zone d'affleurement d'évènements psychiques, plan de frayage. […] La surface électronique est en outre toujours disponible pour de nouvelles inscriptions à la manière de ce bloc-notes magique auquel Freud compare le fonctionnement de l'appareil psychique." Duguet, *Déjouer l'image,* 64-65.

image that is exempt from the important and shocking elements tied to the original event. According to Freud, the mnesic-image is conserved in memory because it relates to another element than that which is repressed.[112] Significantly, this process of memory replacement is not part of our psychic life inasmuch as we are not conscious of this mechanism. Preoccupied by the mental machinery of image production, Kuntzel's video work explores the screen as a "zone" from which such processes are made visible and audible. Kuntzel's experimentation of visual and perceptive settings is devoted to an interrogation on the genesis of conscious memories as products of both past experiences and repressed content, where the replacement of a legitimate *mnesic*-image by means of an unconscious process is central. In effect, Freud brings together in his concept of screen memories the work of both memory and forgetting, drawing attention to how this interaction gestures towards a process of data storage and retrieval that approaches the subject from outside. Moreover, Kuntzel's screen is a surface, or better, a block, that is analogous to Freud's *Wunderblock*, namely, a magic writing pad that operates in a similar fashion as the psychic apparatus. This writing tablet and the screen operate in a similar way: they both define a zone onto which traces appear and disappear. In other words, and as Duguet points out, the video screen is a zone from which "to manifest the operation of the trace and the work of inscription."[113]

Famously commented on by Freud in 1925, the writing pad is a device made of two distinct layers: a brown wax and a transparent paper. With this writing tablet, one can

[112] Sigmund Freud, *Huit études sur la mémoire et ses troubles*. Trans. Denis Messier, Paris: Gallimard, 2010, 88-89.
[113] Duguet, 73.

write, erase, and write again. According to Freud, the interesting aspect of the tablet is that it allows one to have both an "unlimited receptive capacity"—one can write infinitely on the same sheet—and a "retention of permanent traces"—all writing traces are permanently inscribed in the wax of the writing pad.[114] Freud contrasts the new device of the writing pad with more traditional *mnesic* techniques. Simple notes in writing, often used to enhance memory function, require their users to know where they are deposited, in order to be reproduced in an exact and unaltered way. This process of retrieval may seem outdated but it is particularly relevant when such "simple notes in writing" are accessed through locked technological devices. Along these lines, any computer user can remember the experience of facing the screen of their computer and having forgotten their password, thereby being prevented from accessing their content (emails, photo, bank information). In such cases, the screens act as gatekeepers to stored information and require their users to adjust themselves to new processes of retrieval that are implemented in the device itself. Furthermore, and to go back to Freud, the writing surface of these permanent traces can be exhausted—namely the notebook does not last infinitely—thus leaving the device unusable for new traces to be retained. This characteristic is important, as Freud conceives of the infinite retentional capacity of the writing pad, not so much as a perfect prosthesis of our own finite retentional capacity, but precisely as mimicking the interrelated functions of perception and retention of the system of Perception-Consciousness (here after, Pcpt.-Cs.).

[114] Freud, Sigmund. "A Note on the 'Mystic Writing Pad'," *General Psychological Theory*, Chapter XIII, 1925, 208. Available online at: home.uchicago.edu/~awinter/mystic.pdf.

Freud concludes his argument by stating that one's interest in written traces may not be the same when time passes and changes the value of what should be kept in memory. For him, the permanent retention of memory onto a *mnesic* device such as the notebook, may not be as relevant as time passes since no selective procedure helps classify the mass of information it collects. What is at stake here is a process of memory selection, organization, and classification that is tied to the making relevant of memory. Precisely, it is the lack of an organizing system in the notebook—beyond, of course, our linear and open ended writing operations—that prevents the simple notes from matching the analogy with the mental apparatus where a strong process of regulation and selection of memory traces is at work. Once again, one can directly see how such commentary resonates with another form of retention, more massive and global, namely that of Big Data. In the latter, the process of selection is based on mathematical formulas applied and operated by algorithms, which create a process of selection radically distinct from one based on a psychic subjectivity, or on a rational selective decision.

Contrary to simple written notes, Freud sees in the writing pad a fruitful combination of two *mnesic* systems: one that receives (input), and one that retains (storage). In his commentary, Freud's goal is:

> to compare the celluloid and waxed paper cover with the system Pcpt.-Cs. And its a protective shield, the wax slab with the unconscious behind them, and the appearance and disappearance of the writing with the

> flickering-up and passing-away of consciousness in the process of perception.[115]

Similar to the perceptive apparatus of the mind, the writing pad is composed of an external layer that filters the stimuli coming in—this function is performed by the transparent sheet—, and of an internal layer that retains the stimuli—this function is performed by the wax. However, contrary to the system of Pcpt.-Cs. as developed by Freud, "which receives perceptions but retains no permanent trace of them" at the level of consciousness, the writing pad has the capacity to leave permanent traces on the wax.[116] The wax itself becomes the central characteristic of the writing pad in its analogy with the unconscious. The top sheet represents the infinite possibilities of perception and the wax represents the place where retained traces are kept after being cleared from consciousness.

It is the doubling of function represented by the top sheet and the wax that sparked Derrida's interest. In his essay, "Freud ou la scène de l'écriture," Derrida points out the economy of *différance* in the body of the writing trace. The trace is not that which can be recollected and repurposed as a simple presence that lasts in the nebulous background waiting to emerge intact from the past. The trace is the condition of the *différance* understood as that which stands as invisible and unreachable, spawning in-between moments of impression. In this sense, and along Kuntzel's interest in forms of pre-figuration, life is an *a priori* trace before it unfolds as a determination of being as presence. Made of light, and more precisely of lighting signals, the electronic images in

[115] Freud, "A Note on the 'Mystic Writing Pad'," 211.
[116] Freud, 208.

Kuntzel's work produce fluctuations on the screen that recall the functioning of the psychic apparatus as a machinery of trace production. "Pure time flow" says Kuntzel's video, "pure temporalisation" says Derrida's essay. In between these two, stands Freud's reference to a writing machine that accounts for the trace as that which gives shape to time in space. Derrida sees in Freud's text on the *Wunderblock* an opportunity to account for the work of the psyche as a work of spacing layers. A topography of traces, a map of spawning touches: the writing device is a stage onto which the psychic milieu gives shape to its untouchable, unreachable *mnesic* traces. It is within this "lithography from before the words" that Derrida inscribes the work of the *différance* that conditions the spacing of time.[117] Writing within writing, writing before the words: for Derrida the poet is the one that invents its own grammar. It is in this sense that Kuntzel is a poet of the image, one that invents the shape of the adopted traces to suggest that which exceeds the realm of signification. There is no simple translation at work in the psyche of a poet, only modalities of transductive forces shape the realm of its oneiric composition. To account for the becoming sign of a trace is to account for such transduction, where the becoming space of time reaches its fullest concretion. For Derrida, Freud's psychographic metaphor of the writing pad has theoretical value inasmuch as it allows thinking about the economy of *différance* as constitutive of memory. For him, not only is memory one out of many characteristics of the psyche: it constitutes its essence.[118]

[117] Derrida, *L'écriture et la différence*, 307.
[118] Derrida, 299.

VIDEO-WORK

The memory apparatus for Freud functions as a process where perception, retention, and remembering are intertwined with one another. However, three major aspects of this analogy between the writing tablet and the mental apparatus do not apply. First, in Freud's explanation, it almost seems like the tablet accidentally retains all the traces. The traces left on the wax have no function for the apparatus of the writing pad, which is not the case with the memory in its relation to consciousness. By missing the function of secondary retention, Freud missed grasping the imaginative function of recollection in shaping the process of primary retention. Second, old traces cannot emerge from the wax onto the writing pad, which is the case in the functioning of memory where memories can suddenly emerge from the unconscious to consciousness. The plasticity of the function of recollection in relation to consciousness is essential if one is to address the movement-memory nexus central to experience of the sensible. Lastly, the model of the writing pad lacks movement. While writing itself implies movement, the retention of these written traces is motionless on the writing pad. By contrast, the mental apparatus is made of temporal layers that fluctuate thus creating a meta-stable psychic environment that does not match the static model of inscription implied by Freud's writing pad. Furthermore, consciousness perceives and functions in time, meaning that the temporal constraint of the writing pad cannot fully acknowledge the ongoing movement of psyche. Finally, it is only based on the atemporal dimension the unconscious's functioning in its capacity to

retain information that Freud can see in the palimpsest traces of the writing pad the equivalent of the functioning of the unconscious in its relation to memory.

As Kuntzel pointed out in "A Note Upon the Filmic Apparatus" published in 1976, Freud's discussion of the mind's perceptive system and its *mnesic* functions misses an important characteristic of the mental apparatus in its analogy with the writing tablet.[119] Freud did not take into account the fact that movement is central to both the perceptive and retentional systems. Kuntzel replaces Freud's model of the writing pad with the filmic apparatus and sees the latter as an improvement as it allows two moving mechanisms to perfectly mirror each other: the mechanism of perception and the mechanism of inscription. Kuntzel draws on Freud's analogy between the mental apparatus and the writing pad but extends it to the filmic apparatus to think the movement-memory nexus in terms of image projection. For him it is precisely the functioning of the cinematic machinery—not its narrative-representative patterns, nor its capacity to represent our mental abstractions—that accounts for the functioning of the psychic apparatus.[120] Kuntzel sees the connection between the filmic apparatus and the psychic one operating as follows: "the screen serving as the covering sheet," and the "celluloid, as the wax."[121] Still relying on the Freudian analogy, Kuntzel proposes a theoretical reconsideration of the cinema-image as built on the same model of the mental apparatus, both perceptive and retentional. This model permits one to think of the processes of condensation and displacement, central to the imagery of the unconscious

[119] Thierry Kuntzel, "A Note Upon the Filmic Apparatus" *Quaterly Review of Film Study*, 1.3 (1976): 266-71.
[120] Kuntzel, *Title TK*, 471.
[121] Kuntzel, 473.

for Freud, as analogous to the movement of the filmic apparatus. For Kuntzel the functioning of the unconscious and the film-work are analogous to the same moving image machinery.[122]

Kuntzel's optical choice in favor of the film apparatus does not, however, stop at the level of the theoretical analogy. In his video practices, he pushes such correlations between the mental and technical apparatus even further. By experimenting with the video form, Kuntzel collapses the division between the screen and the celluloid. To him, the video itself is "regarded as the very materialization of the block."[123] While in cinema there is the possibility to detach "a picture from the tape strip, to select a piece of the film," in video "the picture is invisible on the tape, it appears only on the screen."[124] The thick and opaque surface of the video screen allows for the analogy between mental apparatus and technical device to be completed. The video screen does not distinguish between that which is projected and that which is retained. For that matter, the model of the video in its analogy with memory formation is optimal for questioning the link between primary and secondary retention: the video as an apparatus of trace formation becomes the operational tool to experiment with mechanisms of inscription, projection, and perception along with mechanisms of memory formation such as input, output, and storage. Kuntzel sees in the video form the specific tool that accounts for the functioning

[122] In "Freud and the Technical Media. The Enduring Magic of the *Wunderblock*." Thomas Elsaesser points out the necessity of rethinking Freud's legacy with respect to technical media. While Elsaesser's article provides one of the rare accounts of the relation between technical media and Freud's theory of the psyche as an optical machinery of trace inscription, the article completely fails to address which theoretical model Kuntzel's video work provides for this analogy. Thomas Elsaesser, "Freud and the Technical Media. The Enduring Magic of the *Wunderblock*." *Media Archaeology*. Eds. Erkki Huhtano, and Jussi Parikka. Berkeley: University of Minnesota Press, 2011, 95-115.
[123] Kuntzel, *Title TK*, 486.
[124] Kuntzel, 495.

of the system of the unconscious, the memory formation tied in it, and its relation to the system of Perception-Consciousness.

Kuntzel's work thus raises the question of memory formation—a process of perception/reception and inscription/storage—from the point of view of the conditions that allow for the experience of memory to emerge and to unfold. Specifically, the relation between the video and the psychic apparatus is tied to a suggestive rather than a representative image. By creating an emanating world of trace formation, the screen suggests the genesis of images and its perception by the viewer. In Kuntzel's work, the electronic image functions as a metaphor for the memory apparatus. More precisely, through the appearance and disappearance of lighting traces, the surface of the screen is analogous to the surface of consciousness where memory and the passing of images cannot be separated from one another. In other words, what emerges and what remains, what appears and disappears constitute the mental continuum as explored on the video. The flow of mental content, whether conscious or unconscious, is a movement made of different patterns of time creating a flow that is analogous to the machinery of the moving image device. The screen, taken as a block of persistent motility, allows Kuntzel to question the relation between memory formation and mental content, thus engaging in a reflection concerning which traces are retained from the traces that have been appearing and disappearing in the video. The latter offers the potential for expressing different modalities of presence that oscillate between appearance and disappearance. It is within this fluctuating work of the trace and the intermittent lighting of the electronic signal that an economy of *différance* is to be found. The spectrum of possibilities granted by the

video-work accounts for a definition of memory outside the opposition between remembering and forgetting. This video-work is an electric medium that permits one to think of the spectral quality of *mnesic* traces as suggested by Derrida and Stiegler. These *mnesic* traces, as we have seen, are metastable, continually evolving in space and time while constituting a milieu of associated responses between perception, recollection, and inscription. The video screen operates as a visual spectrum onto which different patterns of time oscillate on a continuum that urges one to conceptualize the *mnesic* system from the point of view of various modalities of moving presences. The video screen suggests, rather than represents, such various modalities by making visible the appearance/emergence of the trace as well as its potential disappearance/erasure in the presence of the viewer.

Interactive Moving-Memory Environment

The culminating moment in Kuntzel's practice of movement-memory interrogation holds special relevance for my argument. Having questioned data extraction as a systemic process that recodes the structural formation of memory—understood as a relation between input, output, and storage—I am now going to address the emergence of an interactive and algorithmically produced moving-image environment that reshapes our notion of perception and participation. In the remaining twists and turns of this chapter, I turn to Kuntzel's interactive video installation from 2003 titled *The Wave* [see plate 34].

In *The Wave*, Kuntzel builds upon on his early experimentations—the screen as a machinery of trace inscriptions—to explore how the immersive and interaction dimensions of media experience disrupt memory formation.

The Wave is a retro-projection of a digital video on a large screen. With the help of a computer and an infrared laser sensor placed on the floor behind the screen, the video varies according to the distance of the visitor from the screen. The speed of the sound depends on the video and the color of the image depends on the visitor's position, becoming black and white when the visitor is very close to the screen. *The Wave* displays the flows of the sounds and motions of the ocean. In an almost hypnotic-fashion, the audience enters a dark space lit only from the screen. The screen is the size of an adult human being and/or the size of a cinematic screen posited on the ground. The size of the screen is of relevance here. Kuntzel confronts its viewer with an anthropological point of view: the ocean is shot from the water's edge as if someone was looking at the sea. Yet, the materiality of the screen itself surpasses the viewer's corporeal ability to grasp the entirety of the movements displayed on the screen. Here the anthropological point of view is presented as a default, as a non-all-encompassing one.

There are no seats and no stage in the space of the installation: only the light from the waves displayed on the screen comes to structure the empty room. By entering the space, the presence of the audience disturbs the flow of images and sounds. The immersive environment of the installation is affected by the presence of the audience that intrudes upon the space. The viewer's presence can modify the setting of the space through the modulation of sounds and lights to the point that when the audience gets too

close to the screen, the image freezes into a black and white postcard-type visual, and the sound stops.

At the back of a very long room, a very big picture and the sound that goes with it: the sea, or to be more precise, waves. No beach, just a thin strip of sky. Tiers of waves: the distance nearly flat, the emergence of some crests in relief, and in the foreground, waves breaking. Movement and color, like an unstable monochrome, continually re-emerging, between black, blue, grey, green and golden (the sand engulfed by the speakers):

> Take the color green: of course, the yellow and blue can be perceived, but as they grow smaller their perception fades and they enter into a differential relationship that determines the green. And nothing prevents the yellow, or the blue, each in its own right, from not being determined by the differential relationship of the two colors that escape us, or two degrees of light and shade […]. Take the sound of the sea: two small waves at least must be perceived as emerging and heterogeneous for them to enter a relationship capable of determining a third that "excels" over the others and reaches consciousness." Gilles Deleuze, *Le Pli.* The image and sound in this installation maintain a disturbing relationship with the viewers: if the latter do not determine what has been filmed and recorded beforehand, they regulate and disrupt the speed by their position in space. The waves slow down as you approach the screen until they stop moving altogether, in a soundless black-and-white photograph. No literal fusion

> with the waves but a connection, a complicity with them: renewal of an oceanic feeling (illumination of melancholy). Layout, perception, return nearly the almost same, wash, backwash, impossible time: *The Waves* is a homage to Virginia Woolf (to her book with that title), to her writing, to her invention of time, to her as a person—a life lives on the verge of drowning (which is how she ended), between terror and ecstasy.[125]

In Kuntzel's installation, the continuous movement of the waves invents a modality through which to connect with the spectator who anticipates the return of the wave while maintaining a subtle distance from the screen so that the audio-visual movement can be preserved.

The motif of continuous and yet repetitive flow of the wave encapsulates the wavering of the mind and the functioning of its memory. The wave is both constitutive of the ocean and a distinct element of it; ocean and wave cultivate an immanent relation to each other. This material, rather than formal, approach to the content displayed on screen is a means by which to broach a consideration of the immanent relation of memory and consciousness. Memory operates toward consciousness in a fashion analogous to the wave in its relation to the ocean. Memory is both what constitutes consciousness and what is constituted by it, as consciousness filters that part of memory retained in the mind. The fleeting movement of memory in consciousness is analogous to the ongoing fleeting movement of the wave as that which forms and deforms the ocean.

[125] Kuntzel's dvd-rom, *Title TK*, section archive.

