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UNIVERSITY OF CALIFORNIA,
IRVINE

A New Grammar of Images: Werner Herzog and the Contemporary Philosophy of Cinema

DISSERTATION

submitted in partial satisfaction of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

in German Studies

by

David Michael Lamme

Dissertation Committee:
Professor David T. Pan, Chair
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2019

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ACKNOWLEDGEMENTS

Writing a dissertation is not mere academic activity, but a crucible for one's life. The efforts of this dissertation – like most I imagine – started off with a simple, yet far too broad investigation: to look at the films of Werner Herzog and chart their mechanics. It grew and grew, ballooned and then contracted, before taking this, its final form. Only now, having been written, does its question seem assured; only now do its investigations and juxtapositions seem valid; only now do the most interesting problems generated by the problematics it encountered along the way rise to the surface, affect that (sur)face. Writing this dissertation, finally, taught me what it means to write in the first place.

To write is to become aware of limits: limits of patience, limits of isolation, limits of talent, limits of thought. To write is to break those limits and return, repeat. In the 21st century, one finds the ground to stand up only through the creative and destructive capabilities of fabulation. The crook in Kafka's back has become everyday reality that each and every one of us fights to straighten in his or her own way. Questions of who and what we are, as individuals, as groups, as a species, come shot through with inhuman actors, cosmopolitical concerns, chaotic consternations, indiscernibility. We do not know what to think but only that we must think. What is it to think? What is it to envision? What is it to act and what is it to act ethically? Doxa reigns not as king but as unconscious invader. It lies in our utterances, in our politics, in our aesthetics, our taste, our morals, our likes and posts and comments. The barbarian in all of us recoils, however large, however small. What is a horizon if it does not move, does not recede upon our advance? Can steps be measured if the sun never sets? Stirrups no longer suffice to chase the light, nor cars, nor planes, nor will a rocket

driven future. The former nomad has lost the fight and been incorporated. Another takes its place and, through it all, the spirit of wonder remains. Thought marches on across deserts, through forests, down river, over mountains, and under seas. To write is to risk. To write is to choose to choose. To write is to think.

So, we write, we risk, we choose, we think, we repeat and differ.

As a creative endeavor in the Deleuzian vein, this dissertation would not be complete without acknowledging those who have supported me, challenged me, encouraged me, and simply put up with me along the way. Though we may often be separated by time and space, my work would not bare meaning without you and neither would I. So thank you to my mother and father, my sister and nephews – thank you for the laughs, love, patience, and for the money that kept my head afloat through grad school poverty. I'd have drowned long ago without you. Thank you to my colleagues, friends, and mentors at UC Irvine, who wouldn't let me rest in my thinking, even when I desperately wanted to. A warm thank you in particular to David, Gail, Matt, and Jaime, and to those folks in anthropology that kept me grounded in the human throughout my heady work: thanks James, Nima, Nathan, Valerie, and Bill (and so many others). Thank you to the wonderful and challenging minds I've met along the way, that I so rarely get to see, but still made an impact and continue to do so; thank you Zuza and Valentina, thanks Tim and Gabbi. And, finally, thank you Renée for supporting and believing in me as I went about this half-crazed project. I once was lost but now am found. You and the Beagle Beast brighten my life and give me a home. With that one can do most anything.

CURRICULUM VITAE

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ABSTRACT OF THE DISSERTATION

A New Grammar of Images: Werner Herzog and the Contemporary Philosophy of Cinema

By

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Doctor of Philosophy in German Studies

University of California, Irvine, 2019

Professor David Tse-Chien Pan, Chair

In his central mission of working on “a new grammar of images,” the German film director Werner Herzog presents a challenge to the philosophy of cinema. Pairing Herzog’s work with Deleuzian film theory, I argue against the prevalent secondary literature that Herzog’s oeuvre engages with an anti-romantic and non-ironic material philosophy in order to provide ethical challenges to a contemporary, connected world. Specifically focusing on spatiotemporal formations derived from empirical science, I demonstrate that Herzog’s approach to cinema utilizes a four-tiered semiotic that is at its core not merely a film theory, but rather an entire material philosophy of nature with profound ethical and political implications.

Introduction

This dissertation begins with the problem of how our conceptions of the world relate to empirical reality and what role film can play in that process. The problematics of the transcendental – of Kantian critique founded on human conceptions of space and time – have seeped over the centuries into everyday life, presenting practical and embodied difficulties for contemporary, connected society. Yet, while these problems – both within and for the individual, both within and for political society – have gradually continued to mount, the logical capacities of the Western world have struggled to find the means to appropriately grasp them, to face them head on. Still clinging to the identity and national politics of a foregone era, humankind now asks global questions and faces global risks. Climate change, rapidly proliferating technologies and inhuman intelligences, nuclear arsenals and overpopulation: these are just a few of the problems that threaten not only the individual, but the species. And until a logical, practical philosophy is developed that can begin to address both transcendental critique and empirical reality, that can keep up with societal change and scientific progress or at the very least finds itself capable of charting their movements, thought will forever lag behind what is being demanded of it.

In hopes of signaling vital steps we might take in critiquing the logical approach we take to such species-wide dangers, I turn to the films of Werner Herzog. Relying on Gilles Deleuze's philosophical formulations concerning cinema, I argue that Werner Herzog's films are not simply a reflection of reality, but that empirical reality already has in itself an image structure. As we slowly discover more of this structure through the efforts of artists, scientists, critics and philosophers, we alter not only our factual understanding of that image structure, but also the foundations of human

thought itself. While cinema might seem at first of limited purview in the realm of global threats, in light of the entrenching nationalisms that have reappeared, newly clad and newly armed with far reaching, globally connective technologies, I argue that in fact it has never had more practical or theoretical importance. While cinema is but an aspect of the global media sources that inform us and reform society in their very process, the cinema holds within itself the glimmer of potential to change the way we think, or at the very least bring awareness to the inherent and often autocatalytic problems of contemporary thought.

Certain films, including but not limited to Herzog's, participate in empirical structures as a further manifestation of them rather than mere representation; they form a monstration of empirical reality that tests and aims at exceeding the limits of human knowledge. Herzog's landscapes, for example, merge outer landscapes with the subject's inner mental landscapes so that the inner vision manifests the structures of the outer one: the result is not a representation of some "true" landscape of the self, but rather a correlative and probabilistic causality derived from empirical experience.

Alternatively, I argue that one should read *Lo and Behold* not just as a documentary about informatics but rather as an attempt to establish a particularly human perspective forged in the film sequence itself that would encompass informatics and subject its seeming independence to an ethical vision that informatics seeks desperately to avoid. In other words, this dissertation takes upon itself the task to provide an understanding of how Herzog's film work matches with Deleuze's philosophical project of linking human conceptions with empirical reality's own structure of images and, by extension, how Herzog's oeuvre might be utilized to develop new avenues of research in the philosophy of cinema. This dissertation charts the commonalities and interruptions of a new

grammar of images and a new image of thought, encouraging us to think differently *with* the cinema rather than merely about it.