Video Installation: Art of Spatializing Time

In her particularly insightful account of the screen in video installation art, art historian Kate Mondloch emphasizes what is certainly the most important element of this art form: namely, its capacity to spatialize time. By "spatializing time" she refers to the video installation as placing time and its fluctuations at the center of the art form.[126] The space of the installation operates as a stage on which time is put on display via the video. Drawing on Daniel Birnbaum's account of how today's media insert "spatial modes into the temporal dimension," Mondloch underlines the different temporal dynamics at stake in video installation art, where moving images are presented to moving bodies in space.[127] Indeed, in Mondloch's quite apt characterization, the coming together of both moving images and moving bodies often presents "contradictory durational impulses."[128] Namely, the video presents time's fluctuations, while also being presented to a moving audience that brings its own plural temporality. This durational plurality of both the video and the audience often creates contradictory temporal dynamics that Mondloch places at the center of the video installation experience. Because the art form no longer requires the audience to stand still in a predefined and fixed position, it allows the viewer to be in movement, therefore permitting a different experience of moving images than the ones offered/or/ allowed by cinema and television. In other words, the apparatus does not

[126] Kate Mondloch, *Screens. Viewing Media Installation Art.* Minneapolis: Minnesota, 2010.
[127] Mondloch, 40.
[128] Mondloch, 40.

position the audience to experience video installation art as the latter is now open to more fluctuating and ambulatory perspectives.[129]

While Mondloch is certainly correct in this assessment concerning the coming together of moving images and moving bodies in video installation art, her theoretical development must be complemented by a deeper evaluation of the newly engendered mode of connection between the viewers and the media object. The enmeshment of different temporal dynamics constituted by moving bodies and images requires that we consider the viewer's experience from a different spatio-temporal framework. Accounting for the implication of spatialized moving bodies as constitutive factors of media experience in video installation art is not enough. Such theoretical development should move away from an agent-centered perceptual modality of experience to a more environmental and atmospheric sensibility. This framework is made of the generative encounter between the machinery of a moving image device and the ambulatory displacement of a moving audience.

In Kuntzel's interactive installation, the presence of the audience reduces motion within the work and functions as a parasite on the media object, preventing its viewers from fully accessing the domain of experience to which it pertains. In *The Wave*, the parasitic quality of the audience affects the atmosphere of the installation by changing its visual and sonic elements. The flow of visual and sonic information emerging from the

[129] The ambulatory perspective of the audience refers to Anne Friedberg's book *Window Shopping* where a flâneur-type of viewership is theorized in relation to media proliferation. However, Kuntzel is not interested in the screen as functioning as a window onto which viewers project themselves. Rather, and as we have seen, Kuntzel takes the screen as an opaque block and as a trace-surfacing device where the fleeting of light and the passing of time are the basis of a suggestive, rather than representative, moving image content.

installation is not addressed to the viewer. On the contrary, the media operates for itself and at its own pace. Here, the unfolding of elemental and watery components in the space functions as both the repository and the receptor of the media object whose materiality is at the core of this environmental installation in which the viewer is no longer the recipient but the disturbance of the art form.

The parasitic characteristic of the viewing experience is exemplified in *The Wave* by the "becoming postcard of the image," that is, the transformation of a moving, sonic, and colorful image of the ocean into a black and white, muted, and fixed representation.[130] Caused by the disturbance of the audience, the frozen black and white image is the result of a reduction of potential of what was once an ongoing vital and elemental movement displayed in the space of the installation. In *The Wave*, the postcard functions as a closure to the circulation, rhythm, and openness of the media object. In this case, the video is an open object but only to the extent that no one uses it, or better, interacts with it all.

In *The Wave,* the becoming postcard of the image is an interruption and a closure of the durational openness of the video object understood as a temporal object. When the viewer of *The Wave* interrupts the flow of visual and sonic components of the media object, it creates a postcard type of image that is a suspended representation of what was once an ongoing movement of atmospheric modulation. In Kuntzel's video installation, the becoming postcard of the image questions the becoming moving image of memory as

[130] There appears to be a critique of tourism, that is, the notion of the image as a souvenir or, as Benjamin says about Proust's *mémoire volontaire*, a record of the past that contains no trace of it.

produced by the encounter between the media object and its audience. The latter becomes the factor, and not just the receptor, of a media object.

Furthermore, as exemplified by *The Wave*, this generative encounter is based on the assumption that the media object performs better, perhaps even more optimally, when nobody is around. It is as if the media object were performing not so much for a viewer but for the environment itself, creating an atmospheric and elemental—rather than representational—space of sensory perception. This particular approach to the media object leads to a conceptualization of media as a mode of producing a domain of experience that yet cannot be fully accessed by the person who encounters it. In this case, the impossibility of experiencing the entirety of the object is not a question of scale, such as the climate, the stock market or earlier forms of total art (the theater of the Gropius for instance), but rather a question of operation. The viewer of *The Wave* cannot experience the media work because it fully operates only if no one interacts with it. In *The Wave,* the viewer's awareness (consciousness, perception, attention) of the media object ruins the media's potential to affect our domain of experience.

Open-Access Memory

It is from this newly engendered sensory framework of media experience that memory formation should be reevaluated in today's environment. What matters is not so much the positioning of the spectator's experience through a unilateral encounter with a single

screen, but the proliferation and operation of the latter as constitutive of an immersive environmental media experience. This media environment produces a new temporal movement that I define as "open-access memory," that is, the becoming moving image of memory through the viewer's interaction with a media object that operates both below and beyond its sensory-motor capacity, and yet affects its domain of experience.

Two correlated elements of the video installation art *The Wave* assume particular significance for my argument here. First, *The Wave* constitutes what is called an interactive environment where the media object prevents its audience from experiencing its content. In other words, the media object encapsulates a performative materiality that cannot be accessed without being disturbed or destroyed by the viewer. Second, *The Wave* constitutes what is called an open-ended environment. The open-ended quality of the installation allows the audience to choose the length of time they spend with the art form. That is, the audience encounters the video as already performing and leaves the installation while the work is still running. In other words, *The Wave* operates *prior to* and *a posteriori* to the presence of the viewer. This temporal dimension leads the video object to have a certain agency of its own: it needs no audience to fully perform, and it performs beyond the realm of the installation as experienced by the audience.

Together, these two elements—the open-ended environment and the often-participatory aspect of such an installation—position video installation art as a valuable context for thinking about memory formation in today's increasingly proliferating moving image world. As I understand it, the experience of spatialized time-based objects—objects made of time and displayed in a particular setting, or objects that encourage one

to critically engage the notion of time in today's media environment (Ernst)—enables heightened access to the temporal dynamics at stake in our contemporary surroundings. I approach the interaction between moving bodies and moving images not so much from the point of view of temporal plurality, but rather as producing a specific form of temporal movement that I call "open-access memory." Whereas the cinema was once an experience based on the concealment of the apparatus, where the body of the viewer was set into pause in a dream-like fashion, here, the moving bodies of the audience both pertain to while being rejected by the media object. Rather than being positioned, the viewing subject of video installation art is constantly negotiating time and space according to an ongoing moving media object that exceeds the realm of its perception. This spatio-temporal negotiation on the part of the viewer demands that we question memory formation from a moving point of view. The time-based apparatus of such an environmental network implies a shift in our understanding of memory as image-consciousness, to memory as moving-image consciousness where the consciousness, in its relation to the world and to itself, not only functions like in a movie (montage, cut, flashback, condensation), but like a multiplication of fleeting and blending split-screens. In other words, I argue for an understanding of memory as a constant movement of multiple screens in which multiple traces are constantly being shaped.

In today's new media world, the open-ended environment of media objects is linked to the material agency of the object, and therefore constitutes the characteristics of a generative, as opposed to representative, process of sensory experience. This generative perspective allows us, on the one hand, to question how the technoscape of media objects

actually operates at the level of memory formation from the point of view of a multi-dynamic encounter between the moving image object and the moving subject. On the other hand, the often-participatory aspect of such installation leads to thinking of the viewer as a disturbing force, a parasitic presence in relation to an operative, rather than representative, media performance.

Keeping in mind the analogy between the video work and the optical machinery of the psychic apparatus, I would like to conclude by going back to the predatory dimension of data extraction and memory externalization, as exemplified by the Big Data economy. The ongoing expansion of a global network of tertiary retention is fed by the constant upload of data by individuals onto platforms such as clouds and social networks. While much attention has been paid to the question of privacy and security concerning the use and misuse of such data by third parties, an important challenge remains untackled. This challenge concerns the increase of data-mining processes that operate below humans' sensory capacities while drastically remodeling their inner abilities to perceive, retain, and recollect information.

Kuntzel's video work not only makes visible the analogico-digital condition that allows an individual to experience the present as always in flight, but he anticipated the new connections between individuals and media environment that are shaping the relation of time and space. By experimenting with computer-generated imagery triggered by the presence of the viewer to which the machine responds by modulating the content projected on the screen, Kuntzel's later work foresees the dynamic connection that is being created at the speed of light. It is within this context of an open-access memory of

tertiary retention within which machines interact with other machines, thus leaving little agency to individuals to access the content extracted before him, that a performative and generative theory of memory displacement assumes its true value.

Chapter Two: Technically, Speaking.

In the preceding chapter, much has been made of the way in which Kuntzel's reflection on memory apparatuses opens up lines of inquiry into the theoretical challenges imposed by Big Data centers and their mode of data collection. As we have seen, the relation between memory, speed, and recollection is drastically changed due to the implementation of prescriptive memory interfaces. In this context, not only has programmability become a new condition for making possible the digital archive, but it has also made impossible human access to such archival process. After having dealt with Big Data's dynamics of extraction and the production of a global network of tertiary retention in chapter one, I now turn to the notion of the digital network as a new master signifier in today's digital mode of communication. Precisely, I think together the practice of language dissemination and the implementation of networked devices. My interest comes from an interrogation of the dynamic construction of communicative supports and their abilities to translate, manipulate, and process information.[131]

This chapter will be dedicated to Kuntzel's constant interrogation of theoretical models concerning the status of the letter, the text, and the replacement of signification by signifying structures that think before us. These structures, as we will see, can take the form of a theoretical formula, a media object, or a network. My goal is to unpack Kuntzel's reflections on language and mediation as a means through which to interrogate

[131] On the notion of information interface and the transfer of old objects into new structures, see in particular Lev Manovich. "Understanding meta-media." *Ctheory* (2015): 10-26.

the digital *epistémè* and its apparatus of knowledge production. In this chapter, I pay particular attention to the ways in which the notion of mediation has been mobilized in media studies to reveal the debates that have shaped the field in recent years—years in which notions such as cryptology, information leaks, and surveillance policy have been at the forefront of the question of critical media theory.

To Communicate You Must

> There has never been so much remembering and so much biography as in the age of the technologies of oblivion.[132]
>
> Siegfried Zielinski

Communicative devices are authoritative. Emails, tweets, phone, texts, blogs, and chats are tools fostered to promote and impose communication among people. The never-ending stream of communicative signals functions like a singularized cell, a place in which time endlessly finds its ruins. "To unplug," "to turn off," "to desynchronize" are now verbs that evoke the goal to rescue time from the abyss of online communication. Messages are no longer scarce objects that get lost.[133] On the contrary, messages are homing devices, waiting for you to be available to unleash their informational missiles.

[132] Siegfried Zielinski, *[... After the Media]*. Minneapolis: Univocal, 2011, 243.
[133] Here one thinks of Jacques Derrida's reflection in *The Post Card: From Socrates to Freud and Beyond*, Trans. Alan Bass, Chicago: University of Chicago Press, 1987.

These devices navigate in a stream of continuous signals that has been put in place to create the collapse of the distinction between social, professional, and leisure time. It is in this context of an never-ending flow of communicative signals that attention is mobilized as an economic category.[134]

Depending on the setting of the networked media, a specific constraint is forced upon the user. As Jodi Dean suggests, "communication functions symptomatically to produce its own negation."[135] The question of communication in the age of digital media is the question of making visible a powerless mass, one whose attention bears an economic as opposed to a psychic value. Powerlessness sounds quite counter-intuitive when one thinks of the recent boom of the use of online tools such as Twitter for protest gathering and revolution. As Jodi Dean points out in her political critique of the blog, there is the development of personalized media that foster both exposure and anonymity at the same time. "The indistinguishable mass of the singularly unique" announced by Dean is a symptom of the tendential fall of signification fostered by networked communication.[136] The latter is conceived as an ongoing expansion of a total mediality in which the user buys their own circuit of exposure. In this context, there is a double reconfiguration of cognition as both the impoverishment of attention and the mutation of subjectivity.[137] While the contents of subjectivity depend more and more on a multitude of machinic systems as Félix Guattari reminds us,[138] the development of digital

[134] Tiziana Terranova. "Attention, Economy and the Brain." *Culture Machine* 13.1 (2012). 1.
[135] Jodi Dean, *Democracy and Other Neoliberal Fantasies. Communicative Capitalism and Left Politics*, Durham: Duke University Press, 2009, 26.
[136] Jodi Dean, *Blog Theory*, New York: Polity, 2010, 65.
[137] Tiziana Terranova. "Attention, Economy and the Brain," 7.
[138] Félix Guattari, *Schizoanalytic Cartographies*. Trans. Andrew Goffey, New York: Bloomsbury, 2013.

communicative devices is drastically changing the entanglement between collective apparatuses and assemblage of enunciation.

Media: Where The Linguistic Goes to Die

> *The image in general* does not exist. What is called the mental image and what I shall call the image-object (which is always inscribed in a *history*, and in a *technical* history) are two faces of a single phenomenon. They can no more be separated than the signified and the signified which defined, in the past, the two faces of the linguistic sign.[139]
>
> Bernard Stiegler

One particularly interesting assemblage of enunciation is found in Thierry Kuntzel's very first museum installation from 1974. The viewer of *Le Tombeau de Saussure (Double Entrave)* [see plate 1] enters the space of a gallery-based installation where a piece of white marble is put up against a white wall. While facing the sculpture one can read, carved in the stone, a sentence from French linguist Ferdinand de Saussure: "Whether I make the letters in white or black, raised or engraved, with pen or chisel, all this is of no importance with respect to their signification."[140] This sentence, written in black capital letters onto a white and imposing marble, works both as the epitaph to what appears as

[139] Bernard Stiegler, *Ecographies of television*, 147.
[140] Kuntzel, *Title TK*, 53. "Que j'écrive les lettres en blanc ou en noir, en creux ou en relief, avec une plume ou un ciseau, cela est sans importance pour leur signification." Kuntzel, *Title TK*, 458.

Saussure's tomb, as well as a title on a monumental page. Perhaps even a frontispiece. In French, a *tombeau* is both a gravestone raised in memory of a deceased person and a poetic composition written by an artist.[141] In Thierry Kuntzel's poetic *tombeau* dedicated to Saussure's work, the tomb stands still and faces the audience in a mute dialogue between the bodies of the mobile audience and the tomb's static letters. The object is presented in a way that emphasizes the form of the sculpture and the aesthetics of the letters as they work together to compose the medium of the installation. There is no time constraint to viewing the exhibit (within the gallery's hours of operation), which allows the audience to have an open-mode of engagement with the object, with only the space between the audience and the tomb framing the visual experience. The presence of the sculpture, which simultaneously looks like a giant page and a standing stone, visually engages audience members: the page/tomb imposes itself as an object of perception.

The visual reference to both a tomb and a page recalls in many ways how writing and death figure prominently in reflections concerning the production of cultural artifacts. From the lives preserved in written autobiographies and confessions, to the numerous epigraphs that are engraved upon tombs for the sake of future visitors, many narratives are concerned with the relationship between writing, death, and memory in Western society. Plato made note of this relationship in his work *Phaedrus*, where he depicted the gift of writing as both a remedy and a poison for human memory, an insight fashioned into a touchstone for critical theory by Jacques Derrida. Continuing in this tradition, Kuntzel's installation leads us to think about what scholars have determined as the very

[141] One famous *tombeau* is the poem by Stéphane Mallarmé dedicated to Charles Baudelaire in which the marble of Baudelaire's tomb is compared to a seat where his shadow comes to rest.

beginning of history, that is, the cultural shift imposed by the rise of inscription starting with the first analytical writing in Mesopotamia around 6000BCE. These writings purposefully left traces carved onto tablets made of clay and are one of the many forms that engraving took in this period. Around 600BCE in Athens, Greece, more durable stones like marble were used for inscribing and publicly displaying the laws. Not only are they used as artificial supports for the memory of the law, but these carefully shaped pages made of stone were considered as political acts that made the readable visible.

In Kuntzel's work, the making readable of the visible is a way to open up the pictorial field in which forms undermine writing. In *Le Tombeau de Saussure. Double Entrave*, the marble works as a medium: both as a page on which Saussure's words are engraved, and as a tomb for the meaning of Saussure's sentence. The marble is thus a medium where *epitaph* and *epigraph* meet to better reveal a *double entrave,* a double constraint tied to the written language. Evoking Saussure's famous distinction between the *signifiant* [signifier] and the *signifié* [signified], Kuntzel's installation exposes the productive forces of the arbitrary quality of the sign. Through the exhibition of a tomb that stands still, Kuntzel proposes to reposition the marble and transforms it, in a readymade manner, into something other than what is being seen. In this case, the *signifiant* (the standing marble) reinforces the arbitrariness of the *signifié* (the tomb). Moreover, within the realm of the visible, the material used by Kuntzel not only tells the spectator that the signified is in direct relation with its signifier, but also stresses that the form on which the linguistic sign is made readable generates the signified. While Saussure used the arbitrary quality of the sign to highlight that the signifier *per se* creates

the signified, Kuntzel uses the work of the text engraved in marble as a means to demonstrate that the medium on which a signifier is transmitted is precisely what shapes the signified. The whole installation thus challenges the linguistic logic of Saussure's sentence. In fact, Kuntzel's installation highlights the fact that, to have "the letters in white or black, raised or engraved, with pen or chisel," is crucial, and even decisive with respect to their signification. In others words, within the pictorial realm of the installation, forms undermine the writing by exposing the matter of the shape and color, which carry the linguistic sign.

Le Tombeau de Saussure (Double Entrave) is key to understanding the critical move taking place in semiotics at that time: a shift away from considerations about the arbitrary quality of the sign toward a critique of the potential of the form. In one of the notes written on July 4, 1974 in preparing and conceiving his installation, Thierry Kuntzel formulates a reflection titled "Saussure's Tomb" in which he questions how the medium determines and thus connotes the inscription, revealing the essential pertinence of format, material, and shape in the making readable of the visible. The note is preceded by an interrogation called "For The Tomb," which reads:

> For The Tomb.
>
> Language is the only semiotic system to be gifted with secondarity (Benveniste).
>
> Painting only 'talks' (about) painting metaphorically; what 'talks' (about) painting is theory as articulated language conveys it. Until the advent of

> conceptual art, theory operated outside the field of sight, display, and exhibition.
>
> Now, language--theory--shows itself. But which one? In a communicative circuit it "gets across" information without necessarily considering its specific site.
>
> Contaminate.
>
> Get the systems of exclusion to communicate--in another manner.
>
> Make the readable visible, operate a double subversion in relation to the pictorial field of writing which, even in the most advanced cases—Mallarmé's work on disappearance--cannot, in books, think up another material.[142]

What is at stake here is to get theory to operate inside the field of sight. To understand this fundamental goal at the core of Kuntzel's theoretical and artistic work, we first have to lay out the production in which both language and theory are engaged.

In the wake of Saussure and Benveniste, language has been thought of as a structure that operates within two temporalities. This definition is drawn from the distinction made by linguist Émile Benveniste between *énoncé* and *énonciation*. The *énoncé* is understood as a non-temporal statement that is in direct synchrony with its meaning and that has a systematic correspondence with a signification that does not refer to the specific time of an expression. In contrast, the *énonciation* defines the act of utterance that is tied to a particular context shaped in time and space. It is in this context

[142] Kuntzel, *Title TK*, 455.

that the *énonciation* takes place where a particular meaning can be posited. The *énonciation* thus inscribes itself in a diachronic relation with meaning that reveals changes in the realm of signification over time. Benveniste's distinction extends Saussure's differentiation between *signifié* and *significant*--an opposition that made no reference to the act of enunciation--and draws attention to the context in which language gives shape to meaning and signification. In this context, language is thought of as a structure that involves temporalities and as a system of rules. Both distinctions, respectively between *signifiant* and *signifié*, and between *énoncé* and *énonciation* give the operative scheme that leads Kuntzel to posit that "language" is "the only semiotic system to be gifted with secondarity."[143]

For Kuntzel, language has the privilege of being gifted with a feedback loop that allows meaning to be rooted in a diachronic temporality that always produces change as a reflective gesture upon itself. However, if this consideration remains obscure, it becomes less so when looking at Kuntzel's video work titled *Echolalia* [see plate 8]. This 32min video from 1980 questions the genealogy of image media through the stratification of forms and sounds, where the vibration of colors echoes the vibration of musical resonances.[144] Insistently multi-layered this creation explores the notion of representation

[143] Kuntzel, *Title TK*, 455.

[144] Thierry Kuntzel's entire body of work is haunted by the attempt to experiment with visual elements as if the screen were a visual score, as if it were the musical composition that gives shape to the visual agencement on the screen. As I develop the manuscript further, and as I write a chapter on totemic sound in Kuntzel's work, I will not miss an opportunity to go back to two of John Mowitt's chapters from *Sound: The Ambient Humanities* and *Text. The Genealogy of An Antidisciplinary Object*. The first Chapter is "Echo," in which he lays out the theoretical foundation for thinking about context in relation to sound in the humanities. John Mowit*, Sound: The Ambient Humanities*, Berkeley: University of California Press, 2015. And the second is the conclusion of his book *Text* in which he lays out the project of a textual politics. John Mowitt, *Text. The Genealogy of An Antidisciplinary Object*, Durham: Duke University Press, 1992.

itself by offering a ritual of sound and vision where practices of language are both framed and transformed. The structure of the video allows for this wandering of meaning that gives shape to the genealogy of images, where appearance and disappearance are creative forces "imposed" upon the viewer.[145] As creative forces sound and vision produces trace upon trace, fragments, "like a never-ending palimpsest" where the movement of the letters give rise to a use of speech that is subjected to a use of speed.[146]

The technological apparatus of the video is put into play as a means to reveal its capacity for metamorphosis. Visions and sounds form the medium through which a passage from one language to another is made possible by the apparatus. The latter aims precisely at getting theory to operate inside the field of sight. This field is the one where language and theory interconnect via an apparatus that technically addresses its viewer, that is, that speaks in technical and technically mediated terms, to the latter. Theory and language are thus shown to share a temporal condition at the core of their reflective dimension, by which I do not mean "reflective space" precisely because what is at stake does not so much have to do with the kind of visual space one medium will open up, but precisely with the kind of time that can be taken to better trace the network of meanings operated by theory.

As Kuntzel reminds us, before conceptual art one medium could only talk about itself metaphorically. Theory was only made possible through commentary, a formal practice that would stand outside of the functionality of the medium it addressed. In other words, only theory could work as a commentary upon a specific medium. Kuntzel for his

[145] Kuntzel, *Title TK*, 335.
[146] Kuntzel, *Title TK*, 549.

part intends to develop a reflective system that can comment on a medium from and within itself. For Kuntzel, this reflective system takes the shape of a moving image apparatus that collapses the distance between image and theory, text and commentary.

Mainly active in film theory in the 1970s, Thierry Kuntzel's first art installation *Le Tombeau de Saussure (Double Entrave)* [see plate 1] explicitly engages in a larger debate concerning the status of the text in relation to the filmic image. To better unpack and appreciate this relation I urge we consider a short text, written by Roland Barthes that addresses the question of the linguistic nature of images. In "Rhetoric of the Image," Barthes asks: "can analogical representation (the 'copy') produce true systems of signs and not merely simple agglutinations of symbols? Is it possible to conceive of an analogical 'code' (as opposed to a digital one)?"[147] Interested in how the image (both analogue and digital) spurs reflection on the ontology of meaning generation, Roland Barthes underscores the fundamental component at the core of Kuntzel's goal: to make the readable visible. This component is the semiotic notion of the code where code is understood as a system that converts information into a form that is communicated via a medium.

Roland Barthes asks as early as 1964 if there could be an analogical code of representation, thus directing our attention to a potential transformation at work within the realm of analogue images. In his short article he analyzes advertising images because of the intended, thus limited arbitrariness of their significations. Barthes distinguishes

[147] Roland Barthes, *Image, Music, Text*. Trans. Stephen Heath, New York: Hill and Wang, 1996, 32.

between a linguistic, a coded iconic image, and a non-coded iconic image.[148] Concerned with the *mass image* Barthes acknowledges that in the overall structure of the image, the three types of codes are intertwined.

In the 1970s film theory began conceiving the film as a text. In this way the film could be approached in an analytical manner, applying the semiotic techniques of textual analysis to the filmic form. However, text should not be literally understood as the letters transmitted through a specific medium. On the contrary, as Raymond Bellour reminds us in his short article "The Unattainable Text," what Roland Barthes and before him Maurice Blanchot meant by text was the work of the text (*le travail du texte*), that is, the process whereby material is rendered readable.[149] Bellour adds that this *work* is characterized by a multiplicity of operations taking place in an unrestrained openness. In other words, what is at stake when engaging with the *work* is the experience of the operation of the text, its unbounded functionality. Bellour, a prominent figure of film theory who has written on Thierry Kuntzel's video artwork for decades, stresses that even though the film is a text, this text remains unattainable precisely because it cannot be quoted. In other words, because the filmic text cannot be re-cited in the same way that a word or sentence can be, that is, in "a material coincidence between language and language": the concept of the text is only applied metaphorically to film.[150]

If, for Bellour, the filmic text *per se* is only metaphorical, it is metaphorical in a different way than the written text, but also than the pictorial, theatrical, or musical text.

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[148] Barthes, 36.
[149] Raymond Bellour, "The Unattainable Text," *Screen* 16.3 (1975): 20.
[150] Bellour, 20.

The written text is the only one that can be quoted unimpededly and unreservedly. But the filmic text does not have the same differential relations with the written text as the pictorial text, the musical text, the theatrical text (and all the intermediate mixed texts they give rise to). The pictorial text is in fact a quotable text. No doubt the quotation stands out in its heterogeneity, in its difference; no doubt there are many material difficulties in its way, difficulties expressing the specifically material loss undergone by the work from the very fact of its reproduction.[151]

To further illuminate why the filmic text is so different from other types of texts it is important to understand the notion of commentary. A commentary has a material reality that can also have the function of a text whose operations can be depicted. For Bellour, the material reality of a commentary is necessary because it mediates and it inscribes the process between the object and the comments made about it. In other words, the notion of commentary helps clarify that there is an irreducible distance between the work of the text and the commentary understood as the analytical work drawn from the text and inscribed within a specific, but different material reality.

On The Transformative Potential of Media Studies

> To believe that issues of representation are now irrelevant is to believe that the very real life chances of groups and individuals are not still crucially affected by the available images circulating in any given society. And the fact that

[151] Bellour, "The Unattainable Text," 21.

> we no longer see the mass media as the sole and centralized source of our self definitions might make these issues more slippery but that does not make them redundant. Tactical media are a qualified form of humanism. A useful antidote to both, what Peter Lamborn Wilson described, as "the unopposed rule of money over human beings". But also as an antidote to newly emerging forms of technocratic scientism which under the banner of post-humanism tend to restrict discussions of human use and social reception.[152]
>
> Geert Lovink

In this section, I question how the theoretical shift of the 1970s resonates with more recent debates considering the status of the letter and the function of the text in networked communication. In what follow, I lay out one recent debate that took place across the Atlantic between two distinct schools of thought in media theory. My goal is to reveal how Kuntzel's simple and yet productive work may bear some weight in recent questions concerning the fate of mediation in digital economy.

In *Excommunication*, media theorists Alexander Galloway, Eugene Thacker, and McKenzie Wark develop a theory of mediation as excommunication, which they define as *a priori*, excess, or withdraw of communication.[153] In the co-written introduction "Execrable Media," excommunication is presented as having less to do to with the destruction of communication than with its impossibility and its insufficiency. By taking the notions of media and mediation "as *conceptual objects* in their own right," not only does the trio develop a model based on the "fantasy of an absolute end to all communication" but they also attempt to further a theory of mediation understood as that

[152] Geert Lovink, "The ABC of Tactical Media," *Nettime*, 16 May 1997. http://www.nettime.org/Lists-Archives/nettime-l-9705/msg00096.html. Web. 10 April. 2016.
[153] Alexander Galloway, R., Eugene Thacker, and McKenzie Wark. *Excommunication: Three Inquiries in Media and Mediation*. Chicago: University of Chicago Press, 2013, 11.

which can ultimately annul any communication, and yet both stands prior to and conditions it.[154] More precisely in Alexander Galloway's essay "Love of the Middle," three modes of communication are distinguished: the first is the text, represented by Hermes and related to the critical method of analysis named hermeneutic; the second is the image represented by a figure of pure mediation as well, named Iris, a figure that refers to the experience of immanent immediacy that gives shape to phenomenology; the third is the network represented by the Furies and related to the contagious presence of a system. For Galloway, the textual, the visual, and the systemic operate in concert in most of the media artifacts composing the visual and moving image environment.[155] However, he underscores the current tendency to privilege a systemic mode of mediation, imposing the network as a "new master signifier" at the cost of other knowledge pathways such as hermeneutic and phenomenology:

> Thus, for media theory, the following normative claim begins to emerge: hermeneutic interpretation and immanent iridescence are, at the turn of the millennium, gradually withering away. Ascending in their place is the infuriation of the distributed systems. In more concrete terms, a tendential fall can be expected in the efficiency of both images and texts, in both poems and problems, and a marked increase in the efficiency of an entirely different mode of mediation, the system, the machine, the network.[156]

[154] Galloway, Thacker, and Wark, *Excommunication*, 1-24.
[155] Galloway, Thacker, and Wark, 46.
[156] Galloway, Thacker, and Wark, 62.

According to Galloway the expected fall in the efficiency of both hermeneutic and phenomenology goes hand in hand with the deployment of a radically different mode of mediation, that of the systemic network. In that case, the figure of the Furies is deployed as a theoretical metaphor, first to approach "complex systems like swarms, rhizomes, assemblages, and network" that give rise to new "networked *epistémè*," and then to understand the development of a hegemonic modality of communication.[157] Our relation to the world no longer operates through Hermes' cryptography, nor through Iris' iridescent prism, but through the Furies' underground network. This network is defined as imposing a new mode of communication. Instead of communication as operating within the object world, Galloway claims that the network gives rise to a mode of communication that operates next to the real. He thus proposes to think of a third mode of mediation, that of the Furies, which disperse a wide system of networks and underground connections:

> The Furies run next to the real, but they are never *about* it. They reflect nothing, they reveal nothing, and they most certainly do not let something "shine forth in what it is" as Iris's phenomenology teaches us. They demonstrate that truth is not inside or even outside the real, but simply alongside it, nipping at its heels.[158]

By operating next to the real, this third mode of communication especially challenges the possibility of accessing the object of mediation. Very much inspired by François Laruelle's project of non-philosophy—that develops a logic that is alongside philosophy

[157] Galloway, Thacker, and Wark, 17, 62.
[158] Galloway, Thacker, and Wark, 59.

yet not about it—, Galloway claims that the world has become systematic and that another form of theoretical engagement with it needs to be developed. To him, it is within the world's furious "state of agitation and sensuous energy" that mediation has to be examined.[159] Thereby, the infurious system directly challenges theory itself by cancelling the contact, rather iridescent or hermeneutical, with the object of mediation. In other words, at the core of Galloway's paper resides the argument that in the middle of the twentieth century, the word became systematic, transforming the question of translucence and visuality into a question of the media screens' opaque surfaces.

To better understand the impact of such conceptual concerns regarding the notions of media and mediation I turn to *Excommunication*'s second essay. At the core of Thacker's "Dark Media," resides a paradoxical encounter with that which is unreachable. In this text, excommunication is understood in terms of movement and moment. To Thacker, dark media refers to a paradoxical movement: a communicational imperative that is expressed as the impossibility of communication; and a paradoxical moment that is defined as "when one communicates with or connects to that which is, by definition, inaccessible."[160] This paradoxical logic of both movement and moment is what he calls the enigma of mediation:

> The aim is to undertake a sort of experiment--to think about communication, media, and mediation less in terms of technical artifacts or technical processes, and more in terms of the capacity of media to at once mediate between two points, while at the same time negate this very

[159] Galloway, Thacker, and Wark, 60.
[160] Galloway, Thacker, and Wark, 81.

> same form of mediation. […] I will be calling this enigma--the mediation of that which cannot be mediated—*dark media.* Dark media are, in a way, the consequence or the effect of excommunication. And, if excommunication precedes or conditions every communication, we might likewise say that dark media precede or condition every mediation.[161]

For Thacker, two layers of media operations run parallel to each other: the first is communication as being *always*, *already* shaped by excommunication, the second is mediation as being conditioned by dark media. The two relate to one another since dark media are the effects of communication, in the sense that dark media are produced as left overs of what escapes communication.

If Galloway emphasizes the infurious network as a mode of communication, dark media is understood here as the *paradoxical encounter*--both a movement and a moment--with that which is unreachable. This paradoxical encounter is the one of an "empty aesthetic form in which the thing-in-itself is at once mediated and not mediated."[162] More precisely in his essay Thacker offers a genealogy of philosophical thinking about objects, distinguishing between the relation of subject and object as found in Kantianism and Husserlian phenomenology, the object to object relation as found in object oriented ontology, and the object and thing relation that has occult qualities such as in dark media. Since dark media defines that which connects with the inaccessible, it has less to do, in principle, with a relation of the subject and object type:

[161] Galloway, Thacker, and Wark, 81.
[162] Galloway, Thacker, and Wark,118.

> Instead, we are considering the possible passage between objects and things between that which is readily accessible to us as human subjects, and that, which enigmatically withdraws into a region that we can only describe as the "thing-in-itself." Note that, strictly speaking, there can be no relation between object and thing. It is the "relation" of object-thing. While objects are always objects as they appear to us as subjects, things occupy a dark, nebulous zone outside of subject-object relations altogether (including object-object relations). If objects are always objects for a subject, then things are like impossible objects, occult objects, or better, apophatic objects--objects absolutely withdrawn, leaving only a strange, fecund emptiness, an inaccessibility that knows no limit.[163]

By offering the concept of excommunication the trio aims at creating a theoretical tool to question that, which *always, already,* and *again* overflows mediation. They attempt to redefine our human condition as depending upon a communicative modality that escapes communication itself.

Media theorist and activist Geert Lovink responded to this text and criticized the intellectual position adopted by Galloway, Thacker, and Wark.[164] "The New York Three," as Lovink names the trio, turns away from the challenge imposed by the international scandal caused by the revelations of CIA's former system administrator

[163] Galloway, Thacker, and Wark, 119.
[164] See Geert Lovink's online publication "Hermes on the Hudson: Notes on Media Theory After Snowden," *E-Flux Journal* #54, April 2014. Web. 19 Jul. 2014.

Edward Snowden in June 2013.[165] According to Lovink the three authors favor Greek mythology to talk about our radically changing media relation instead of addressing questions such as the freedom of speech in an increasingly complex security apparatus, and the empowerment of citizens in the digital era. To Lovink, the highly codified and elitist jargon of *Excommuniation* not only speaks to "the revolutionary few" but simply cannot respond to the challenges imposed by the deployment of a global digital network in which "the subject-as-user […] can indeed no longer productively distinguish between real and virtual".[166] For Lovink, Snowden marks a turning point in media studies and the duty of the latter is now to find ways to counteract the invasive development of planetary surveillance where freedom of expression and access to information is at stake as an *a priori* to all modes of communication. In other words, the task of theory is not to present archetypal figures within conceptual realms, but to take algorithms and coding seriously. The main concern is to question the yet unknown impact of algorithmic structures and data mining on informal exchanges. Lovink doesn't see it as being relevant for the increasingly wired situation to question and reveal the general and absolute modality of mediation, nor to develop any types of conceptual analysis of its potential evolution. What is at stake is much more pressing and precise: it is a question of the ethical challenge to develop civic alternatives in which "another communicative order" can be developed in the digital age.[167] The challenge facing media theory bears not only on the

[165] In June 2013, Edward Snowden shared with the public classified documents on surveillance and data manipulation that he acquired while working as a NSA contractor, revealing to the world the security apparatus of invisible data centers ran by the United States.
[166] Lovink, "Hermes on the Hudson: Notes on Media Theory After Snowden," 3-4.
[167] Lovink, 6.

difficulty of accessing the objects of critical analysis—say, the algorithmic structure of Google, the social graph of Facebook, or the invasive function of the drone--but also on the fact that media theorists did not learn to code and thus to decode, recode, and analyze the transfer of data in the age of the systematization of the model of applied mathematics. For Lovink, the message of the medium runs in underground structures, indeed the precise ones that escape our attention and by slipping past us structure our ability to access their operations. It is this internal mechanism that should be questioned not mythological spectacle of excommunication. In order to compete against the deployment of complex and self-sufficient technologies of surveillance and manipulation, media theorists should be able to understand the internal ramifications of mediation. While for Lovink the duty of media theory is grounded in the traineeship and practice of skills that can compete with today's hegemonic model of the algorithm, the New York Three attempts to develop a methodological approach as well as new modalities for interpreting our changing world.