While pairing Deleuze and Herzog has thus far received scant attention, the pairing of philosophy and film is gaining ground. The work of Stanley Cavell in particular has done much in recent years to advance thought in this area. Likewise, In *Film as Philosophy*, an edited volume from 2017 that heavily features concepts from Deleuzian philosophy of cinema, Noël Carroll analyzes and argues for the possibility of “philosophy *in* cinema,” no matter how difficult or rare that possibility might be (265). Moreover, Carroll invokes Herzog directly as a prime example of how this could potentially be seen, though he does little to truly develop that argument. Herzog is cited as a director that should be considered “philosophical” and whose films might be used by philosophers to “illustrate the tenet in question which is unbeknownst, so to speak, to the creator of the motion picture,” specifically in reference to the structural paradigm of language in Herzog’s *Kaspar Hauser* to “Lacan’s theory of language” (Carroll 266). While I would disagree with this reading and argue that in fact *Kaspar Hauser* critiques and moves beyond the Lacanian theory language (based as it is on a Saussurean structuralism from which nothing of the human *escapes*) through its treatment of *direct sensation*, Carroll’s assessment that with Herzog’s films “the philosopher brings a theoretical grid to the film” is beyond doubt (ibid.). If Carroll ultimately contends that Herzog should be considered philosophical in that “he constantly defamiliarizes human life, examining it from a position detached and quizzical, and, therefore, philosophical,” I can only agree, but also add that a director like Herzog should only be mapped along with a given philosopher or particular tenet insofar as their *structural semiotics* align (Carroll 283). It is never a point of “doing” the same thing or somehow

supplying a bald metaphor for a given film or philosophical theory, but rather a matter of the *empirically specific ways* in which film and philosophy intersect and parallel one another: it is a matter of charting the parallels, overlaps and interferences between their respective affects, percepts, concepts and – should they be investigating them, as Herzog does – even functions. It is a matter of allowing varied fields to communicate with and challenge one another.

In this study I bring together Werner Herzog and Gilles Deleuze as two independent thinkers investigating similar subjects through different means: a new grammar of images, a new image of thought. I argue that the affects and percepts of Herzog's films complement and challenge Deleuze's conceptual apparatus, while that same machinic assemblage hones Herzog's images and makes comprehensible aspects of his oeuvre that have up to this point remained enigmatic. Upon close inspection, the sheer number of similarities between the two *in terms of structure* are staggering. Yet these are achieved by separate and very different avenues of thought and action. This must continually be kept in mind. There are obvious and important distinctions that separate Herzog and Deleuze, but I firmly believe that bringing them together, reading the philosophy *with* the films and vice versa, opens new avenues of investigation, analysis, and experimentation for both fields. Straining to create a new grammar of images and a new image of thought respectively, Herzog and Deleuze arrive at similar points *diagrammatically* – that is, they arrive at certain structures that align in their functioning, built, as it were, from different parts, but always drawn from the world around them. Much like DeLanda argues in *Intensive Science and Virtual Philosophy*, analyzing Herzog's films in the manner presented here therefore does not offer a "direct interpretation" but rather a "reconstruction" of Deleuze's philosophy (xii). Such a "reconstruction" is not merely to make

Deleuze's "ideas seem legitimate to my intended audience" of philosophy, film, and German scholars, but to show that Deleuze – and as I argue Herzog's – works do not depend on their "particular choice of resources, or the particular lines of argument" (ibid.). They are instead "*robust to changes* in theoretical assumptions and strategies" (ibid.). And, just like DeLanda, I must underscore that, "clearly, if the same conclusions can be reached from entirely different points of departure and following entirely different paths, the validity of those conclusions is thereby strengthened" (ibid.).

What I am trying to make patently clear is that – this time akin to DeLanda's example of "the storm in the computer" in *Philosophy and Simulation* – the experimental efforts of Herzog's films and Deleuze's concepts are aligned insofar as they share *actual and virtual empirical structures*: the "mechanism-independence" that might at first seem accidental, coincidental, or even miraculous within their work can be explained "by the fact that their possibility spaces share the same structure" (16-18). They are looking at the same, empirically identifiable and comprehensible universe. Herzog and Deleuze tap into and explore nearly isomorphic semiotic structures, the same types of topological, nonmetric *space*, the same types of nonlinear *time* that is "out of joint." In other words, the arguments and comparisons presented here arise from the fact that they both draw on a similar conception of spacetime to ground their efforts. *This in turn makes the conception of spacetime the fundamental key to understanding and building upon their efforts. It also allows the conception of spacetime to ground my critique.*¹

¹ It should be noted upfront that when I speak of science and its relationship to modern cinema, we I am arguing for "intensive science" as defined by Manuel DeLanda, rather than utilizing "science" as the specific manner in which a given scientific field might define science in general. In the afterword of *The Force of the Virtual: Deleuze, Science, and Philosophy*, DeLanda explains this type of science succinctly, by and large critiqued for its positivism: "For a capacity to

Yet, time and space are notoriously difficult to write or speak about for the simple fact it is impossible to provide meaning to any utterance, any action without invoking them. Space and time, as Kant himself well knew, require a conceptualization before one can even bring themselves to speak, before one can even conceptualize themselves as an individual being. This difficulty, however, has never halted the efforts of philosophers or scientists and there are perhaps more comments concerning the nature of space and time within human literature than any other topic. Space and time house us as subjects, they chart our changes, acting as the metric by which we measure our endeavors and our very lives. Time in particular is wrought with subjective nuances and is, at bottom, a subjective and relative experience, both in our own understanding and in empirical fact. And this empirical fact is what is key. Space and time are deeply ingrained human realities, formed through the interaction of our physical forms and most notably our brains with material nature. Nonetheless, these realities arise in the empirical sense out of a unified spacetime, a reality deeper and more extensive than can likely ever be comprehended by our limited human senses. Spacetime inherently contains a logic of sense that extends beyond the three-dimensional capacities of the human senses, provides alternative perspectives on causality and change that defy the linear

affect, to become actual, [something] must be coupled with a capacity to be affected. A metaphysics or ontology of science based on these two concepts is an entirely different thing than the official metaphysics of science based on laws” (326). DeLanda continues “the virtual plane of immanence would be like a topological or ordinal space from which the actual world with its quantitative relations would emerge by a similar process or progressive differentiation...The problem with scientists is that many of them embrace an impoverished philosophy of science known as ‘positivism,’ according to which they are not only in the business of revealing the true ontology of the world but only creating compact descriptions that are useful to make predictions and to increase our degree of control over laboratory phenomena. This is good for public relations...but it makes for bad philosophy” (327-328). In light of recent scientific discoveries, this critique of positivism and new framing of science should not be too difficult to grasp even from within scientific disciplines, as it has similar conceptualizations in theoretical entities such as, for example, the Higgs Field. The point is, for cinema to play an affective/effective role in science and for science to do the same for cinema, a mutual semiotic operation of the actual-virtual system must be in place.

narratives we create around our day to day lives. By thinking spacetime rather than space and time individually and as separate concepts, we take the important, initial steps of forming an ethics that can keep up with contemporary physics, which hauls philosophy in tow.

In order to form such an ethics, we must, as critics and philosophers, cease shying away from empirical findings, but rather continually update our thinking with their findings and presenting those same findings with metaphysical and ethical challenges. And this means thinking spacetime in addition to the separate concepts of time and space. This is, for the most part the task that Gilles Deleuze set for himself before penning *Cinema 1* and *Cinema 2*, the most rigorously empirical books on cinema and its purview to date. Similar to DeLanda, I read Deleuze as taking a “realist ontological stance” in these works by providing a conceptual apparatus through which “for the first time...the autonomy of material entities from the human mind was asserted without any sense of postmodern irony” (*Intensive Science and Virtual Philosophy*, vii). Yet, like most philosophers to date, Deleuze concentrated most fully on theorizing time and the subjective rather than space and the objective. And this is something that needs to be remedied. Both space and spacetime deserve further consideration in the philosophy of cinema. And, in the end, I believe that this is in turn precisely what the films of Werner Herzog in particular accomplish: while maintaining a realist ontological perspective like Deleuze, Herzog shifts the careful critics attention from temporal conceptualizations to the spatial, not to give primacy to the latter, but to demonstrate the necessity of thinking them together, of thinking spacetime.

On the final page of *Cinema 2*, Deleuze writes that “the theory of cinema does not bear on the cinema, but on the concepts of the cinema,” yet these concepts “are not given in cinema” and

must be produced by philosophy as “conceptual practice” (280). Deleuze often likened his work in philosophy to the search for a new image of thought, a new means of philosophical expression that might reinvigorate and remap our understanding of and relationship to thinking. In the preface to *Difference and Repetition* (1968) this issue is addressed very directly, where Deleuze claims that our logical legacy as human beings, up to and including Kant himself, as well as more recent thinkers from Hegel and Marx to Freud, find limited means to address superindividual concerns by failing to critique our image of thought itself, instead reducing logic to a propositional Reason that grounds itself in human language rather than the physical senses.² For Deleuze, rigorous thinking – including or even especially thought found in the cinema – has to have a critique of thought and its aims as part of its endeavors. It is precisely because of this problematic that Deleuze considers *Difference and Repetition* seminal and claims that “all that I have done since is connected to this book, including what I wrote with Guattari;” forging a new image of thought is at the heart of all Deleuzian philosophy (*Difference and Repetition* xv).

From the very beginning, Deleuze argued that creating a new image of thought cannot be undertaken in isolation, that “philosophy cannot be undertaken independently of science or art” and “creates and expounds its own concepts only in relation to what it can grasp of scientific functions

² We think according to an image of thought. By this I mean not only that we think according to a given method, but also that there is a more or less implicit, tacit or presupposed image of thought which determines our goals when we try to think. For example, we suppose that thought possesses a good nature, and the thinker a good will (naturally to ‘want’ the true); we take as a model the process of recognition – in other words, a common sense or employment of all the faculties on a supposed same object; we designate error, nothing but error, as the enemy to be fought; and we suppose that the true concerns solutions – in other words, propositions capable of serving as answers. This is the classic image of thought, and as long as the critique has not been carried to the heart of that image it is difficult to conceive of thought as encompassing those problems which point beyond the propositional mode; or as involving encounters which escape all recognition; or as confronting its true enemies, which are quite different from thought; or as attaining that which tears thought from its natural torpor and notorious bad will, and forces us to think. A new image of thought... (DR xvi).

and artistic constructions” (*Difference and Repetition* xvi). Instead, the three “daughters of Chaos” as he would later refer to them with Guattari – art, science, and philosophy – must find ways to interact with one another, even if their particular realms of creation remain distinct: concepts for philosophy, affects and percepts for art, functions or prospects for science (*What is Philosophy?* 24). In Deleuzian thought, only the connections and interruptions between philosophy, art, and science were capable of providing a new image of thought. Creating a “taxonomy” of cinematic images therefore proved essential for many of the shifts in direction one sees in Deleuze’s late work, just as Deleuze’s interest in the philosophy of cinema back to its foundations in previous works, especially *Logic of Sense*. In this light, Deleuze’s efforts in *Cinema 1: The Movement-Image* and *Cinema 2: The Time-Image* should be read as an extension of his search for a new image of thought rather than an aberration when compared with more traditional philosophical works. If Kant and Hegel were able to accurately describe an image of thought and logic with human reason at its core, they were, for Deleuze, unable to articulate an appropriate natural philosophy, a philosophy indifferent to human aims or human reason, a logic of becoming rather than being. And this, in turn, presented Deleuze with his central aim: beginning from the fundamental axiom that difference and repetition are the same thing, Deleuze turned to the works of Spinoza and Nietzsche to serve as his foundations and set about forging his own philosophy, a logic not of reason, but of sense³.

³ Deleuze was always rather blunt about philosophy and its role, even if it was not until his final collaboration with Guattari that this was laid out succinctly. Philosophy was for Deleuze “the art of forming, inventing, and fabricating concepts” (*What is Philosophy?* 2). But what, then, is a concept? Concepts are for Deleuze (and Guattari) complex multiplicities and “there are no simple concepts” (*What is Philosophy?* 15). That is, concepts do not and cannot stand alone – there are no pure, transcendent concepts. Concepts are not to be confused with Ideas. Instead, “every concept relates back to other concepts, not only in its history but in its becoming or current connections” (*What is Philosophy?* 19). A concept is “a heterogenesis” – an original, epigenetic becoming of an event that has an origin, like all things for Deleuze, “in the middle and only once it is established” (*What is Philosophy?* 20). A concept is “an incorporeal, even though it is incarnated or effectuated in bodies” (*What is Philosophy?* 21). It “speaks the event, not the essence or the