In the wake of Lovink's critique, McKenzie Wark's response made clear that he is not an activist but a writer.[168] Wark claims that the duty of a media theorist is to reveal the undetermined potential of an object, whether technical or digital, actual or virtual. Thus, Wark and his collaborators insist against Lovink that technical competence and an ethical pragmatics of communication are no substitute for a methodologically open engagement with media and mediation. In interrogating multiple figures of mediation (Hermes, Iris, and the Furies), the trio offers to rethink the making of culture as an

[168] See McKenzie Wark's online response "Where Next for Media Theory?" *Public Seminar.* 9 Apr. 2014. Web. 19 July. 2014.

artifact that shapes and is being shaped by a *metaxu*, an in-between space, which gives form to the reciprocal and reflexive milieu of mediation. Thus, at the banquet celebrating the concept of excommunication one might find Aphrodite, goddess of sexual media and a love for the middle that gives shape to diversity, or Morpheus who delivers messages through dreams, an example being Socrates' foreknowledge of his death sentence as related by Plato in the *Crito*. For Wark, these examples demonstrate the different positions one could adopt in order for the past—Greek mythology, Socrates' condemnation, French, Russian revolutions, or Edward Snowden's revelation—to resonate in the future, and, most importantly, to open potential for the future. The point is to think of mediation as a touchstone by which to interrogate our contemporary situation, and media as a prism through which methodological openness needs to be cultivated. As if anticipating Lovink's reservations, the very first page of their book reads:

> One thing the trio of us share is a desire to cease adding "new media" to existing things. Media are transformative. They affect conditions of possibility in general. Mediation does not merely add something to the existing list of topics that scholars study. It changes the practice of study itself.[169]

In this sense, thinking of media and mediation as conceptual objects offers a way to reevaluate the transformative potential of media studies today. In fact, the trio aims to critically engage with the conditions of possibilities for the freedom of speech, circulation of information, citizen's empowerment not from the point of view of practical counter-

[169] Galloway, Thacker, and Wark, 1.

actions, but from within the realm of theoretical interrogations. In the vein of scholars such as Friedrich Kittler, Lisa Gitelman, Jay Boulter and Richard Grusin, who contest the so-called new media by showing "how old the 'new' media experience is", the trio raises the question how to know what media *do* and how it changes the possibility of knowing as such.[170] In *Excommunication*, the goal is to underline that the hermeneutic method has been privileged for centuries--a privilege that in a sense constitutes a certain form of elitism--but also to establish that there remains an underestimated potential in and for media studies. The latter can today, precisely by gesturing toward an approaching future, be used to create and develop other ways to interrogate textual forms of the past, thus responding to the ongoing challenges that face the humanities in the era of the algorithm and digital coding.

To usefully contextualize this argument, I draw attention to Vilém Flusser's account of what serves as the core of such a debate. For Flusser the goal is not to rescue the hermeneutic from the algorithmic, but to work, as Lovink might urge, with the latter and its codes. If one attempts to challenge and understand our increasingly complex and virtual environment through merely historical and critical means, theory will miss the point. To him, we need to relearn how to learn, how to write, how to be critically engaged with our environment:

> A completely different critical method is required, one that is only approximately named by the concept "systems analysis." For this, alphabetic thinking is useless. This is not to say that we are surrounding to

[170] Galloway, Thacker, and Wark, 1.

> the new images uncritically; on the contrary, we will develop new methods so that we can analyze and resynthesize them. Such methods are already being developed. The attempt to rescue the old critical thinking may be noble, but it is completely beside the point. We will have to learn how to write digitally, should *writing* still be a suitable designation for such a means of notation, and should anyone still be able to see it as a recoding from old into new codes.[171]

What is at stake is not so much to "secure a place for writing in the texture of a future culture" but to develop "new methods so that we can analyze and resynthetize" the digital images that shape the socio-cultural and political dimensions of industrialized societies.[172]

In other words, *Excommunication* sparked a debate that is concerned with both ethical and methodological challenges: ethical as it engages within the transformation of subjectivities, and methodological as it questions critical models and tools so as to better address the transformation of mediation within the context of our increasingly wired environment. When Lovink claims that "In the age of smartphones, archetypal layers have been rewired and have mutated into a semi-collective techno-subconscious," he deliberately cautions against the production of telematics and computational subjectivity that appear both at individual and collective levels.[173] For Lovink, the goal of media studies is to face and address this ethical challenge. Theorists should therefore fight

[171] Vilém Flusser, *Does Writing Have a Future?* Minneapolis: Universiy of Minnesota Press, 2011, 152.
[172] Flusser, 151-152.
[173] Lovink, "Hermes on the Hudson: Notes on Media Theory After Snowden," 3.

against the dispersion of a global and hegemonic mediascape that is both the product and the apparatus of a complex regulation of subjectivities. Ultimately, what is of immediate concern is the power to automatically discriminate, monitor, select, combine and distribute data sets. This power is now contained within the realm of algorithmic and wired structures. The algorithm is thus what defines and frames the ethical and methodological challenge within the context of an extremely complex and increasingly virtual contemporary visual environment. The power to discriminate needs to be examined with regard to the question of subjectivity formation, precisely because the latter sees its function as fighting against a standardization of consciousness, a function itself algorithmically designed.

Within an extremely complex algorithmic system, contrary forces shape the notion of mediation. On the one hand technically inscribed algorithms work as new system of codes that allows for the production of newly engendered practices of communication. On the other, algorithms create a closed system that only very few can navigate and thus transform. This leads to two major challenges. The first one is the reduction of the potential of the ensemble into efficient mathematical formulas, and the reduction of the milieu of their use into a closed and stable structure. The ensemble and the milieu, because they are the locus where new plans of consistency takes shape, should be protected from a sovereign formal logic that has replaced subjectivities by algorithms. Furthermore, when Thacker claims that communication is now shifting, from an epistemological register to an ontological one, he underscores the point that media now operate within and beyond ontological realms. In other words, media are now operating

within an ambivalent realm, between the object and the thing, where the subject is no longer a perceptive center but one element among others. What is thus precisely at stake, is the notion of experience. The latter is no longer understood as the result of a human mediation. On the contrary, the object of mediation escapes human perception and operates within an underground.[174] This underground space is nonetheless shaping experience itself as it relates to the relational dynamic that takes place in between objects and things. Because this space is, as Michel Foucault might have put it, "heterotopic," that is, a space of potential, of productivity, it delineates precisely where media theorists and artists alike ought to be directing their creative energies. To do so they may well require the path breaking insights of Kuntzel to find their collective way.

This chapter establishes that the analysis of media requires us not only to unpack the staged functionality of a specific medium but also the network of operations and functions. In this context, Thierry Kuntzel's work is particularly valuable to question the development of prescriptive structures of communication that shape the relation between reception, production, and distribution of signals.

[174] Here I acknowledge and yet differentiate my approach from Boris Groïs' notion of submedial space which defines media's underground space in relation to the archive: "Behind the sign surface of the archive we may suspect an obscure, submedial space in which receding hierarchies of sign carriers descend into dark, opaque depths. This dark, submedial space constitutes the Other [*das Andere*] of the archive, albeit another Other compared with the profane space outside the archive, about which I spoke in the context of the economy of the New." Boris, Groïs. *Under Suspicion: A Phenomenology of the Media*. New York: Columbia University Press, 2013, 11.

Chapter Three: The Allagmatic of Race

In chapter two, I approached the question of mediation in relation to the network. In this chapter, I want to move from digital communication to its preemptive milieu by showing that digital devices partially constitute a new regime of bodily capture. Considering the newly engendered form of bodily capture in the digital age leads us to an inquiry into another order of politics that is different from the ideological realm of interpellation fostered by the Althusserian model of state apparatus, but that is fundamentally operative at the level of the regulation of time and space. The aim of this chapter is to suggest that we should move from the notion of interpellation to the notion of preemption as a response to the rampant advance of operations that track, capture, and mine the body.

In the digital age the body has been transformed into data on a daily basis: data about corporal performance, banking, and online identity. Computational operations produce data that lead to a new form of abstraction of the body—and this calls into question the politics of digital preemption. The digital age is experiencing the emergence of particular forms of *racial discrimination* that we can unpack through the analysis of the proliferation of devices that track, capture, and mine embodied attention. Such apparatuses of control point to the deployment of a new regime of surveillance in which the state apparatus and its security policies are intrinsically linked to the business of the big data economy. Here, big data refers to an economy ruled by computation and algorithmic operations that extract information by applying mathematical formulas.

These developments are tied to the proliferation of both medical devices such as MRI and X-Ray, and operations of control and regulation of circulation increased in techniques such as scanner, metal detector, and DNA profiling. In this chapter, I pay particular attention to the shift between a politics of interpellation and the development of a digital politics of preemption.

In the first part of this chapter, I question the use of similar tools to detect pathologies and migrations, and examine technologies of control in the context of a proliferation of digital devices. More precisely, I interpret *Hiver (la mort de Robert Walser)*, a video installation presented at the MoMA in 1991 that presents the African American performer Ken Moody wrapped in a shroud and shot from above. I argue that Kuntzel's installation offers the medical trope of "the data-mining of the body." I analyze this installation and the political context of the 1990s in France and in the US as a means to theorize the invisible violence of today's modes of algorithmic surveillance. In this context, I aim to move away from a definition of race as an embodied discourse—a representation as an effect or product of norms—to question race as an operation and as a function. I ask: of what politics is race the condition? By doing so, I aim to develop an allagmatic of race: a theory of race as operation, technology, and prosthesis. The second part of this chapter outlines the work of the imagination as a constitutive factor of collective actions understood as both psychic and collective relations. I ascertain the role of the audience in experiencing such video installation work and determine the affective process that leads toward an understanding of representation based on a relational experience. Here the collective is the grounding basis for the production of signification.

This section provides the basis for a politics of imagination, which begins to disrupt the often-reductive definition of imagination as only pertaining to the faculty of a single individual.

From Bodily Representation to Operation of Bodily Capture

You enter a dark and wide shallow space and see three mural-size video projections along one long wall. You are standing in front of the videos, your back against the wall on the opposite side of the room. Confronted with the crushing scale of the installation (each image is 10 feet high by 7 feet wide), you cannot grasp the totality of what is being presented at once and instead have to make a visual selection. The three videos begin with a saturated white light that gradually fills the space of the room. Slowly, the central panel functions independently from the two others and reveals shades of grey that give shape to a figure. Your gaze is drawn by the central panel, where the lighting contrast exposes the silhouette of an African-American male performer lying on his back. Soon, you are staring at an almost naked body wrapped in a shroud. The scene is silent. You stare at this gigantic body passing horizontally in your field of vision. Sometimes, the figure stares at you despite the fact that your gaze and his gaze form the crossroads of an impossible encounter. You continue to look at the central panel where the movement of the camera seems to go back and forth above the body in a regular and continuous fashion, following a path that gradually expands the field of visual capture, creating a

scanning and electronically programed quality to the movement. In the central video, the body is seen as a sculptural figure that is being shaped by the scanning device, while the two side-screens develop a continuous variation of the colors purple, black, and blue at the periphery. In this visual experience, the body of an African-American male performer is being shot from above. The audience sees his body as a fragmented corpse that is being dissected by the camera. The intrusiveness has transformed the video into an inescapable place. The image no longer functions as a window from which you project yourself in one representation of the real. On the contrary, the moving image is a dead end where modalities of identification are entombed.

Thierry Kuntzel's video installation *Hiver (la mort de Robert Walser)* [see plate 17] was first produced and exhibited at the Museum of Modern Art in New York in the summer of 1991. Kuntzel's work was part of the Project Series, a groundbreaking program in contemporary art created in 1971, which features pioneers in video installation art, among other emerging artists. Barbara London, who founded the video program in the film department of the museum in 1977, commissioned this piece. It was designed as a triptych whose central frame uses a motioned controlled camera to recreate the effect of a scanning device. It is made of three projectors, two video players, and a system of synchronization. This 5min-and-30sec video installation was performed in a continuous loop within the setting of the museum.

There are a couple of ways in which one could read this visual installation. First, one should pay attention to two visual references that Kuntzel is drawing from. The first one is Andrea Mantegna's piece *The Lamentation over the dead Christ* from the 15th

century, which presents a rare instance of a scene of lamentation where the Christ is not presented on its cross, but lying on his back. This visual reference is indeed interesting in terms of the pictorial construction: the folds of the veil, the laying on the back, and the high angle shot from which the scene is depicted. The second reference comes from the fact that *Hiver (la mort de Robert Walser)* was part of a four video installation project titled *Quatre Saisons (Plus ou moins une)*, which translates as *Four seasons (one more or one less)*. *Hiver (la mort de Robert Walser)* was later complemented by three other installations: *Été (double vue)* [see plate 16], *Automne (Éloge de l'ombre)* [see plate 29] *Printemps (pas de Printemps)* [see plate 19]. The four installations were presented with another installation only made of sound. In *Moins une (autobiographie d'un autre)* [see plate 20], the spectators were asked to cross a dark space in which a recording of Lou Reed was heard. Combined together, the four audio-visual installations refer to the 17th century French painter Nicolas Poussin's paintings *Les Quatre Saisons ou Le cours de l'Histoire*, a four painting project which portrays the time that passes and the cyclical enfolding of history within it. Kuntzel's installation *Hiver (la mort de Robert Walser)* directly refers to *Hiver* for which Poussin chose the theme of the deluge borrowed from the Old Testament to exploit symbols tied to the hibernal season: a lugubrious scene, a veiled sun, and a tone of dark greys that add to the dramatic intensity of the pictorial composition.

These visual references to Mantegna and Poussin are entry points to Kuntzel's interest in the reflexive function of video. By referencing them, he shows how video can be a medium that reflects upon preceding media forms such as sculpture, painting, film,

and theater, thus producing an aesthetics that is concerned with hybridity and intermediality. Obviously, yet another more complex aspect of this intermediality is to be found in the title of the video installation itself, which refers to the Swiss poet and novelist Robert Walser. The latter was of major influence on writers such as Walter Benjamin and Franz Kafka, namely writers that engaged in the cultural critique of alienation and power. Furthermore, Walser was found dead in the snow on Christmas Day of 1956, a death he foretold in his first novel the *Thanner* (1907). But more importantly, Walser was also someone who was robbed of his physical subjectivity by being institutionalized. In the sanatorium where he spent nearly thirty years of his life, Walser developed micro-scripts: texts and poems he had written in a coded alphabet. It is fascinating to explore how Kuntzel mobilizes this history of isolation, coded creativity, and a body subjected to the discipline of technology in his piece.

In *Hiver (la mort de Robert Walser)* the camera is attached to a trail and is programmed to follow an 8-shape movement above the body of African-American performer Ken Moody, best known as a model for photographer Robert Mapplethorpe. For the taping, the model lays under a motion control camera, which passed over him, following the figure-eight orbit of the infinity sign. The video is constituted of five variations of this scanning movement in which both lighting and close-up are used as tools to modulate the atmospheric characteristic of the figuration presented. In a notebook, Kuntzel describes the effect produced by the camera:

> The day following the shooting.
>
> I have brutally gone from melancholy to terror. […]

> With Winter, no escape, or subterfuge: even if the image is tripled, the left and right panels are not necessarily intended to be seen – pure time flows there, peripherally, on the edge –: straight ahead at the center, the genesis of a representation, its alteration and its disappearance in a register of stupor. Can I sustain this unnamable, this block of perception for which there are no words? […] This is true. Already Summer [see plate 16], read as a mirror image. Here a season of the body, and of a mortal cycle, perhaps a reversal of time. Body amongst those returned from the dead. Born again, why the persistence of Renaissance codes? Summer's perspective, Winter's drapery. This body in repose, what dead Christ, hardly recognizable (dark)?[175]

Kuntzel did not predict the effect produced by the use of the camera. The computer-programmed movement of the camera created a regime of presentation that is autonomous and automatic. It runs by itself based on a program, as opposed to being guided by the track or the hand of the operator. There is thus a distinction to be made between the project of the artist and the realization of the project through digital means.

In *Hiver (la mort de Robert Walser)* [see plate 17], the camera goes back and forth above the body in a regular and continuous fashion, following a path that gradually expands the field of visual capture, creating a scanning and electronically programed quality to the movement, a characteristic similar to the one of an MRI device. While the medical apparatus of the MRI produces loud and almost unbearable noises, the entire

[175] Kuntzel, *Title TK*, 588.

video is silent. In this case, the muteness of the technological operation highlights the intrusiveness of the camera. In the central video, the body is seen as a sculptural figure being shaped by the scanning device. The intrusive movement with which the body is shot is analogous to the operational theater, where an audience can watch surgeons perform. The bright light of the operating theater reveals a body without shadow and without depth: it is a flattened body reduced to clinical observation. At least two other paintings come to mind here: Rembrandt's *The Anatomy Lesson of Dr. Nicolaes Tulp* from 1632 and Henri Gervex's *Avant l'opération, le Docteur Péan enseignant à l'Hôpital Saint Louis sa découverte du pincement des vaisseaux* from 1887, where the theater-like apparatus of the surgery is depicted.

While medical interventions most often require human presence, such as a doctor, a nurse, a technician, in *Hiver (la mort de Robert Walser)* [see plate 17] the operation is done through the camera alone. This setting breaks away from the horizontal perspective of the human gaze by replacing it with a planar drone-like angle of vision. In the video, there is no illusion of a perspectival space in which the viewer can find refuge. On the contrary, the camera is as precise and as intrusive as a scalpel. It brings the audience inside the body. The body being scanned is that of a man wrapped in a shroud, that of an excavated body or a wandering body that did not receive funeral, that of a sick body, which passes under an MRI to be scanned so that the pathology can be localized, and treated. For the viewers, the image of the body in *Hiver (la mort de Robert Walser)* refers to that which is caught in organ trafficking, which brings into question a very specific form of corporal commodity in which parts of a body are worth more than the life of a

subject from which organs and members may be extracted and sold. The indistinguishable inside of the body is then more mobile than the body of the migrant who seeks refuge. This conjuncture between medical and surveillance technology gives rise to organs, without body. The mobility of organs contrasts with the immobility of certain bodies that do not have the right to cross borders.

New Digital Regime of Bodily Constraints

Intrusive techniques of capture such as these were deployed in the 1990's in France, a period that marks the reinforcement of anti-immigration policies in Europe. The "Pasqua law" voted in 1993 by the right-wing coalition and named after French interior minister Charles Pasqua, imposed repressive measures that rendered formerly legal migration flows illegal.[176] At the same time, Jean-Marie Le Pen's extreme-right National Front party gained a significant part of the French electorate with its demand to expel, among others, Muslim immigrants from France. In a talk given for the 8th congress of the National Front on April 3rd 1990, Le Pen called for an awareness concerning a disease that was spreading all over the country, and that he named "le SIDA politique" (political AIDS). Le Pen claimed that what attacks the French vital system is analogous to AIDS,

[176] "The so-called Pasqua Laws prohibited foreign graduates from accepting in-country employment, increased the waiting period for family reunification from one to two years, and denied residence permits to foreign spouses who had been in France illegally prior to marrying. The legislation also enhanced the powers of police to deport foreigners and eliminated opportunities to appeal asylum rejections. The election of a conservative president in 1995 continued the course of limiting immigration channels." Kimberly Hamilton, Patrick Simon, Clara Veniard. "The Challenge of French Diversity." *Migration Policy Institute*. http://www.migrationpolicy.org/article/challenge-french-diversity. Web. 11 May. 2015.

both a homonym and an acronym that, in French, stands for "Socialisme, Immigration, Drogue, and Affairisme" [Socialism, Immigration, Drugs, and Venality.] Le Pen's analogy to AIDS was more than timely as France, among other countries, faced the climax of what was called "the AIDS years" in 1990 by French magazine *Le Gai Pied* in March 1990. This analogy between migrants and people infected by HIV played on the fears of Le Pen's electorate, encouraging it to believe that the outside was the cause of "the political aids" and to view sick individuals and migrants as victims of their own promiscuous lifestyles and unsafe behaviors. In the context of this dialectic—between the self who represents the French territorial body and the non-singularized others that stand for parasitic outsiders—immigration is conceived of as a pandemic disease-spreading worldwide and from which France should be rescued.

Known as the syndrome of an immune deficiency, AIDS talks directly to the imaginary of Le Pen's electorate who sees the French nation as a sovereign body whose territory needs to be protected from invasive and unwelcomed residents. In the context of such analogy, laws and borders are used as rhetorical tools to regiment and maintain the lowest risk of parasitic presences. According to the FN (Front National), the French territory is defined in two specific ways. First, it only represents *la France métropolitaine*, which designates the European territories of the French republic, and outcasts *la France d'outre-mer* whose importance is relegated to post-colonial utilitarian positions (one could think of the European Space Agency located in French Guyana for instance). Second, this territory is anthropomorphized into a body, which sees the outside as a field of bacterium that weakens the economy and the cultural authorities of France's

superiority.[177] Such sanitary argument recalls commonly used governmental strategies that stigmatize specific communities, such as migrants, to evict places of refuge in the name of hygienic conditions and public salubrity. Moreover, the blood contamination that is known as the main road through which HIV is transmitted evokes both the rejection of *métissage* (interbreeding) whose development is seen as weakening France's supremacy according to the FN, and the stigmatization of homosexuals, artists, and drug addicts who were the first to be hit by the spreading of the AIDS disease in the 1990s. In Le Pen's political discourse, a medical trope is used to explain the effect of migration and is put forward as the cause of a disease. By collapsing racial discrimination and medical symptoms, Le Pen's analogy functions as a symbol of his political agenda and operates on an ideological level—taking the effect for the cause of a problematic situation.

The African-American man in Thierry Kuntzel's video installation *Hiver (la mort de Robert Walser)*, Ken Moody, is a performer best known for his numerous collaborations with American photographer Robert Mapplethorpe who died from AIDS in March 1989, a year before Kuntzel's installation was created. Mapplethorpe's work is remembered for his sensitive and yet blunt treatment of controversial subject matters such as sexuality, gender, and homoeroticism. In addition, the exhibition of Kuntzel's video installation in July 1991 coincides with the first time when police brutality was caught on

[177] Today, more than ever before, the Front National claims a politics of purgation in regards to immigration. In a press release from 11 May 2015, Marine Le Pen, President of the Front National and daughter of the former President Jean-Marie Le Pen, declares: "Seule la reprise en main de notre souveraineté nationale, c'est à dire en matière migratoire de nos frontières et de nos lois, permettra de mettre un terme à l'immigration massive et à ses conséquences néfastes pour l'ensemble de la société. Dans ce contexte, sortir de l'espace Schengen est désormais un impératif absolu." Le Pen, Marine. "Immigration Massive: L'Europe n'est pas une solution mais un problème." http://www.frontnational.com/2015/05/immigration-massive-leurope-nest-pas-une-solution-mais-un-probleme/. Web. 11 May. 2015.

tape in the United States. It was the video footage taken by George Holliday of the March 1991 beating of Rodney King by the Los Angeles Police. The raw footage of the beating was broadcast on national television and sparked the infamous L.A. riots of 1992. This footage is considered the first viral video of its kind in the pre-Internet age, and George Holliday to be one of the first citizen journalists, a concept in media theory based upon the idea that citizens can play an active role in the process of collecting, reporting, analyzing, and disseminating news and information. In this case, the video operates as a tool that allows its viewers to witness the bodies who suffer the cost of social death.

In *Hiver (la mort de Robert Walser)* [see plate 17] the camera is used as a scanner. This use of the camera represents the deployment a new regime of surveillance, which I call "scanning surveillance." "Scanning surveillance" is a regime in which a person is no longer being addressed as an individual with agency, but instead as a body, or corpse among others, a body that is subject to examination by technical objects that operate outside the realm of the individual's sensory perception. The body does not act—it is acted upon. The regime of terror that is central to the aesthetic framework of the video installation interrogates the sacrificial ground in which the body of the African-American performer is captured. The visual modulation of the camera exemplifies the shift from a society of discipline to a society of modulation and control. In Kuntzel's piece, the video becomes a trap, similar to the one that regulates and modulates the movement of bodies in time and space. The video is an inescapable place in which data, information, and evidence are being extracted from the body through technical means. Here, the frame of the image no longer functions as a window from which the audience

projects itself in one representation of the real. The moving image is a dead end where modalities of identification and projection are entombed. Furthermore, the central panel calls into question the collapse of the categories of representation and expression.[178]

There are two different regimes of operations in the video installation. The first has to do with the scanning device (central frame), which mechanically fragments and reproduces a particular image of the body and reveals the medical trope that resonates with mechanisms of control and the use of technical objects to monitor people. The second regime of visual operation has to do with the two frames located on the edge. Made of blue, black, and purple colors that fluctuate constantly while the scanning device operates, these two panels allow for other categories of knowledge to emerge. However, and as Kuntzel points out, the two-side images are not necessarily made to be watched. They function at the periphery, to expand the exploratory duration of the visual experience and decentralize the gaze from the regime of capture present in the central panel.

The video presents a context in which to account for the analogy between the development of medical devices that make the body disappear into data and operations of regulation that track movement in time and space. The scanning apparatus of the video calls into question the specific use of computer-programed technology that are deployed to detect, track, and mine the body. Following an analysis that accounts for the technical precondition of racial discrimination, one could trace back to specific uses of operation of

[178] The Deleuzian categories of representation and expression, which used to develop a certain modality of understanding racial dynamics and politics of interpellation, are now challenged by newly engendered operations of discrimination.

bodily capture. It is possible to consider three usages of the same technical object to highlight the political implications of technical operations. First, the body of the miner who gets systematically scanned by the diamond-mining company to detect and combat diamond theft. In an illustration from 1919, the use of X-ray in a diamond mine in South Africa is depicted via the contrast between the body of the colonized that is being exposed to the X-ray and the body of the colonizer that is being protected from it. Here the scanning technology equally performs the detection of injuries onto the body as well as the presence of foreign bodies in a patient. Furthermore, the setting implies that there is a long line of almost impatient miners who need to be regulated by the guard so the technician can perform its task. Second, the same scanning operation is used to monitor the circulation of people. In the image produced by millimeter wave technology in airports, one can see that such technology is able to undress people, transforming the body into a naked silhouette whose sex is exposed. Thirdly, the same technical operation is employed to detect a corpse concealed underneath a truck. By using electromagnetic radiation, both the x-ray and the scanner are devices employed to detect concealed objects. The radiation becomes a medium of measurement beyond the layers of human perception. Understanding this regime in which the operations done to the body are linked to technical operations that run at an infra level is crucial to grappling with the contemporary mode of surveillance.

What is at stake in the three examples presented above is the capture of a presence and the mining of the traces it may, or may not, leave behind. There is then the development of a paradox between the capture of a said presence—body, objects, organs,

gestures—and the operations of what lacks any presence—namely an algorithm, a set of mathematical formulas, a pattern or program. It is within this tension, and the blurry distinction between presence and absence brought about by algorithmic operations, that I aim to reevaluate the question of race in the digital politics of preemption. The operations of digital capture at play in today's society are operations in which algorithms track and wrap the individual into sets of quantifiable abstractions. This data mining of the body gives rise to organs without bodies. In this body-mining context, race in the age of both electronic and digital surveillance can no longer only be understood as an embodied discourse. On the contrary, race needs to be analyzed as the product of a technical operation. If Michel Foucault warned us against the development of an apparatus of surveillance that produces subjugated knowledge, that is, a knowledge written out of history, the deployment of scanning devices in the digital age forces use to think about the modes of traceability and data mining that are writing upon us. In this context, a reevaluation of power dynamics fostered by institutions is more than needed. When tools are programmed to apprehend action and keep track of the traces left behind, it is the notion of history itself and the discourse it produces that are at stake. The rise of an hyper-writing machine of interconnected devices questions the very notion of a technically, and thus historically, produced subjectivity.

From Illusion to Prehension

Thierry Kuntzel's video installation pushes us to recognize the power of ideological discourses such as Le Pen's, and reveals the rhetorical force of the metaphors used to serve a political agenda. Furthermore, Kuntzel's video essay pushes us to interrogate how the technical operations of medical devices that capture bodies in space and time and ultimately lead to racial discrimination, segregation, and inequality. The effective strength of Le Pen's comparison resides in that it is both an *illusion* and an *allusion* to reality, two characteristics fundamental to the structure and functioning of ideology as presented by Louis Althusser. In his now famous essay "Ideology and Ideological State Apparatuses," Althusser points out the ambivalent relationship that is fostered by falsified representations:

> while admitting that they [ideological representations] do not correspond to reality, i.e. that they constitute an illusion, we admit that they do make allusion to reality, and that they need only be 'interpreted' to discover the reality of the world behind their imaginary representation of that world (ideology = *illusion/allusion*).[179]

In the context of Le Pen's analogy, the *allusion* operates on the basis of a shared structure: acts of migrating and contractions of AIDS are global phenomena. From this it follows that the falsified representation of the world presented by the FN (migrants = HIV people) is 'only' partially incorrect because the allusion operates effectively on a

[179] Louis Althusser, "Ideology and Ideological State Apparatuses," 162.

structural level. Conversely, the *illusion* is anchored in an imaginary distortion that poses immigration and AIDS as the causes of France's sick political system. Whereas the structural relation is based on an *allusion* to global phenomena, on the contrary, the causal relation is 'only' the effect of Le Pen's 'vivid imagination.'[180] The causal relation of his analogy is based on the *illusion* created by an imaginary relation.

Althusser offers two distinct types of interpretation of such imaginary relation: a *mechanistic* interpretation that defines Priests and Despots as the "cause for the imaginary transposition of the real conditions of existence" and a *hermeneutic* interpretation that defines the "material alienation which reigns in the conditions of existence" as the cause of the imaginary transposition.[181] Even though Le Pen's discourse could easily be assigned to the first category of interpretation (as no one in France better exemplifies the figure of a contemporary Despot), Althusser's text is based on a subtler point of view. For Althusser, ideology functions as the representation of a *rapport imaginaire* (imaginary connection) to a real relation, one that is concerned with the materialistic condition of individual existence.[182] What is represented in ideology is therefore not the system of the real relations which govern the existence of individuals, but the imaginary relation of those individuals to the real relations in which they live.[183] Althusser defines ideology as "the representation of an imaginary relationship of

[180] Here one will easily detect my use of Spinoza's terminology found in the *Tractatus Theologico-Politicus*: "the power of prophecy implies not a peculiarly perfect mind, but a peculiarly vivid imagination." Benedict de Spinoza, *Tractatus Theologico-Politicus*, New York: Dover, 1951, 19. I will go back to this point later in the essay.
[181] Althusser, "Ideology and Ideological State Apparatuses," 162-164.
[182] Althusser, *Idéologies et apparails idéologiques d'état*, 40.
[183] Althusser, "Ideology and Ideological State Apparatuses," 165.

individuals to their real conditions of existence."[184] In the context of Le Pen's analogy, the imaginary of his electorate is yielded by a representation ('*le SIDA politique*') that operates as a satirical image. The amount of sarcasm it takes to state that migrants are the threatening force of a political system not only "mocks" and "takes pleasure in the powerlessness and distress of men" but forges the satirical and sacrificial ground from which a mutilated idea of the real emerges.[185] The mutilated idea of the real is caused by the imaginary distortion of the representation, its *illusion*. However, such mutilated knowledge is nonetheless an *allusion* to reality and more so as the satirical image produces hatred and revulsion toward mutilated bodies in lack of political, institutional and social care. Le Pen's *SIDA politique* is a satire in the sense that it feeds "on accusations, on malice, on belittlement, on low interpretations."[186] Such satirical presentation (migrants = HIV people) is in opposition to the "vital and optical rectification" of Spinoza's *Ethics* whose work is grounded in a method of invention rather than intellectual exposition.[187]

In the political and aesthetical context of the 1990s in France, what seemed a useful definition of the work of the *imaginary relation* in Althusser now appears as a dead end. The imaginary relation presented to individuals by ideological systems is effectively powerful in shaping their relation to the real precisely as individuals continue to cultivate their own collective imagination, or in Spinozan terms, as individuals produce an inadequate and yet powerful knowledge of their real condition of existence. In other

[184] Althusser, "Ideology and Ideological State Apparatuses," 162.
[185] Gilles Deleuze, *Spinoza. Philosophie Pratique*, Paris: Minuit, 2003, 13.
[186] Deleuze, *Spinoza*, 13.
[187] Deleuze, 13.

words, it is not so much that ideology is a system that dominates the individual minds but that by doing so it imposes an all-encompassing veil between the real and the collective praxis of the imagination related to the real. In such ideological apparatus, or system of representation, the distortion is intrusive in the sense that it filters the relation between collective beings and acting. Ideology is the more powerful when it leads collective individuals to act differently from from what they imagine that they do, by imposing an alienating gap or imaginary relation that prevents them from directly engaging with real, shared, and collective conditions of existence.[188] Simultaneously, such *dispositif* allows individuals to cultivate the work of their own imagination. What makes an ideological system so powerful is that it presents collective individuals with a common imaginary framework from which every individual performs the singular work of his or her imagination without relating to the collective condition of existence grounded in the real. It seems then that the more the imagination is at work, the more it feeds the operative system of such imaginary structure.

Imagination as an Operative Scheme

Questioning the doubling of relations at work in ideology, i.e. ideology as representation that operates both as *illusion* and *allusion* to reality, leaves the door open to two intricate debates: one concerned with a relational ontology grounded in the work of the

[188] From a Spinozist point of view, immigration and contraction of AIDS have nothing in common at the level of essence, but share a whole world at the level of existence.

imagination and, following a Spinozist tradition, to a non-asymmetrical relation to falsity and truth; and the other one concerned with an operative milieu that takes causal immanence as the pre-individual process from which collective individuals can act. The path that I intend to create in the following pages addresses the work of the imagination as a practice of collective ontology.