While changing the image of thought might at first glance seem rather abstract, it gains clarity once one sees how philosophical thought links up with and complements the percepts and affects of art, as well as the prospects and functions of science. The latter are perhaps easiest to grasp and most distinct. The functionality of scientific understanding has become a part of our everyday lives to the extent that it largely goes unnoticed; we interact with intricate systems of scientific prospects every time we flip a light switch, ignite a stovetop, take a train, open a laptop. “*Science passes from chaotic virtuality to the states of affairs and bodies that actualize it*” (italics in original. *What is Philosophy?* 156). That is, prospects are the “propositional” or logical functions of the actual world as a referential system of knowledge, as Logic, the universe as an organized system with natural laws. Moreover, it is from these laws that we draw the functionality of technology and our contemporary understanding of ourselves, our species, our planet, and even our place in the universe. Science creates such propositions by drawing on, *but then prescinding* the chaotic, virtual force of philosophical concepts in favor of predictability and observable behavior, be it direct or indirect. Science allows us to ignore, for the moment and seemingly paradoxically, that which we are unaware of; it lets us concentrate fully on what we can see and measure beyond the limits of our knowledge in order that we might see and measure more of the universe. It does so at a cost. “*In becoming propositional, the concept loses all the characteristics it possessed as philosophical concept: its self-reference, its endoconsistency and its exoconsistency*” (italics in original. *What is Philosophy?* 137-138).

thing” (ibid.). That is, concepts must have virtual components and all concepts are “real without being actual, ideal without being abstract” (*What is Philosophy?* 23). Concepts are the speaking of events and their topological forming, they are the (sur)faces under which and upon which events occur – “the concept is the contour, the configuration, the constellation of an event to come” (*What is Philosophy?* 32-33). Concepts are crystalized probability spaces, a way of thinking that informs the image of thought itself, and with it affects certain probabilities concerning human futures.

Scientific thinking becomes wholly comparative and referential. Prospects function only within the realm of an *a priori* subject/object distinction and with it the simultaneous establishment of true/false propositions taken from an abstracted and universally shared “objective” point of view. Prospects function within the logic of being, while philosophical concepts operate within becoming; prospects are always linked to “a state of affairs, a time and variables, with their relations depending on time⁴” (*What is Philosophy?* 158). Scientists are of course aware of this reduction, but often set it aside as unimportant to their aims, conceding that progress in their individual field is more important than the physical “realities” that exist at a different scale. While this practical move is appropriate to their aims, Deleuze felt that the same affordance could not be extended to philosophy in its efforts to pose self-referential questions to science and art in order to realize its aim of conceptualizing a new image of thought.

Percepts and affects, for their part, are a bit more complicated. A work of art for Deleuze and Guattari is “a being of sensation and nothing else: it exists in itself” (*What is Philosophy?* 164). That is, instead of an objectively viewed proposition with a corresponding and constant function, what is preserved in the work of art is a “bloc of sensations,” *a bloc of percepts and affects* that act within and upon the human body that views or creates the work, changing both the subjective state and physical body of the one that experiences them (ibid.). Artworks do not simply change a particular way of

⁴ The vast majority of scientific prospects are indeed temporally “aware” and include time as a variable in their calculations and equations. However, Deleuze was incorrect to state that *all* science does so. As I shall demonstrate in my conclusions, there are several emergent fields - all related to some sort of combinatorial or unifying work involving both general relativity and quantum mechanics - where time no longer serves as a variable but mathematics is still possible. These are not, as of yet, directly observable and discrete phenomena, but do indeed take place at scales - in particular the quantum scale - where time does not occur in the manner it does in three-dimensional, physical space (in fact, time can be said not to really ‘exist’ at all at this scale).

thinking or feeling, they act upon the total body, causing subtle changes in individual personality and perception alongside the natural, neurological and chemical releases of the senses. Percepts and affects are discrete blocs of sensation for Deleuze and Guattari, that is, they can be conceived of as *beings themselves* rather than simply objective qualities of a given work; they have their own forces, their own life, that can change drastically over time⁵. In short, percepts and affects are points of contact with the nonhuman in the human, the manner in which humans are able to connect sensations that extend beyond themselves. The percept could therefore be thought of as a shifting point of view – a landscape, but also a view of a landscape, foreign or familiar, that makes the very ground beneath our feet feel different. An affect could be conceived of as a “zone of indetermination, of indiscernibility” that “immediately precedes...natural differentiation,” those mutative experiences after which, should we look in a mirror, we would find ourselves unrecognizable (*What is Philosophy?* 173). An affect is the physical shock of the artwork that marks the probabilistic moment of change, the actual neural impulses that change us autocatalytically: our artistic sensibilities form the horizon of our affectual perception, which allows us to be shocked and, in the process, changed. *Percepts and affects are what house us as subjects and continually alter that house.* But as Deleuze and Guattari are

⁵ Deleuze and Guattari argue that these beings “could be said to exist in the absence of man because man, as he is caught in stone, on the canvas, or by words, is himself a compound of percepts and affects” (*What is Philosophy?* 164). For our purposes, it is important to underscore that percepts and affects are the source of both literal and figurative grounding, of topology, of (sur)face, of spirit, and of change. Deleuze and Guattari write that “the percept is the landscape before man, in the absence of man...the nonhuman landscapes of nature” (*What is Philosophy?* 169). Affects, on the other hand, are the “nonhuman becomings of man,” the shocks of sensation that force one to become foreign to themselves. Percepts are “landscapes” and “visions;” affects are “faces” and “becomings” (*What is Philosophy?* 177). The artist – no matter the medium – is always capturing and/or envisioning new sensations, new landscapes, calling some forth while destroying others, and simultaneously through the force of their becomings rearranging the face as the organizing principle of self-conception. I will return to this issue of landscape and face in Chapter III.

keen to point out, such a house “does not shelter us from cosmic forces; at most it filters and selects them” (*What is Philosophy?* 182).

There is always something outside of our experience, something both natural and inhuman that extends beyond us and is capable of changing us. Whereas science furnishes the world and our understanding of it by prescinding functional prospects from nature in order to achieve a universal field of reference, the percepts and affects of art ceaselessly reimagine the world and the place of the human in it by drawing on nonhuman forces, by injecting a bit of chaos into the order of established law. If art achieves something like the transcendent viewpoint achieved by science (and, it should be added, religion, which will be explored in more detail in Chapter IV), it does so through the senses, internally and subjectively rather than externally and objectively; *it does so intensively*. Percepts and affects produce aesthetics and its cultural antecedents – myth and politics – the houses through which we filter and select our modes of everyday existence, but they also, with the aid of philosophy, beg the question of ethical use.

Just like philosophy and the arts, science, too, has an important connection to any rigorous philosophy of cinema and in particular to the films of Werner Herzog, who often investigates scientific subjects as well as scientists themselves in his work. All sciences share similarities with modern cinema and many even remarkable similarities. While this is perhaps not a traditionally accepted approach, one must not hesitate to utilize the findings of one field to aid in the development of another. For Deleuze, this was so much the case that he had no qualms about making comparisons with cinema and a vast array of different scientific disciplines:

I don't feel it's outrageous to say that Resnais comes close to Prigogine, or that Goddard, for different reasons, comes close to Thom. I'm not saying that Resnais and Prigogine, or Goddard and Thom, are doing the same thing. I'm pointing out, rather, that there are remarkable similarities between scientific creators of functions and cinematic creators of images. And the same goes for philosophical concepts, since there are also concepts of these spaces. (*Negotiations* 124-125)

Many of these similarities stem from the mutual, creative endeavors of both the scientist and film director, and, as Deleuze reminds us, the philosopher too; each in their own way, they confront chaos, confront the virtual. Yet their respective approaches place them in entirely different camps. Many people have had varied political reasons for keeping each discipline separate from one another. As a result, the productive similarities and challenges that science presents to the philosophy of cinema have been relatively neglected, undervalued, and under-researched up to this point, though this is thankfully beginning to change.

One simple way to begin to correct this error of judgement is to utilize the findings of the de facto third volume of *Capitalism and Schizophrenia*, *What is Philosophy?* to supplement Deleuze's philosophy of cinema found in *Cinema 1* and *Cinema 2*. In this book, published six years after Deleuze's *Cinema 2*, Deleuze and Guattari explicate the "functions" (or their constituent parts, functions) of science and present them as creative works, just like the concepts of philosophy and the affects and percepts of art. Deleuze and Guattari give science a very specific role: to create "functions that are presented as propositions in discursive systems" (*What is Philosophy?* 118). That is, functions, actual mathematical functions, are seen as the medium through which science is able to express and communicate its findings. While philosophy might reveal concepts intimately related to scientific functions and serve as a platform to challenge fundamental scientific assumptions,

functions themselves draw upon the fantastic slowing down of material processes to make them appear rigid and provide a platform for a spatiotemporal causality to be created. In other words, even though the movements of the physical world are unceasing, science is capable of creating still-frame schematics of certain aspects of empirical reality: functions. Take, for example, snapping two photos of a speeding comet captured with a powerful telescope. By creating a spatiotemporal referencing framework between the comet and another body in space, scientists can use previously established physical laws to calibrate the distance and time traveled between the two photos, determining properties such as the comet's velocity in the process. From this, scientists can then make spatiotemporal predictions, can write functions: if the comet is at point A at x time and at point B at y time, it is traveling at z speed. And, when considering other factors (the gravity of nearby objects, for example), they can then accurately describe the spatiotemporal path of the comet, can determine where it will be at an exact time, provided something unforeseen does not interact with the comet, that there isn't, for example, an unknown planet in its path that the comet might crash into or deflect off, which would invalidate the function.

With functions, it is therefore always the case of establishing a literal frame of reference with every bit of information available, while simultaneously acknowledging this information as incomplete. That is, functions are and always will be invalidated and in need of revision: it is the unforeseen or the unexplainable in the frame of reference that always creeps back into the equation from the outside, as it were, and charts the progress of scientific progress. This is essentially achieved by their constituent parts, functions, comprised in turn through "limits and variables," because the limits and variables involved in a particular interaction actually supersede the function – the frame of

reference is not the action, it is a way to calculate the probability spaces of the future (*What is Philosophy?* 118.). The relationship between limit and variable grounds the function and as such, the function is always catching up to the realities of the limits and variables involved. This is especially important to underscore for our purposes here. Consider this extended passage:

Sometimes the constant-limit itself appears as a relationship in the whole of the universe to which all the parts are subject under a finite condition (quantity of movement, force, energy)...It is these first limits that constitute slowing down in the chaos or the threshold of suspension of the infinite, which serve as endreference and carry out a counting: they are not relations but numbers, and the entire theory of functions depends on numbers. *We refer to the speed of light, absolute zero, the quantum of action, the Big Bang...* Such limits do not apply through the empirical value that they take on solely within a system of coordinates, they act primarily as the condition of primordial slowing down that, in relation to infinity, extends over the whole scale of corresponding speeds.
(italics mine. *What is Philosophy?* 119)

Limits like the speed of light or absolute zero are not just numerical explanations, they are physical barriers, at the very least in terms of the scale we as humans are capable of looking at them. We cannot produce anything colder than absolute zero. Even saying “below absolute zero” temperature is a nonsensical and utterly meaningless term, empirically speaking. It is these initial, fundamental limits that functions always bump up against and they are of vital importance because they calibrate the shifting forms of reference, we use within scientific functions to explain and manipulate natural phenomena to human ends.

Within such thinking, the functions of science therefore do not form a closed system, but rather a permeable one, based on number, that in turn forms new functions as it encounters limits

and new variables.⁶ This is why science, too, can be said to be truly creative. The mistake of seeing science as direct access to physical reality is common and inevitably takes on religious forms if one is not careful; that is to say, science – perhaps even more than philosophy – quite often lapses into the reification of its own findings and the *deification of its fundamental assertions, especially number*.⁷ As Gregory Flaxman puts it, “science is no less liable – and, arguably, even more – to lapse into molarization than philosophy, which circumscribes and regulates chaos out of existence” (*Force of the Virtual* 201). However, science’s most creative aspects are quite literally heretical in this sense: they push back against referential limits by confronting the immanent chaos of the virtual, reimagining the relation of thought to such limits in the process.

The central point of these assertions is that *science shares the same underlying field and logic as philosophy and art*: they all draw on the same source for their creations, what Deleuze often refers to as “chaos,” “the outside,” or “the virtual.” In *The Force of the Virtual*, Peter Gaffney states that, for Deleuze, “science, like matter, does not escape the logic of becoming: its object is not a static world, but one that remains always in the process of (qualitative) change” (2-3). That is, in a realist

⁶ For Deleuze and Guattari, “science does not carry out any unification of the Referent but produces all kinds of bifurcations on a plane of reference that does not preexist its detours or its layouts (*What is Philosophy?* 123). Science is not in any way a totalizing explanation of the universe as – just like art and philosophy – it interacts with information that lies beyond its current frame of reference: it is informed by limits and unknown variables. Instead, Deleuze and Guattari believe that within scientific fields, “it is as if the bifurcation were searching the infinite chaos of the virtual for new forms to actualize by carrying out a sort of potentialization of matter: carbon introduces a bifurcation into Mendeleev’s table, which, through its plastic properties, produces the state of organic matter” (ibid.). By learning about naturally occurring processes of organization, science can seek to catalyze or produce foreign ones. Because of the plastic properties of carbon that we have discovered, we now can explain why environments that lack carbon (along with water, etc.) seem to remain lifeless. Moreover, should we find ourselves capable of recreating these conditions through technology and human endeavor, we should likely see the organization of the constituent parts into organic matter.

⁷ Mathematics, for example, is often seen as a universal language, even though it is more appropriately a wide-reaching language attuned to our bodily and technological senses. It is quite possible and even probable that with a drastic difference in scale or different processing of spacetime that mathematics will be revealed to be an insufficient model. And, indeed, Gödel’s incompleteness theorems indicate this to the careful reader.