Both in his *Ethics* and his *Theologico-political Treatise*, Spinoza has pointed out the work of the imagination as both a type of knowledge and a means through which the servitude of the masses arises. The very ambivalent power of imagination directly addresses the complex and yet under considered tendency in which psychic and collective individuals fall into falsified representations of the real while constructing the social milieu in which they evolve. In commenting on Spinoza's *Theological-Political Treatise*, Antonio Negri differentiates *corruptive imagination* from *productive imagination*, granting to the latter the grounding stage of philosophy as opposed to theology.[189] Negri differentiates two operations of the imagination to better account for the ideological realm in which religion seems to use imagination as a constitutive function of falsity and illusion. Here the corruptive imagination is the one of the theological-image of superstition. Superstition, according to Spinoza is that which brings fear into the state as far as it prevents one from understanding final causes by replacing them with opinions whose work is mainly the one of the imagination. Moreover, when this human faculty is activated, it is always in relation to a collective entity. In Spinoza, individuals do not form collectivities; it is instead the collective that produces individuals through the

[189] Antonio Negri, *The Savage Anomali*, *The Savage Anomaly: The Power of Spinoza's Metaphysics and Politics*. Minneapolis: University of Minnesota Press, 1999, 121.

interrelation of right and power. Negri sees in the Spinozian project, "the constitution of collectivity as praxis."[190]

In such a political and aesthetical context, one cannot be satisfied with a mere opposition between *corruptive* and *productive* imagination as found in Negri's work. Ideology functions both with and within the ground of the imaginary and the work of the imagination. Such a system of domination infiltrates itself by using the imagination (defined as a tool precisely conceived to relate to and make meaning of the world) in order to shape collective individuals' relation to the real.[191] While commenting on Spinoza's *Theologica-Political Treatise*, Negri is nonetheless correct to underscore the constitutive power of the imagination, and more precisely superstition, as the basis for the legitimation of political conditions. Particularly useful in his commentary is an articulation of two concomitant shifts that position "the logical problem of the imagination" from two connected lenses: one that is concerned with a shift *from revelation to institution*, and the other with a shift *from illusion to constitution*.[192] On the one hand, the former allows moving away from a mere denunciation of prophecy as alienation to grounding the historical reality of "efficacious mystification."[193] On the other hand, it permits critically engaging with the "constitutive activity" of the imagination not only as a "simple political function" but also as an "ontological

[190] Negri, *The Savage Anomali*, 21.
[191] I will go back to the definition of imagination as a tool as it departs from an understanding of imagination as 'only allusively temporal' (Negri, *xviii*). For now, I would simply ask the reader to not merely understand imagination as a faculty or a capacity, but more as a practice that requires technique.
[192] Negri, *The Savage Anomali*, 92.
[193] Negri, 95.

power."[194] For Negri, Spinoza's theologico-political treatise is "the first unfolded emergence of the constitutive power of human action" in so far as it allows an opening in which:

> Imaginative activity reaches the level of an ontological statute, certainly not to confirm the truth of prophecy [that which Negri calls 'corruptive imagination'] but to consolidate the truth of the world and the positivity, the productivity, the sociability of human action [that which he calls 'productive imagination'].[195]

The abrupt opposition between corruptive and productive imagination that emerges from antagonistic distinctions between theology and philosophy as well as monarchy and the republic is not particularly useful here as we attend to understand the ongoing work of the imagination throughout collective individuals' imaginary relation to the real. Negri's comment is nonetheless valuable as it points out the constitutive capacity of knowledge as raised by collective praxis. For Negri, the Spinozian rationality is "A constitutive ontology founded on the spontaneity of needs and organized by the collective imagination."[196] Such a project moves away from a conception of imagination as pertaining to individuals toward an understanding of the work of the imagination as a collective practice central to Spinoza's relational ontology.[197] If the imaginary relation

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[194] Negri, 95.
[195] Negri, *The Savage Anomali*, 97-98.
[196] Negri, *xxii.*
[197] On the notion of relational ontology in Spinoza, see Etienne Balibar, *Spinoza: From Indidividuality to Transindividuality.* 1993. Delft: Eburon Delft, 1997 ; and Hasana Sharp, *Spinoza and the Politics of Renaturalization.* Chicago: University of Chicago Press, 2011.

functions as a framework for a hegemonic representation of the real in Althusser, the imagination operates differently. The imagination begins with the collective to form constitutive knowledge and action. It follows that for Negri, Spinoza's project offers "a research scheme oriented in a phenomenological direction, understood as identifying the level of reality that is constituted by the imagination."[198] Negri locates the ethical within the realm of the imagination as a "constitutive force of the reconstruction of the world":[199]

> The imagination is as strong as tradition, it is a vast as Power, it is as destructive as war—and *it is the servant of all this*, so that human unhappiness and ignorance, superstition and slavery, misery and death are grafted onto the imaginative faculty itself, which, on the other hand, *constructs* the horizon of a human society and a positive, historical determination of being. A new metaphysical foundation, then, that tries to traverse the entire world must not avoid the conflict with this theologico-political figure of reality. Distinguishing the truth and recognizing the human capacity to construct both truth and the freedom of life, apart from all the calamities that the imagination determines in the world, become the first steps in a logical reform that is trying to found an ethical reform. And a political reform, too? Yes, necessarily.[200]

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[198] Negri, *The Savage Anomali*, 92.
[199] Negri, 84.
[200] Negri, 89.

The work of the imagination is thus not a system that imposes itself to dominate the mind [i.e. an ideological system of representation], but an operative scheme anchored in the materialistic condition of collective practices. Now, one can start to distinguish *imaginary structure* as a system of thought from the *work of the imagination* as an operative scheme. Such a scheme is one of both a psychic and collective process of individuation where individuals are tied in an ever-expending process of becoming. Here I transfer the distinction between *corruptive* and *productive* imagination by the structural functions from which different work of the imagination arise. My analysis leads toward an operative scheme of thought rather than a productive system in which the imagination is enslaved and tied up to an imaginary relation. The development of a non-oppressive environment is the challenge faced by the work of the imagination. This development has to go through a decolonizing process of the imagination from which system of representation and falsified knowledge are replaced by an operative scheme. Such a scheme is the one that encompasses human agency from the point of view of a relational ontology. In this context, what matters is the production of a horizontal plan in which the relational character of existence leads toward a less oppressive imaginative horizon. [201]

[201] On the decolonizing process of the imagination and the creation of a less oppressive horizon, see Sharp, *Spinoza and the Politics of Renaturalization.* 156.

Operations of Bodily Capture

The global strategy of social conservatisms aims to defend society against all threats. From one socio-political system to another, the definition of menace not only varies but also carries the weight of the deployment of a particular apparatus of defense and attack. Expressions of the intent to hurt or indications of an impending danger are detected according to parameters whose characteristics can be as versatile they are obscure. In today's digital age, not only is the interpretation of danger based upon a targeted definition that suits a political agenda, but such a political hermeneutic is performed by algorithmic procedures that operate below the threshold of human's sensory-motor capacities. Threats are defined as potentials according to an interpretation whose parameters can be as obscure as they are versatile. The politics of the threat, or, the politics that define threats as that which needs to be combatted, has led to the emergence of war temporalities in which accessing future potential shapes the face of the present.

According to Michel Foucault, social conservatism has led to the development of state racism, which defines a state in which society directs racism against itself. For Foucault, the development of biologico-social racism throughout the nineteenth century led to the splitting of a single race into a superrace and a subrace. Such racial discourse was the product of a centered and centralized power to combat those who pose a threat against biological heritage. State racism gave rise to an internal mechanism of purification, which becomes the basic dimensions of social normalization. Racism is not a phase, nor it is an episode: it is the product of a psycho-power. Bernard Stiegler argues

that contemporary power technologies not only discipline bodies or regulate life-processes, but control and modulate consciousness. Following Gilles Deleuze own warning on the development of a society of control, Stiegler names such a shift the passage from biopower to neuropower. Racism is systemic: it imposes itself as the opposite of desire and cancels out the potential of becoming with others.

From Interpellation to the Digital Politics of Preemption

Digital data are both the objects and the tools of today's society. The development of automatic computing—self-managed computing systems with a minimum of human interferences—has changed the governance of social and economic systems by displacing human agency. That is, the human is no longer the main agent of the media network in which he or she evolves as media operate more and more below the threshold of human sensory perception. Yet, networked digital presence stems only from the access to data. Within the data driven landscape of today's communication, the body turns into a quantifiable set of predictions. Biology has gone computational, and so has the socio-discursive mode of bodily apprehension.

Media theorist Mark Hansen recently engaged in a discussion concerning the impact of digital media on our experience of time more specifically. In *Feed-Forward*, he challenges the common assumption that we choose to engage with media and consume

their content.[202] On the contrary, he proposes to think of media as unavoidable parts of our experience: they have expanded their scope to operate outside the realm of our perception.[203] The media technics of data-mining apply a prospective model to dig out specific information and they instrumentalize time through the development of probabilities. In their respective works on the preemptive power of new media technology, Brian Massumi and Mark Hansen respectively point to the instrumentalization of time in today's algorithmic modes of data surveillance and pre-crime policy. Working on the post-9/11 American foreign policy and its logic of imminent threat, Massumi points out to that the effective, rather than causal operative logic of preemption is employed to quasi-causally affect the present.[204] For Hansen, the "premediation" of future events prior to their occurrence—as exemplified in *Minority Report*—operates at the level of ideology. To him, it is urgent to distinguish between "the future-implicating causal efficacy of the real *and* the premediation of how that efficacy might produce the future."[205] The latter is a representation that is designed to immunize the possibility of the improbable. In this case, both the logic of preemptive power and premeditation are deployed as ontological problems: ones that question how to relate to what has not yet emerged in the present and yet constitutes a future threat.

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[202] On the post-prosthetic phase of technical distribution, see Mark Hansen's book *Feed-Forward.* Especially the chapter on prehensivity, 33-135

[203] Mark B. N. Hansen. *Feed-Forward: On the Future of Twenty-First-Century Media*. Chicago: University of Chicago Press, 2015.

[204] Brian Massumi, "Potential Politics and the Primacy of Preemption." *Theory & Event* 10, no. 2 (2007) para 23, http://muse.jhu.edu/journals/theory_and_event/v010/10.2massumi.html

[205] Mark B. N. Hansen, "Our Predictive Condition; or, Prediction in the Wild" *The Nonhuman Turn* Ed. Richard Grusin. Minneapolis: University of Minnesota Press, 2015, 132.

For philosopher of law Antoinette Rouvroy, such techniques of "prediction" aim to remove uncertainty, doubt, and hesitation by analyzing large datasets. Rouvroy understands this change toward prediction as a "passage from the deductive logic to a purely inductive logic."[206] She develops the notion of "algorithmic governmentality" to update understandings concerning Michel Foucault's concept of governmentality. The aim of the Big Data ideology, she explains, is to remove uncertainty but also "recalcitrance."[207] Individuals, by becoming dividuals, are also becoming "quantified sel[ves]": since all their data are considered potentially useful, everything should be recorded and kept for future potential uses.[208] The promise of the Big Data ideology is therefore a "passion for the real": we can finally know the distances we walk, the calories we eat, the hours we sleep without any interference and friction. We have a direct access to new functionalities, what seemed previously incalculable is now calculated for us, only at the cost of our voluntary donation of data, a new kind of voluntary servitude. What was incalculable, improbable and often abstract, such as desires and dreams, is now calculated and processed by these online services using sophisticated algorithms. In algorithmic governmentality, our expectations take into account the results from these online services about our possible future experiences (the color of the food from that restaurant, the music from bands playing at that gig, etc).

The development of automatic computing prompts new forms of objectification for the body, making the latter become the field of a constant operation of data-mining. In

[206] Antoinette Rouvroy and Bernard Stiegler, "Le Régime de vérité numérique. De la gouvernementalité algorithmique à un nouvel État de droit," *Socio*, 4 (2015), 11.
[207] Rouvroy and Stiegler, 15-73.
[208] Rouvroy and Stiegler, 14.

the wake of Rouvroy's work, one can argue that networked machines embody specific forms of power and authority, leading to statistical governance.[209] This algorithmic governmentality produces a post-interpellative mode of governance that urges us to consider operations of bodily control and behavorial surveillance from an aperceptive point of view. As Mireille Hildebrant points out, such governmentality is based on the development of techniques "that trace and correlate the data, detect patterns invisible to the naked eye, to recombine discrete data into new contexts and to anticipate futures on the basis of patterns found in past behaviour."[210] At stake here is not only the instrumentalization of time for the sake of programmability: the preemptive dimension of computer-driven environment questions the production of particular forms of subjectivity.

What matters in the last decade is not so much the fact that ubiquitous computer-based images mimick the operations of living thought, but rather that networked machines are producing a new image of thought that bears political challenges, especially regarding racial discrimination. This new image is the one forstered by the ideology of big data. The latter is no longer political as it is not anchored in the interpellation and positioning of a certain subject. On the contrary, such ideology is technical, meaning that it operates by fostering practices, such as behavorial profiling, financial tracking,

[209] Antoinette Rouvroy, Thomas Berns, "Gouvernementalité algorithmique et perspectives d'émancipation. Le disparate comme condition d'individuation par la relation?", *Réseaux* 1.177 (2013): 163-196.

[210] Mireille Hildebrant, "Autonomic and Autonomous 'Thinking.' Preconditions for Crinimal Accountability." In *Law, Human Agency and Autonomic Computing*. Eds. Antoinette Rouvroy and Mireille Hildebrant. New York: Routledge, 2011, 141-160.

displacement recording, monitoring of bodily performance, and capturing of data that have not yet been produced.

Frantz Fanon's interjection 'Look, a nigger!' which was thrown in his face triggered the imposition of a verdict consituted in plain sight: it is through the gaze of the child who is talking to his mother that Fanon sees himself as bearing the mark of an incurable alterity.[211] In Fanon's case, the interpellation functions on a relational mode that both targets and positions the subject as other. This model of interpellation is still crucial to account for the work of the gaze in positioning the other in a racialized category. However, an understanding of interpellation *à la Fanon* is nonetheless incomplete to unpack the automatic profiling, tracking, and capturing of racialized bodies in the digital age, as these operations are being performed out of sight.

In the case of Louis Althusser's interjection 'Hey, you there!' that he developed in 'Ideology and Ideological State Apparatus' in 1970, this interpellation is the theoretical framework proposed to think about ideology. In this case, the figure of the interpellation displays the function of ideology as that which unfolds the process of subjectivation. In other words, ideology recruits its subjects by interpelling individuals in a given society. The process of production and social reproduction thus becomes central to account for the material condition of ideology. While the Althusserian model of interpellation has been popular to detect forms of subjectivation, it has mutated with the newly engendered language of data materiality.

[211] Frantz Fanon, *Peau noire, masque blanc*, Paris: Seuil, 1952.

Indeed, in the digital age, materiality has to be understood in terms of mathematical formulas, i.e. data. Moreover, the material procedures of the production of data is not based on a model for anonymous ideological insertion. They do not need the figure of the interpellation as they do not engage with any subject at all. In the midst of theoretical debates concerning race in the digital age, the discursive model of interpellation should be repurposed to sustain a critique of racism in the biometric present. To tackle this challenge, I propose we turn our attention to new operations of bodily captures. By looking at the relation between automatic computing and human agency, I aim to reevaluate race in the digital age from the point of view of operations of datamining, ambiant computing, and spatio-temporal tracking. At a time when most media operate below the treshold of human consciousness, the discursive formation of race based on the logic of epidermalization and objecthood needs to be reevaluated from the standpoint of operations of governance in which algortihms play a central role. Moreover, the insiduous instrumentalization of the racialized body in today's data-driven gorvenance has undergone systemic changes. This does not mean that media theorists have to reduce race discourses to an apolitical understanding of representation. On the contrary, much work needs to be done to unpack the racialized categories at play in online presence, as well as to account for the performative potential that digital platforms offer for alternative modes of being in the world.

Imagination and Theory of Operation

As philosopher of science and technics Gilbert Simondon notes that the "allagmatic" is a theory of operation aimed at understanding the mode of existence of technical objects and at revealing the technical preconditions of social or cultural formations. In other words, it aims to reveal the relation between structure and operation in any given individual, may the latter be an animal, a technical object or a machine. The allagmatic of race moves away from an understanding of race as being only the effect of interpellation, which functions at an epidermic level as Frantz Fanon pointed out. Instead, the allagmatic of race aims to interrogate the operations of mesurement, mediality and surveillance that are performing outside the realm of human sensori-motor perception. In doing so, I aim to question race as the condition of a political system. In this sense, racism is systemic, it proliferates within the environement of networked machines that track, capture and mine the body in time and space. I take race as the cause—rather than a consequence—of a right-wing political agenda, and question the relation to technical objects, such as X-ray, scanner and facial profiling as constitutive factors of such culture. Here, culture defines that which arises from a relation toward a technical object. I propose the encounter with the allagmatic of race as a new paradigm for the human relation with technical objects.

Via the operational system it triggers, this allagmatic of race offers an alternative to think about race as the cause of a specific relation to techniques and technology. This section targets racial discrimination as the cause of a political system to reevaluate the

ideological impetus that states that race is only tied to an imaginary relation to the real, i.e. a discourse, and to question instead the work of the imagination, and the operational scheme it offers, to challenge some of the most pressing issues of today's cultural politics.

This potential stems from the cultural dimension of a technical object, as it has been understood by Gilbert Simondon and, following his lead, by philosopher of technics Bernard Stiegler. Both Simondon and Stiegler have foregrounded the centrality of technics in social and political experience. In *Du mode d'existence des objets techniques*, Simondon insists that "It is culture that is regulating and that creates the link of circular causality between the rulers and the ruled over," meaning that culture starts and ends with the question of the governed.[212] Simondon insists that critical theory has to operate the inclusion of technical reality—or what he prefers to call "technicity"—into culture. For Simondon, humans are mediators of the relation between machines, granting them the necessary independence in order to objectively interrogate the cultural aspect of technicity. Stiegler, for his part, has expanded this definition by treating culture as a political question. For Stiegler, the becoming of an individual is tied to technical artifacts that form the condition of a social milieu. The question of culture thus becomes the question of what is happening in the social realm, where technics play a central role in shaping the relation between individuals. The political aspect of culture is tied to the pharmakological dimension of technical objects. By pharmakological, Stiegler, following Jacques Derrida's account of the relation between writing technics and memory, refers to

[212] Simondon, *Du mode d'existence des objets techniques*, 207.

the ambivalent power of all technics.[213] For Stiegler, the technical field emerges simultaneously as a solution to a problem and engenders forms of toxicity that require the development of therapeutics in order to address the remedy-poison aspect of technics. In other words, technical life is a dynamic system shaped by contradictory tendencies.

In the context of the ideology of big data, one major challenge is to reevaluate the work of the imagination in regard to newly engendered imaginary structures. If autonomic computing is nothing but a projection, as Antoinette Rouvroy states, the digital plunges us into abyssal ontological and epistemological interrogations concerning our relation to the real. In order to adress the question of race today one needs to engage in the work of the imagination in relation to new technics and technology. However, while a lot of attention has been paid to the democratic potential of the Web, especially as the latter adopted peer-to-peer and decentralized modes of operations in the 1990s, these platforms in which such feelings of democracy seem to perform are not neutral: they make the monitoring, capturing and mining of bodies in time and space possible. Such joyful run-up for the Web is only causing a digital blindness that bears particular consequence for thinking critically about new forms of governance toward racialized bodies.

[213] Jacques Derrida. "La Pharmacie de Platon." *Phèdre.* Ed. Luc Brisson. Paris: Flammarion, 1995, 255-403.