Deleuzian ontology, science “cannot occupy a position of neutrality vis-à-vis its object, nor, strictly speaking, can it presume that this object already exists. At most we can say that a particular (historically specific) body of scientific thought has a *reciprocal* relationship with the object it determines” (*Force of the Virtual* 3). Deleuze’s logic of becoming applies not merely to some particular pattern of human thinking, but to the material universe itself in both its actual interactions and virtual potentialities: in short, the universe *is becoming* regardless of what we think about it. Becoming is – as far as we can tell – not opinion but empirical fact. Whether we are artists, scientists, philosophers or some amalgam of each, all of us draw on a common reality indifferent to our personal aims.

How then might we account for science in cinema? How might the findings of contemporary science be incorporated into what cinema is and what it does in a practical way, especially into a cinema like Werner Herzog’s? As one of the three “daughters of chaos” alongside philosophy and art, science acts as a “fantastic slowing-down” through its functions in order to “gain a reference able to actualize the virtual,” proceeding chiefly through the prospects of logic (*ibid.*).⁸

⁸ Deleuze and Guattari assert that the common logic of science is “reductionist not accidentally but essentially” and wants “to turn the concept into a function” (*What is Philosophy?* 135). While the limits necessary for functions were covered in the footnote above, with logic and prospects it is essentially a matter of variables. Deleuze and Guattari present the propositional function of “x is human” as an example, which they believe “clearly shows the position of an independent variable that does not belong to the function as such but without which the function is incomplete” (*ibid.*). That is to say, propositions and functions cannot be concepts because they lack any sort of radical self-referentiality and must always fall back upon a structure relating back to a set of axioms, of limits. Therefore, because scientific logic “considers empty reference in itself as simple truth value, it can only apply it to already constituted states of affairs or bodies, in established scientific propositions or in factual propositions (Napoleon is the one who was defeated at Waterloo) or in simple opinions (X thinks that...). All types of propositions are *prospects*, with an information value. Logic has therefore a paradigm... which is no longer that of religion or science but like *the recognition of truth* in prospects or informative propositions” (*What is Philosophy?* 138). This sort of logic, which “kills the concept twice over” by attempting to place concepts in a discursive system and providing them with some sort of grounding reference, therefore becomes - and is frequently utilized as - an autocatalytic market strategy that feeds on information in order to sell truth claims, sell opinion (*What is Philosophy?* 140). Information technology, for example, and even or especially the logic of the standard computing model, are bound up within an economy of opinion that they cannot escape or even critique

Science acts in many ways like a “freeze-frame” within cinema, a singular photograph prescinded from moving images that makes actual some aspect of the virtual by providing a universal plane of reference (*What is Philosophy?* 118-119). Science attempts to halt the infinite speeds of chaos by providing a still picture of the universe, functioning under mathematical law, whose creative efforts lie in the rewriting of limits set by that frame of reference: “science is haunted not by its own unity but by a plane of reference constituted by all the limits or borders through which it confronts chaos” (*What is Philosophy?* 119). This can be juxtaposed with the concepts of philosophy which provide “the virtual a consistency specific to it,” or the affects and percepts of art that “create the finite that restores the infinite [chaos]” through its “aesthetic figures” (*What is Philosophy?* 197). But the question of how science, art, and philosophy come together and interact within cinema is one that is just beginning to be seriously posed. This is best accomplished by first examining several fundamental *concepts* of cinema developed by Deleuze in some detail.

In *Cinema 1* and *Cinema 2*, Deleuze provides a sweeping account of classical and modern cinema. Focusing his thought on two major categories drawn chiefly from Bergson – the movement-image and the time-image – Deleuze sets out to develop a taxonomy of cinematographic images, to define and refine the *concepts* of cinema. To reiterate Deleuze’s points from the conclusion of *Cinema 2*, “cinema’s concepts are not given in cinema. And yet they are cinema’s concepts, not theories about cinema” (280). That is to say, cinema’s concepts are part the medium’s *materiality* as much as its technological aspects: cinema’s concepts are quite literally “blocs of space-time” with

without radical social and semiotic adjustment, a change in their conceptual makeup. This is the role that philosophy and art can play in the furthering of scientific functions - providing them with conceptual, affective and perceptive imagination. This will be addressed more fully in my analysis of Herzog’s 2016 documentary, *Lo and Behold*.

space and time its fundamental realities (*Cinema 1* 61). If it is, as Deleuze argues, the task of philosophy to “produce” such concepts as a “conceptual practice” then these concepts would have to be philosophical explanations of empirically validated points of view on space and time, as well as spacetime (*Cinema 2* 280). Yet, as one can imagine, this was no easy task for Deleuze himself, nor is it for his readers today. The two volumes took him roughly a decade to complete and are replete with an almost encyclopedic breadth of comments taken from literary texts, philosophical works, scientific articles, and, of course, from cinema itself. From the latter, Deleuze cites almost a thousand different films and hundreds of directors, but after closer reading, one can identify key examples for Deleuze’s overall theory and general argument. As is often the case with Deleuze, however, many of these key examples are brushed over quickly or mentioned almost in passing, leaving the reader to trace the line of thought themselves or – and sometimes dangerously – to simply take Deleuze at his word. Unfortunately, mastering Deleuzian terminology is no easy task and Deleuze at times employs a frustratingly individualized use of vocabulary that necessitates careful and near-constant reexamination. As Martin Schwab puts it, “Deleuze’s basic concepts... are always deployed with a spin intended to differentiate them from standard definitions” (113). The greatest impediment to understanding Deleuze’s system is not that he deploys such “spin,” however, but rather coming to terms with the vast literature outside of philosophy that Deleuze utilized to create his concepts and in particular scientific literature. Because Deleuze felt free to make comparisons between philosophy, art, and science, many of the concepts he develops are based not just on the philosophical traditions his work arose out of. Deleuze’s fundamental usage of “space” and “time” in particular benefit from scientific examination rather than purely philosophical speculation: a fact all too rarely recognized.

Nonetheless, the philosophical lineage Deleuze harks back to – and in particular the formulations of Kant’s critical philosophy – is important to understand before more contemporary notions of space and time can be adequately understood.

As a 20th Century thinker, Deleuze had an image of space and time that was remarkably different than his philosophical predecessors, but nonetheless followed in the footsteps of Kantian Critique. As part of his Transcendental Aesthetic in the *Critique of Pure Reason*, Kant states very clearly what has become an untenable position in light of scientific discoveries from the last two centuries: space and time are aspects of the subject rather than empirical realities on their own.⁹ General relativity and quantum mechanics have since taught us that Kant was remarkably on the right track but faltered in certain, important aspects; Einstein himself read Kant extensively before ultimately disagreeing with his formulations of space and time in favor of an empirically relative concept of time that salvaged an unassailable practicality for science and diminished the importance of critical philosophy as an encompassing system.¹⁰

⁹ In *The Critique of Pure Reason* space is “not an empirical concept which has been derived from external experience,” but rather as a “necessary representation a priori, forming the foundation of all external intuitions...a condition of the possibility of phenomena, not as a determination produced by them” (23-24). Space is for Kant at this point strictly three-dimensional, a “pure intuition” that is “represented as an infinite quantity” and is the a priori of intuition itself rather than a concept created by thought or philosophy (24-25). Likewise, time is for Kant “not an empirical concept deduced from any experience,” due to the fact that intuition itself would be impossible without time as a given a priori (*Critique of Pure Reason* 29). Time is instead a “pure form of sensuous intuition” that has “only one dimension; different times are not simultaneous but successive, while different spaces are never successive, but simultaneous” (ibid.). And, furthermore, as a pure form of sensuous intuition a priori to representations, “time is therefore simply a subjective condition” and “apart from the subject, nothing” (*Critique of Pure Reason* 32).

¹⁰ More specifically, general relativity invalidates once and for all that Kant’s synthetic *a priori* could be empirically accurate. This is especially important to note, because this is precisely the line that Deleuze is able to draw between science and philosophy, that tasks philosophy with extending beyond Kantian critique, as well as negative dialectics, and continually create new concepts appropriate to the age and contemporary state of science. For Einstein’s full explanation see: *Albert Einstein, "Elsbach's Buch: Kant und Einstein," Deutsche Literaturzeitung, 1 (1924): cols. 1685–169. Doc. 321 in Collected Papers of Albert Einstein: Volume 14: The Berlin Years: Writings & Correspondence, April 1923-May 1925. Ed.*

Kant's positions on space and time were utterly revolutionary at the time of their formation and have been highly influential, remaining so in some sectors to this day. In fact, these initial Kantian contentions are by now a deeply ingrained way of seeing space and time by many and one that is rather easy to lapse back into if one is not careful. Deleuze starts his own analysis of space and time in his early work *Kant's Critical Philosophy* precisely from the Kantian spatiotemporal position, taking account of the perhaps unintentional consequences of Kantian critique and in the process provides key starting points for contemporary philosophical theorization. In his Preface, Deleuze therefore teases out "four poetic formulas" which might best summarize Kantian critical philosophy as a whole, each having to do with the concepts of space and time. These "four poetic formulas" create in turn a fruitful lens to inspect Deleuze's philosophy of cinema in reference to the cinema of Werner Herzog.

For the first "poetic formula," Deleuze invokes Shakespeare's Hamlet, who claims that "time is out of joint" (*Kant's Critical Philosophy* vii). For Deleuze, a major shift in human thought concerning space and time occurs with Kant's critical philosophy because it "unhinges time" by inverting the relationship of time and movement (*ibid.*). According to Deleuze:

As long as time remains on its hinges, it is subordinate to movement: it is the measure of movement, interval or number. This was the view of ancient philosophy. But time out of joint signifies the reversal of the movement-time relationship. It is now movement which is subordinate to time. Everything changes, including movement... Time is no longer related to the movement which it measures, but movement is related to the time which conditions it: this is the first great Kantian reversal in the *Critique of Pure Reason*. (*ibid.*)

Diana Kormos Buchwald et al., Princeton: Princeton University Press, 2015. Translation from English Translation Supplement. pp. 324-25.

Kant's critical philosophy overrides the thinking of the ancients in that it requires new definitions of both space and time by no longer allowing time to be thought of simply as a matter of succession. Complicated by the findings of general relativity, time is indeed "out of joint" but more specifically, the continuous flow of past-present-future that philosophy and common sense had maintained has been replaced by a relative situation in which each realm is interactive with the other. While the processing of time does indeed seem to be linear to the human brain, its empirical functioning is far more complicated.¹¹ Once time cannot be thought of as only in terms of succession, according to Deleuze, "space cannot be defined by coexistence" either, but too must be seen in relative terms; an event must always be calibrated between at least two spaces and not taking place in one, permeating neutral space at a specific time (*Kant's Critical Philosophy* viii).

The second "poetic formula" drawn from Kant's critical philosophy is Rimbaud's phrase "I is another," and again is derived from *The Critique of Pure Reason* (ibid.). Deleuze describes this as "the most difficult aspect" of Kant's views on space and time to grasp because it is so incredibly different than our everyday experience of self (ibid.). Moreover, today we can easily see that it relates to the position on general relativity broached above. In Kant's critique, "the Ego itself is in time, and thus constantly changing: it is a passive, or rather receptive, Ego which experiences changes in time" (ibid.). Yet, Deleuze claims, "on the other hand, the I is an act which constantly carries out a

¹¹ There are myriad accounts of this and many have worked their way into both scientific literature and pop culture. In terms of the cinema, one might cite Christopher Nolan's 2014 *Interstellar*. Mathematically speaking, and, should the body be capable of surviving it and the technology required be invented, practically speaking too, this film's story is viable: a father could indeed, by getting close to the event horizon of a black hole, return to earth to find himself to be far younger than his daughter. Numerous Hollywood indulgences are of course taken within the film, but this sort of "time travel" through relativity is indeed possible and occurs routinely between objects in space, even in almost imperceptible ways with the things here on earth. Time passes, for example, slower at sea level than it does at the top of a mountain by being more approximate to Earth's gravitational center.

synthesis of time, and of that which happens in time, by dividing up the present, the past and the future at every instant” (ibid.). Deleuze means that, by following Kant’s logic through to its natural conclusion, we come to realize that there is no “true” ego underlying our identities, but rather the passage of time and the effects of the external events around us that carve us out, slowly chipping away at our form and ceaselessly altering that form. With the tools established in Kant’s critical philosophy, and echoing the Nietzschean notion that the self is not individual, but rather always at bare minimum and at any moment “dividual,” Deleuze shows that the splitting of time in its very formation divides us from ourselves and never ceases to divide us. All those various pasts that are open to critical interpretation and still exist within the present reveal the identity as *a process* rather than an essence.

That the “I is another” is so difficult to grasp because it is for Deleuze a direct reversal of Descartes’ *cogito ergo sum*: in the Kantian determination, an ‘I think’ is “determinable only in time, under the form of time, thus as the existence of a phenomenal, receptive and changing ego...I cannot therefore constitute myself as a unique and active subject, but as a passive ego which represents to itself only the activity of its own thought; that is to say, the *I*, as an Other which affects it” (*Kant’s Critical Philosophy* viii-ix). Within the Cartesian determination, a strictly speaking moral consciousness, capable of righteous action is possible, yet, against Kant’s own intentions, the critical philosophy sunders the individual subjects’ self-conception and leaves them with the ethical conundrum of right action, caught up and formed in time. In Deleuze’s reading of Kant there is always something external that preconditions action, and true self-determination becomes impossible to conceive of.