Concluding thoughts

This chapter has contrasted the model of interpellation and preemption and showed how a historical account of bodily capture can be beneficially used to reflect on the development of digital apparatuses that track and mine data out of the body. It ends by suggesting that the realm of imagination as deployed by Spinoza can be an example of a technics of thought that emerges out of a decolonized body, free from a priori structure that mines the individual's potential for de-phasing itself.

Conclusion: The Discrete Imaginary

> And if it were possible to demonstrate that lived reality is always a construct of the imagination and thus perceived only on condition of being fictional, irreducibly haunted by phantasms, then we would finally be forced to conclude that perception is subordinated to—is in transductive relationship with—the imagination; that is, there would be no perception outside of the imagination, and vice versa, perception then being the imagination's projection screen.[214]
>
> Bernard Stiegler

In the previous chapter, I underlined the difference between the projective work of the imagination and the preemptive structure of the imaginary. I now want to seek to understand the role of the imagination in shaping processes of psychic and collective individuation as developed by Gilbert Simondon. As I have argued in this dissertation, Thierry Kuntzel's work exemplifies the projective work of the imagination, thus underlining the value of inventing new modes of perception to make sense of the world. This section will give me an opportunity to develop the concept of the discrete imaginary further. By formulating both invention and imagination, I want to understand their dynamics within digital structure of prediction and preemption. I must make it clear that I

[214] Stiegler, *Technics and Time. 3 Cinematic Time and the Question of Malaise*, 16. "Et si l'on pouvait montrer que la réalité *vivante* compose toujours avec l'imagination, n'est perçue qu'à la condition d'être fictionnée, irréductiblement hantée de phantasmes, alors on serait peut-être finalement amené à dire que la perception est toujours en relation de transduction avec l'imagination, c'est-à-dire qu'il n'y a pas jamais de perception sans imagination ni l'inverse, la perception étant l'écran de projection de l'imagination, la relation constituant ses termes qui ne la précèdent donc pas; on serait donc amené à dire que la vie est *toujours*, et que c'est pour cela que quand on aime la vie, on va au cinéma. Comme si on allait au cinéma pour retrouver la vie. Pour *ressusciter*, en quelque sorte." Bernard Stiegler. *La Technique et le temps 3. Le temps du cinéma et la question du mal-être*, Paris: Galilée, 2001, 39-40.

am not criticizing a parallel reading between Simondon and Stiegler in terms of imagination and the operational schemas fostered by technological developments; rather, I want to point to a direction of inquiry that is central to their work and that is concerned with the concretization of new processes of individuation.

Digital Trouble

As I write concluding thoughts on what shall become the draft of a first book manuscript, my goal is to further open lines of inquiries. The discrete imaginary that will concern me in this last section takes its point of departure in the object of the software. It has become clear now that Kuntzel apprehended early on in his career as a theorist and video-artist the drastic changes that occur in our modalities of both perceiving the world and being perceived in the world at the turn of the twentieth century. While chapter one dealt with the question of memory in relation to the big data industry, chapter two moved us further into the question of the transformative potential of media objects, finally bringing us to the politics of digital preemption in chapter three.

In this conclusion, I bring together the notion of symbolic misery developed by Bernard Stiegler with the notion of the discrete imaginary. By discrete imaginary, I mean the implementation of an analogico-digital structure that functions as a preemptive field that supersedes processes of individuation. I highlight the toxicity of what I call our techno-tragic condition by looking at the way in which the proliferation of digital devices

has disempowered the psyche from anticipating, symbolizing, and inventing another structural milieu. Because the digital constructs an ever-expanding network of capture and control, it is urgent to question the symbolic tragedy that is taking place. For that matter, my goal is to address and propose a new definition of the notion of the imaginary accounts for the loss of imagination in today's society. This loss is best exemplified in symptoms such as the tendential fall of attention, memory, and desire in today's libidinal economy, where the object of desire and the transitional object of the infant have been replaced by the commoditized form of the fetish. In this context, I read Gilbert Simondon's work on the image and the imagination as a way to reevaluate the unminding structure that now shapes both psychic and collective individuation in the digital age. This last section thus calls for a pharmacology of mental schemata that takes into account the rise of a discrete imaginary now expending at the speed of light.

On Our Techno-Tragic Condition

In recent years, the market economy of digital devices has witnessed the proliferation of a new form of commodity: software. Created in 1968 by IBM, software designates a splitting off from hardware and the creation of programs that are commonly understood as tools put in a computer, or other tele-communicative devices, to make it *do* things. Software is less about the physical components of the device (screen, keyboard, mouse, audio speakers, and printers), and more about that which enables the users to interact with

the machine. Word processors (Word, Open Office), video players (VLC, Windows Media Player), and Internet browsers (Firefox, Google Chrome) are software the consumers need to use a computer. The explosion of the private software sector in the 1980s was concomitant with the introduction of personal computers. At that time, software quickly became to the computer what Internet is now to the tablet: an indispensable commodity that renders the device useless if not accessible. The network-dependency of today's digital devices reveals the chain-like aspect of humans' relation to technology. In fact, and as Gilbert Simondon points out as early as 1958, what counts is the transfer of energy and information in the object and between the object and its milieu.[215] With the software, the relational dependency to a network-type of milieu questions the scheme of command and auto-regulation from the point of view of the systematic automatization of operations.

The app, i.e. the application, which formerly defined the action of putting something into operation, has become a major part of the software industry. The latter is defined by the constant upgrades and fast-growing potential of the commodity. The app presents itself as an activity to be consumed by a user who needs to be related to the temporality of a network. Among the wide range of services offered by online applications is the one that fosters mental activity. Applications have been developed to foster mental productivity, organization skills, and gaming abilities. Usually based on cognitive psychology, these apps are sold to stimulate memory, provoke thinking, inspire creativity, and unleash business strategy. According to advertisement rhetoric, the simple

[215] Simondon, *Du mode d'existence des objets techniques*, 59.

handling of these stimuli-response types of applications seems to be sufficient enough for creativity to be fostered and deployed. Brain fitness, memory training exercise, resilience building, and conquering negative thoughts are only a few of the activities the software commodity aims to promote. According to the market strategy of the software industry, apps have become enabling tools to regulate emotion, promote memory, foster attention, and increase imagination. The software, more often than not, reminds you when it is time to train, it tracks your effort, and may post your score online so that your online community can become the award winning structure of your inner challenges. Usually combined with a device that tracks your progress, or your lack of it, the app is designed to stock information about your activity and to draw a profile of your digital self and push you to match the competence and achievement of your digital double.

In this era of wearable technology, employees, students, and CEOs are tracking their health via the algorithmically designed app that tells them when to sleep, when to wake up, how likely they are going to be to lose weight, and how stress is affecting their sex life.[216] This new regime of calculation that gives access to what used to be

[216] In "How employers tracking your health can cross the line and become Big Brother" financial journalist Suzanne McGee questions the possible intrusion into one's personal life when companies seek to use the data collected by the wearable to measure financial rather than health benefits from their employees. *The Guardian*, Friday 1 May 2015. Last access, April 5, 2016. Important here, and not mentioned in the article, is the competition fostered by companies to have their employees enrolled in contests: who walks the most, who sleeps enough, who has the healthiest heartbeat, who has regular intercourse. Not only the best employee of the week is elected based on the tracking and extraction of data but such bio-regulation takes place in a wider system of endless labor. This monitoring of employees' behavior via computational tracking relates to what Jonathan Crary's book *24/7* reveals: "24/7 markets and global infrastructure for continuous work and consumption have been in place for some time, but now human subject is in the making to coincide with these more intensively. […] 24/7 steadily undermines distinctions between day and night, between light and dark, and between action and repose. The planet becomes reimagined as anon-stop work site or an always-open shopping mall of infinite choices, tasks, selections, and digressions. Sleeplessness is the state in which producing, consuming, and discarding occur without pause, hastening

incalculable and unnamable has found a label: the quantified self. The later is self-monitored and self-sensed by wearable computing technologies, also known as lifelogging.[217] The main function of the quantified self is to analyze the discrete aspects of daily life, to extract data, and to draw patterns. Movements in space and time are not only regulated by technologies operating within the social layers of intimacy, health, profession, and leisure—they are now optimized by interrelated objects that weave the threads of multiple experiences into a singular calculable one.

There is a techno-tragic characteristic of the emergence of the quantified self in today's post-industrialized society. These apps are made to enhance user's inner capacities by fostering technically supported activities. Like the device used in Greek theater to lift an actor from above or to bring gods onto the stage, the app is marketed as an empowering machine and the possibility it provides to the individual to surpass human-related ability. Becoming bigger than oneself through the tracking of data has become the motto of the industry. Such power, or *puissance*, is nonetheless relative. Because of the artificiality of such activities and the thin link it ties with daily activities (such as knowing where to put one's keys and when to pick up one's children from daycare), the enhancement does not seem to be so effective outside of the time frame it consumes. There is no need to act out the instructions outside the realm proposed by the application, there is only the need to spend time browsing the idea of enhancement.

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the exhaustion of life and the depletion of resources. Jonathan Crary, *24/7. Late Capitalism and the Ends of Sleep*, New York: Verso, 2013, 3-17.

[217] Lifeloggers are people who use wearable technologies to capture a large portion of their life. The lifelog information captured via devices are usually deposited into other devices, such as a computer, to digitally document one's life.

The app, as a commodity, consumes the user with a new type of fantasy: the ability to power. Whereas in Emanuel Levinas' *Totality and Infinity*, the ability to power was suspended by the face of the Other, such encounters have been replaced by the proliferation of iterations of the face: avatars, selfies, emojis, and emoticons are now the helpless characters of our contemporary tragedy.[218] This ability to power, sold by the digital economy of the software industry, has replaced the will to decide and to cultivate one's singular practice. The myriad of ready-made technics of the self—launched by the software industry of applications—produces the collapse of a distinction between *power* as a logic modality in the sense of the probable, and *power* as an ontological modality in the sense of what is possible, namely what is in *puissance* rather than what is in *action.* Whereas power used to define the capacity to act efficiently according to a goal, a project, or a desire, these apps foster only the power to remain constantly in *puissance* without having to act out.[219]

The techno-tragic dimension of our digital condition is tied to what Bernard Stiegler calls in the second volume of *Symbolic Misery,* "the *catastrophé* of the sensible." For Stiegler, the art of acting out is embedded in the practice of *teckné*. The loss of participation fostered by the machinic turn of sensibility—that is, the proletarianization of

[218] "The expression the face introduces into the world does not defy the feebleness of my powers, but my ability for power. The face, still a thing among things, breaks through the form that nevertheless delimits it. This means concretely: the face speaks to me and thereby invites me to a relation incommensurate with a power exercised, be it enjoyment or knowledge." Emmanuel Levinas, *Totality and Infinity*, translated by Alphonso Lingisp, The Haugue: Martinus Nijhoff Publishers, 1979, 198.

[219] *Acting out* is the English tittle of Bernard Stiegler's book *Passer à l'acte* in which he outlines his transformation during a five-year period of incarceration. While trying to understand what pushed him to remove himself from the world, Stiegler started to adopt a daily regime of sequenced actions based on reading and annotation. This is how Stiegler, with the help of Professor Gérard Granel, acted out to become a philosopher in the first place. Bernard Stiegler, *Acting out*, Stanford: Stanford University Press, 2009.

savoir-faire [skill, expertise] in the industrialized epoch—has produced a *catastrophé*. Borrowed from the lexicon of ancient Greek and classical tragedy, the *catastrophé* used to refer to a moment of crisis after which a situation is drastically changed. Known as a reversal of dynamic brought about by the collapse of the hero, such *catastrophé* has found a different meaning in our contemporary era. It no longer serves the function of an outcome nor does it signal the reversal of a situation. The contemporary form of *catastrophé* is a continuous falling down provoked by a constant state of shock: no figure stands out, no action evolves.[220] Only the dramatic tension of a situation still holds. It is in this context that Stiegler questions the symbolic misery in terms of the fall of aesthetic participation. For Stiegler, participation is a passage from *puissance* to *action* whereas the loss of participation is a regression from *action* to *puissance*.[221] Such participation is understood in terms of movement: the *puissance* is a power to move whereas the *action* is the movement itself.

The latter is the *mise-en-movement* of the soul—understood as a noetic soul—moved by a motif that is itself inscribed in a movement. The inscription of a moving motif is at the core of Thierry Kuntzel's video work. In *Echolalia* [see plate 8] the moving images define both an external movement—one that appears on a screen—and an internal movement that recalls the capacity to move and be moved by an art form. *L'émouvoir* is for Kuntzel the coming together of the movement of the film-strip and the movement of the moving image that moves the cinematic spectator, a feature that he

[220] This notion of state of shock is the title of Bernard Stiegler's book, *États de choc. Bêtise et savoir au XXI^e siècle*, Paris: Fayard, 2012.
[221] Stiegler, *De la misère symbolique. La* catastrophé *du* sensible, 53.

experimented with in his very last installation *La peau* [see plate 37] from 2007 when he came back to the film strip as an homage to cinema. Kuntzel's desire to experiment with the video form is anchored in pushing even further the experience of a moving apparatus where no external movement—the filmstrip, or the movement in the image—can be separated from the internal movement of consciousness in the viewer. It is this movement—of the writing, of the seeing and sensing, of the images emerging onto the screen—that is so valuable in today's ever expanding network of algorithmically produced interfaces. Because Kuntzel's work questions the depth of trace surfacing operations, it offers the aesthetical tools to anticipate the changes in the plasticity of our inner capacity to restructure our sensory milieu according to a dynamic tension between imagination and invention.

The AppBrain and the Discretization of the Imaginary

> The contemporary brain is a digital brain.
> David Bates[222]

Whereas the splitting of the hardware and the software was crucial to transform the latter in an open-ended commodity, the distinction relies too simplistically on an opposition between mind and body. As David Bates suggests, through a careful reading of Descartes' theory of the nervous system and the physiological foundations of cognition

[222] "Le cerveau contemporain est un cerveau numérique." Bates, *Digital Studies. Organologie des savoirs et technologies des connaissances*, 28.

and emotion, the challenge to overcome is to rethink the activity of the soul [*l'esprit*] as that which disrupts the cognitive processes of the body. Bates argues that it is such an interruption that provides adaptive flexibility to the human organism. "The open and plastic structure of the brain can […] take on habits based on connections that are not made by the mind but by external agents or circumstances."[223] For Bates, the challenge is to see in the soul, "the organization of a being that responds actively to the environment:" a definition it shares with cybernetics principle."[224] Softwares are malleable (soft) entities that can evolve through time. The plasticity of the software finds itself analogous to the plasticity of the brain, which is an organ granted with the ability to reprogram itself in response to external circumstances. As cognitive neuroscientist Maryanne Wolf puts it, the open architecture of our brain and its plasticity are the conditions of knowledge production in the form of writing, and knowledge reception in the form of language use.[225] The reading brain, Wolf argues, is constantly negotiating the creation of new circuits of signification by building connections between the visual, language, and conceptual areas that are part of genetic heritage. Understood as a decoding process, reading is thus that which constantly reprograms the brain through its capacity to build new knowledge pathways. However, and this is where Wolf's research intervenes in a groundbreaking way, she poses that we don't yet know what a digital brain can do, nor do

[223] David Bates, "Cartesian Robotics," *Representations*, 124.1 (2013), 56.
[224] Bates, "Cartesian Robotics," 44.
[225] "Human beings were never born to read." With this simple and yet powerful statement, child development expert Maryanne Wolf opens her book, which questions the relation between deep learning capacity and the faith of our reading brain in the age of digital distraction and the attention economy. Maryanne Wolf, *Proust and the Squid. The Story and Science of the Reading Brain.* New York: Harper Collins, 2007. Today, at the age of digital computing and smart technology, Wolf's statement may be transformed in what could read as: "Human beings were never born to code."

we know the implications of the constant and prominent exposure to content displayed via digital interfaces for the reader. Wolf worries that along with the confrontation with an overwhelming amount of flowing information—which continually requires and receives less and less care and effort—many new readers will no longer have the time, nor the motivation, to dig into the *savoureuses* [tasty] layers of meaning brought about the intellectual work of interpretation:[226]

> We need to understand the value of what we may be losing when we skim text so rapidly that we skip the precious milliseconds of deep reading processes. For it is within these moments—and these processes in our brains—that we might reach our own important insights and breakthroughs. They might not happen if we've skipped on to the next text bite. Tough questions. Rigorous research. These are what are needed now of us as we ponder the kind of readers we are becoming and how the next generation of readers will be formed.[227]

The software designates, at least, two conceptions of algorithm: algorithm as a set of finite and determined instructions, and algorithm as an evolving system able to adapt and vary. In this sense, and as Luciana Parisi points out, "algorithms are not simply

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[226] I borrow here a play on words that Bernard Stiegler delightfully reminds his friends, as we continue to engage with him in his generous scholarly endeavors. The French verb *savourer* finds its etymology in the latin root of the verb *saporare*, meaning "to give flavor" and the noun *sapor*, meaning "savor". But *savourer* is also rightly tied to the French noun and verb *savoir* which finds its root in the latin world of *sapere*, meaning "to have flavor." The French noun *savoir* which translates in English as "knowledge" is what gives flavor to the life of thought. The *savoureuses* layers of meaning brought about the intellectual work of interpretation are that which gives knowledge its savory taste. However, *savourer* [to relish] is not *manger* [to eat], nor it is *dévourer* [devour]. *Savourer* is about taking the time to cultivate the flavor.

[227] Maryanne Wolf, "Our 'Deep Reading' Brain: Its Digital Evolution Poses Questions" *Nieman Foundation Harvard* June 29, 2010. http://niemanreports.org/articles/our-deep-reading-brain-its-digital-evolution-poses-questions/ Last access: April 4. 2016.

instructions to be performed, but have become performing entities."[228] The doubling of performance at the core Parisi's argument implies a double understanding of programmability: programmability as that which responds to an input by the completion of a task, and programmability as that which learns how to program the task to respond according to future inputs.

Whereas in 1936 Walter Benjamin invited us to interrogate the possibility of reproducibility fostered by the newly engendered machines of the cultural industry, in the digital age such reproducibility has drastically changed. Electronic processing tracks, captures, and selects at the speed of light, generating synchronically both the proliferation and the preemption of digital objects to come. As Bruno Bachimont puts it, "Not only can a digital content be automatically reproduced, but its transformation can be programmed."[229] In this sense, we are no longer inscribed within a paradigm between original and copy *à la* Benjamin, nor are we in the production of simulacra *à la* Baudrillard. The existence of digital objects is anchored in a relational process of a different scale.[230]

The wiring of the brain to a computing machine questions the relative *smartification* of the tools and devices that now proliferate and constitute our daily environment. Smart technology, as it were, defines a technology that is learning from its users and that is reporting the data it collects to a network so that it may adjust its operation according to a wider set of parameters. More precisely, smart phones, smart

[228] Luciana Parisi, *Contagious Architecture: Computation, Aesthetics, and Space.* Cambridge: MIT Press, 2013, IX.
[229] Bachimont, *Digital Studies*, *Organologie des savoirs et technologies des connaissances,* 63-78.
[230] On this question see, Yuk Hui *On the Existence of Digital Objects*, Minneapolis: University of Minnesota Press, 2016.

tablets, smart missiles, smart drones, smart bombs, smart houses, and smart cars are "objects equipped with, using, or containing control devices."[231] In other words, smart devices are provided with systems that incorporate functions of sensing, actuation, and control.[232] These devices perform smart actions in the sense that they analyze and respond according to a set of parameters. In the case of smart devices, the context-oriented handiness of the tool is at odds with our capacity to handle change.[233] They can be both predictive and adaptive, meaning that they are granted the use of data already stored in a system to generate prediction on the future needs of operation. The increase of smart functionality into daily objects—such as smart food dispensers for pets and smart coffee machines—drastically changes the relation between subject and object.

The fact that objects can learn from the environment in which they evolve is not new. What is new is that users no longer need to learn how to use the devices that operate for them. Who has not seen a baby intuitively touching a tablet with its index, zooming with its thumb, navigating with its eyes through the many open windows that are provided for his or her attention within a couple of seconds? The intuitive dimension of the algorithmically run medium is not a mere ornament: this intuitive component has been wired to the intuition of the user who is now driven by the programmability of the machine that operates before him. The spatio-temporal object, which constitutes the app, interrogates the becoming consciously technological of our daily operations. The three

[231] See definition of smart, http://www.wordreference.com/definition/smart

[232] See definition of smart systems, https://en.wikipedia.org/wiki/Smart_system. Actuation means the operation that is responsible for moving and controlling the mechanism of a system.

[233] As Geoffrey Winthrop-Young puts it: "The computer is not a tool because that term implies a context-oriented handiness or Heideggerian *Zuhandenheit* that is said to be at odds with the computer's versality." In *Critical Terms for Media Studies*. Eds. W.J.T Mitchell and M.B.N. Hansen. Chicago: University of Chicago Press, 2010, 186.

different categories that are knowledge, awareness, and reasoning [*savoir, connaissance, entendement*] are collapsed into one that is performance: the app becomes psycho-affectively a transplant that regulates and monitors the artificial relation between perception and consciousness.

The Elemental Realm of Digital Objects

In his efforts to shift the focus of media theory from the content displayed by the object to the figure of the environment, Mark Hansen coined a new term: "twenty-first-century media." Such media, he says, encompass "everything from social media and data-mining to passive sensing and environmental microsensors," and "designate[s] media following their shift from a past-directed recording platform to a data-driven anticipation of the future."[234] In this vein, twenty-first-century becomes a term that designates the relational characteristic of media apparatuses, where objects can no longer be differentiated from the environment of interconnectivity it produces. This move away from an understanding of media as content is also a move away from a particular understanding of time in relation to media.

Appearing at the center of Hansen's last book *Feed-Forward*, the notion of twenty-first-century media aims to guide a more environmental approach to media studies, and to specify what are the substantive differences that characterize the new

[234] Hansen, *Feed-Forward*, 3-4.

forms of media present in today's world. Constituted of computational technologies and data processing, twenty-first-century media are new forms of digital objects. Such an environmental approach is inspired by the work of Alex Galloway and Eugene Thacker, from whom Hansen borrowed the notion of the elemental. The elemental designates the dynamics through which networks operate above or below the human subject. The elemental aspect of a media network, its ambient characteristic, thus points to the lack of human control regarding the media operations that constitute twenty-first-century media phenomenon. Such characteristics imply a shift from an agent-centered perception to an environmental sensibility in which human agency and media devices are to be conceived as elements within a broader environment. For Hansen, such approach implies that "absolutely no privilege is given to any particular individual or node, to any level or degree of complexity."[235] Media devices have sunken into the realm of human experience, thus shaping the "'operational present' of sensibility".[236] Hansen calls for a reform of the subjective principle from the standpoint of the newly engendered media operations that are now constitutive of the reengineering of experience. To address this imperative, Hansen suggests that we conceptualize subjectivity in terms of agency. For him, the human activity needs to be understood as one element among others. In other words, the environmental characteristics of twenty-first-century media reveal and actualize a properly elemental conception of the human.

Thierry Kuntzel anticipated the changes fostered by our ever-expanding digital realm. His videos and video installations experiment with the potential of the analogico-

[235] Hansen, *Feed-forward,* 2.
[236] Hansen, 4.

digital image to reflect upon itself and to pinpoint the space in between the different phases of the concretization of the image. It is because Kuntzel experimented with such a potential that his artistic universe became a rich object of critical inquiry into thinking through the notion of imagination in relation to technologically produced forms of digital imaginary. In the remainder of this conclusion, I will try to engage with Simondon's notion of image as life organism in relation to the notion of imagination as the restructuration of the milieu from which images of this type emerge in the first place. Important here will be a discussion on the definition of culture in relation to technical objects.

For Simondon, culture arises from a reduction of potential, when the user of a technical object interrupts its openness and directs it toward a specific end. According to Gilbert Simondon, the psychosocial historicity of a technical object operates both at the level of the use and of the symbol of the object. For Simondon, culture is understood as a consequence of the closure of a technical object. Simondon explains that a civilization is out of phase with its culture when the modification of phenomena constitutive of that culture does not match the speed at which technical objects are modified and expanded.[237] He names this crisis a *déphasage* that is constitutive of Culture in a broader sense:

> The temporal phase difference and the qualitative differentiation that intervene between culture and civilization within Culture are crisis phenomena caused by the rapid change of techniques; this change

[237] Simondon, Gilbert. *Sur la technique (1953-1983).* Paris: Presses Universitaires de France, 2014, 35.

> temporally breaks the homogeneous characteristic and organic-like totality of Culture. [238]

What is essential here is the underlining of Culture as a process of phase-shifts that implies the restructuration of the co-existence of culture and civilization. More precisely, and crucial to debates around Big Data, is the importance given to a potential gap between the development of technical objects and the effective use of those objects. This gap is thus defined as producing a crisis that disrupts the organic totality between culture and civilization. With respect to video installation art, this is exemplified by the use of video outside of the realm of both program industries and mass production of temporal objects. We shall come back to the implications of such a statement, and precisely to the effect of such a consideration that defines culture as the product of a closure in the technical object. Briefly, however, let me just state that in Simondon, each technical object is the warrant of an openness toward higher levels of progress. It is precisely the use of an object that can cause the closure of the potential of this object.

The Imaginative Condition of Invention

[238] Le déphasage temporel et la différenciation qualitative qui interviennent entre culture et civilisation au sein de la Culture sont des phénomènes de *crise* causés par le changement rapide des techniques; ce changement rompt provisoirement le caractère d'homogénéité et de totalité organique de la Culture. Simondon, Gilbert. *Sur la technique,* 35-36.

Inventions shape the structural relations between individuals in time and space. They punctuate the advancement of knowledge while superseding the potential for new modalities of becoming to emerge. In a world that is now globally monitored via automatic procedures of exchanges of data, goods, and people, the problem of invention needs to be addressed from the point of view of preemptive platforms.

To French philosopher Gilbert Simondon, invention is the fourth phase of the becoming of an image. The first being anticipation, the second being perception, the third being symbolization. These four phases create a cycle that is named the genesis of an image and which potentially leads to the constant restructuring of the cycle. In *Imagination et Invention*, a book constituted of lectures presented at the Sorbonne in 1964-1965, French philosopher Gilbert Simondon develops a theory of mental image as an intermediary reality that stands between object and subject, concrete and abstract, past and future. In this work, the mental image appears as secondary organisms within the thinking subject.[239] For Simondon, the image holds a status of quasi-organism that inhabits the subject: images develop within the subject with a relative independency toward the unitary and conscious activity of the subject himself. In other words, it is not so much a life-image understood as a capitation of life's productive forces, but an image that *is* alive and inscribed in a genesis that endures a becoming in time. Such imago-genesis shares the essential lacunary dimension of the image as both a mental perception and a mental recollection. However, and important in Simondon's understanding of the genesis of the image, is the fact that image is a sample of life [*un échantillon de vie*] that

[239] Simondon, *Imagination et Invention*, 9.

appears abstract because of the partial aspect of the sample.[240] The semi-concrete characteristic of the image includes aspects of anticipation such as projections and visions for the future; cognitive contents such as representations of the real, and affective-emotional contents. For Simondon the semi-concrete image, the image as intermediary between the concrete and the abstract, synthesizes motor, cognitive, and affective capacities. The image operates a synthesis that allows the subject to compare the weight and impact of certain semi-concrete images. While one cannot compare different concepts or different perceptions, Simondon argues that the synthetic operation of the image allows the subject to make decisions based on the comparison of the image's power. For him, everything that intervenes as an intermediary between the subject and the object can serve as an image whose value can play a prosthetic role, both adaptive and restrictive.[241] In this sense the image as an intermediary between abstract and concrete, between the subject and the world, is not only mental: it can be materialized into institutions and products that are distributed through mass media informational networks. The intermediary characteristic of the image, made of consciousness and object, grants it a high level of propagation:[242]

> Images penetrate civilizations and load them of their power; in a sense, images express socio-economic facts […] but as soon as they are materialized and objectivized, they constitute a charge and introduce a tension that partially determine the social to come. […] the image is a

[240] Simondon, 10.
[241] Simondon, *Imagination et Invention*, 12.
[242] Simondon, 13.

> resultant, but it is also a spark: it can become a primer for concepts and doctrines. The circular causality, that goes from the mental to the objective real through the social process of cumulative causality, also goes from the objective real to the mental. Every single image is likely to incorporate itself to a materializing or idealizing recurring process.

For Simondon, the object-image is almost like an organism: it carries latent significations capable to develop inside the subject. Outside the subject, the image-object grows and multiplies itself through the exchange of activities until it finds an opportunity to be deployed and incorporated by a new invention.

To question the imagination is to question the signification of object-image. Here, the imagination defines the activity of production and evocation of images but also the capacity to host images concretized in objects so that they can be endowed with a new existence.[243] It is to prevent these image-objects (works of art, clothes, machines) to become mere larval souvenir that one should have the capacity to host, through the faculty of the imagination, the potential to rediscover the signification of these image-objects. By perceiving them as organisms, the imagination of the subject provokes the imaginal fullness of invented and produced reality.

For Simondon, mental images are both structural and functional subsections of the psyche.[244] These subsections possess a genetic dynamism similar to one of an organ within a system of organs. Simondon poses that there are three stages of the development of these images: anticipation, experience, and systemization. First, the anticipatory phase

[243] Simondon, *Imagination et Invention*, 13-14.
[244] Simondon, 18.

is anchored in an *a priori* experience of the object: the image is an embryo of motor and perceptive activity that develops for itself without internal experience of the milieu. It is a phase that has to do with pre-adaptation. Second, the image becomes a mode of hosting information coming from the experience of the milieu and provides response schemas to its stimuli.[245] In this phase the images become functional: they organize themselves in groups according to the link between the organism and its milieu. Finally, after a phase of apprenticeship, the full organization of the image is achieved via affective and emotive resonances.

With such definition of the image, Simondon both acknowledges that imagination pertains to psychology, and yet grants the image of a certain power. He assumes that there is an activity that gives shape to the image, and that there is a particular function that makes use of the image. Allowing images to hold a quasi-organismic status has particular relevance as I try to interrogate the common grounds between mediascape and technoscape.[246] In the preamble, Simondon explains the genesis of a mental image by mentioning the four phases that constitute its becoming: anticipation, perception, symbolization, and invention. For him, the becoming of a mental image is an internal process relatively independent from the subject. It appears first as a prism of motor tendencies that anticipate the experience with the object. Then, it becomes a system of signals reception and allows the motor-perception activity to gradually be activated by the interaction between the organism and its milieu. Next, the image integrates the affective and emotional resonances as developed during the experience with the object,

[245] Simondon, 19.
[246] Simondon, 9.

and becomes a symbol. It is from the symbolization phase that invention can arise. The last phase is understood as a universe of symbol that tends to saturate, involving the development of a stronger dimensional system able to integrate more complete images.[247]

Following this definition, the genesis of a mental image is linked to a local activity, one of an organism with its milieu and does not refer to a faculty. For Simondon, this local and endogenic activity is what makes a subject the generator of signals aimed to anticipate, receive, preserve, and recycle in action the signals coming from the milieu. In other words, the characteristic of an image for Simondon is that it is an activity that takes place both *prior to* and *a posteriori of* the experience of an object.[248] For Simondon, an image functions as an intermediary reality. "Everything that takes place between a subject and an object can have the value of an image and functions as an adaptive or restrictive prosthesis."[249] In the field of philosophy, invention is a conceptual tool: it offers the criteria to characterize how technical specificity takes part in the ordering of reality. Invention is a means through which to understand the mode of existence and the genesis of a technical reality. One of invention's structural aspects is the fundamental connection between the genetic nature of a technical object and the cause of its invention. For an invention to emerge, the technical object has to reach the phase of concretization. Engendering changes does not translate into the definition of invention. While in the domain of living things, the newness of living is conceived via another living thing; in the domain of technical objects, newness is invented, meaning that it has to be anticipated

[247] Simondon, 3.
[248] Simondon, 4.
[249] Simondon, 13.

and conceived by the agent of the invention. Invention is thus understood from the point of view of the resolution of a problem via a new moment of concretization that takes place in the genesis of the technical object. Such a problem is defined by an incompatibility that needs to be solved between the function of an object and its structural organization within the milieu from which it emerges. In other words, invention appears as a tool to grasp both the genesis and the mode of existence of the technical object. Both the genesis and the milieu appear as determinant parts of the associated milieu, that is the field from which an auto-correlative invention takes place via the technical object and its milieu. In this case, the associated milieu is the condition of existence of the invented technical object, and the technical object is the condition of itself.

Invention is an intervention that has an ontological impact: it reorganizes the structure of the real. Because invention is inherently tied to both the milieu and the genesis of the object, its emergence induces change. Such change in the structural foundation of the milieu is caused by the concretization of a phase in the genesis of the object that reshapes the causal relation within the associated milieu. The constitutive understanding of invention as that which reorganizes the structure of the real introduces an understanding of the internal essence of the technical object as a reality that has an intrinsic homogeneity composed by auto-correlation.[250] Invention is the result of an anticipative imagination. One major paradox surrounding the notion of invention is that invention both requires the anticipative imagination of an active subject and the genesis of a technical object. In other words, invention does not arise from the work of a subject

[250] Simondon, *L'Invention dans les techniques*, 85.

alone, nor is it linked to the technical determination of an object, or to the situational components of a milieu. An invention is paradoxical as it involves the work of different factors, which auto-correlate themselves. Such work takes place in a cycle, each piece co-influencing the emergence of the invention. It is no longer in terms of chronological order that one has to think of invention but rather in terms of gradual phases that reach a moment of concretization. Images are lived organisms. They have their own genesis and continue to evolve while captured by mental and technical processes. Images take part in a cycle of phases, and each phase of an image is a metastable element, a processual work of becoming understood as the restructuring of a new cycle.

We were born to practice. Step by step, the learning process of negotiating space and time takes place to allow individuals to grasp and adopt the milieu in which they evolve. While being born usually translates into having access to a set of gears (claw, horn, fang), the human species is left to cultivate the art of instrumental mediation. Tools are the operating forces that structure our relation to reality. While one may be seduced by the term *homo technicus* as it exemplifies the major vector of change in the process of hominization, such terminology foreshadows the complexity of our technical condition. The question is not regarding what tools humans have been using for particular purposes; the question is which practices have been deployed so one can always better singularize and cultivate instruments. As anthropologist of science André Leroi-Gourhan pointed out in *Milieu et technique*, the result of centuries of tool making translates into practices, where cultural phenomena can be witnessed and narrated. While tools certainly function

as prosthesis, it is misleading to affirm that tools are defining factors of our evolution. [251] It is precisely the cultural practices at stake in the handling of tools that one can start to grasp the stakes of a politics of technical practices in today's digital economy.

Concluding Thoughts

As I conclude, I would like to go back to Thierry Kuntzel's work. Much has been left unsaid of his numerous attempts to unpack the drastic changes that are taking place in the realm of the sensible. I see his work as a rich experimentation to anticipate and to project on the future, the instruments, tools, and practices that can give rise to sensation and knowledge production. Kuntzel was a visionary figure who suspended his participation with the world of the spectatorial image of consumption to project onto new realms of desire, movement, and bifurcations. While experimenting with the in-between space of the moving image, he also created meaningful bridges for others to join. I decided to join and I cannot thank him enough for having forced me to think differently of the cinematic avatars that surround us all. The spectators of his video installations were not present to one another to consume a straight commentary on the state of the society. They were present to fluctuate along the images that appeared and disappeared in front of their eyes, at the threshold of their sensory experience. This intermittent engagement created a

[251] As Bernard Stiegler points out, following Jacques Derrida's account on the question of the supplement and the prosthetic dimension of language, the human is that which is defined by a "default" of origin and an origin in default. See Bernard Stiegler, *La Technique et le temps 1. La faute d'Épiméthée.* Paris: Galilée, 1994.

relational link between the moving image object, the analogico-digital image, and the solicited imagination of the viewers. It is with these fluctuating thoughts that I wish to end this dissertation, specifically on the question of the imaginary in the age of digital preemption. Thierry Kuntzel's work gives us some insight into the development and proliferation of analogico-digital images, and invited us to develop a more systemic approach to the value of creation, invention, and anticipation, and I hope in this dissertation to have succeeded in outlining some entry points into the further development of such thinking.

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