Deleuze will later refer to this as the subjectivity that is *in time* in his works on cinema. It is the equivalent of saying that at this point, with Kant's determinations, "time moves into the subject, in order to distinguish the Ego from the I in it. It is the form under which the I affects the ego, that is, that way in which the mind affects itself" (*Kant's Critical Philosophy* ix). That is, it is only here, once the individual identity is split and the processes of subjectification become apparent to the subject, can one come to appreciate the effects of time and the way that, just as much as we are capable of forming ourselves through conscious choice, we too are formed of our time. It is not a simple matter of thinking of time as something in us, but rather that "our interiority constantly divides us from ourselves, splits us in two" and causes "a giddiness, an oscillation" (ibid.). And, for Deleuze, this giddy splitting never ceases to occur. There is no indivisible notion of self precisely because time has no end in terms of the Ego/I; a subject that is *in time* has the unflagging ability to be sundered and sundered again by the bifurcations of time itself. It becomes more and more difficult to think of oneself after Kant as an independent and free subject, but rather as a split ego/I that continually has to establish and reestablish itself as it falls and breaks, over and over again, from the continuum of time being pulled out from underfoot. Identity formation becomes, for Deleuze, beset on all sides by affectual shocks that paralyze it temporarily and force the identity to recognize a crisis in the moral grounds of its actions.

The third "poetic formula" concerns something arising this time from Kant's *Critique of Practical Reason* and, according to Deleuze, "might appear in formulas akin to those of Kafka" (*Kant's Critical Philosophy* ix-x). It takes the form of a pure imperative, "you must!" In this work, Kant inverts the traditional relationship of the law and the Good, which is for Deleuze "as important

as the reversal of the movement-time relationship” (*Kant’s Critical Philosophy* x). Where former philosophies maintained that the law flowed out from the Good, Kant’s critical system and its new determinations of space and time force the good to instead flow out of the Law. According to Deleuze, the Law becomes a “pure form” in Kant that “has no object: neither sensible nor intelligible. It does not tell us *what* we must do, but to what (subjective) rule we must conform, whatever our action” (ibid.). In the aftermath of critical thought, in order to access the Good, one is not simply able to follow the law, for the law no longer specifies a righteous course of action. Instead, conformity to a Law which goes unstated is required for good or even safe action - anything else can quite literally be seen as illegal activity. Alluding to Kafka’s parable *Vor dem Gesetz* in *Das Urteil*, as well as his short story *In der Strafkolonie*, Deleuze is fundamentally trying to assert that the empty form of Law that simply says “you must!” rather than give specific demands replaces the possibility of moral certainty of action with an ethical and practical determination. Much like the case for Kafka’s characters, guilt becomes for the new subject – that again arises from Kant’s new determinations of space and time – a necessity. In such a conception, Deleuze argues that we can “know [the law] only through its imprint on our heart and in our flesh; we are guilty, necessarily guilty. Guilt is like the moral thread which duplicates the thread of time” (*Kant’s Critical Philosophy* xi). This sort of foundational, fundamental and *a priori* guilt would occur for anyone who does not directly mirror the course of common Law with their actions: thought itself in the critical sense would become a crime one is guilty of and not a simple or righteous action one is capable of.

The fourth and final “poetic formula” that Deleuze chooses to embody Kant’s philosophy comes once again from Rimbaud and this time takes a physical tone: “a disorder of all the senses,”

or, as Deleuze translates into Kantian terms, “an unregulated exercise of all the faculties” (ibid.). That is, the primary and dominating sense of vision one finds in pre-critical philosophies begins to give way to other senses. Citing the *Critique of Judgement*, Deleuze describes the late Kant as one who proposes an “aesthetic of the Beautiful and the Sublime, in which the sensible is valid in itself and unfolds in a *pathos* beyond all logic, which will grasp time in its surging forth, in the very origin of its thread and its giddiness” (*KCP*, xii). That is, Kant, helping sow the seeds of Romanticism by suggesting the idea that critical thought could somehow supplicate to or ask exception of Nature, and the fatally flawed notion that an inspiration of Genius might come to appreciate the logic of Nature or channel its. This sets up for Deleuze this amounts to the “final Kantian reversal,” by granting an organic, human knowledge a “discordant accord” with beautiful or sublime Nature (*Kant’s Critical Philosophy* xii-xiii). This sort of discordant accord was, according to Deleuze, to “define future philosophy” and creates “a new music as discord, and as a discordant accord, the source of time” (*Kant’s Critical Philosophy* xiii). And, while this incredibly dangerous sort of Romanticism still operates in large swathes of our culture and our technology,¹² it is not a methodology to be praised, but rather critiqued and – with the help of science and art – one day possibly to be overcome.

These four “poetic formulas” are therefore not merely creative ways for Deleuze to elucidate the philosophical problematics of Kantian thought, they are the core of the contemporary problematics of creative human thought itself, including artistic and scientific thought. Deleuze

¹²See Arthur Kroker’s *The Will to Technology and the Culture of Nihilism* (1984) or more recently Mark Cokelbergh’s excellent monograph *New Romantic Cyborgs* (2017) for ample evidence of just how Romantic our notions and uses of technology truly are and have increasingly become since the time of Kant.

himself admits that these formulas are “clearly arbitrary in relation to Kant,” that is they don’t bear on anything directly *in* Kant and Kant himself certainly would not argue for them, but are summations of Deleuze’s own analysis (ibid.). However, Deleuze goes on to say that the content of the poetic formulas is “not at all arbitrary in relation to what Kant has left us for the present and the future” (ibid.). The “poetic formulas” of critical philosophy are the starting positions for the explorations of modern cinema and not its end, not a happy or praiseworthy situation but the bedrock of global dilemmas and personal agonies. The poetic formulas Deleuze derives from critiquing Kant presage an entire new approach to cinema and thought itself founded fundamentally on post-Kantian conceptualizations of space and time, on the dizzying world of four-dimensional spacetime, and require us to rethink those very terms in order that we might develop a philosophy, politics, and ethics appropriate to the desperate conditions they force on the human subject. *Moreover, they are the starting point for “modern” cinema for Deleuze and what differentiates it from “classical” cinema: a direct look into time out of joint in the cinema and its effects on the modern, post-Kantian subject, with all the difficulties that entails for the individual.* Deleuze does not extoll the analyses of Kant, but treats them as the gravest of human problems, treats Kant as an enemy, and one whose legacy has left the world playing with philosophical fire, even if it took Deleuze most of his career to truly appreciate these dangers.¹³

¹³ Failing to understand the full dangers of this sort of machine-based Romanticism can still blatantly be seen in Deleuze and Guattari’s *Anti-Oedipus*. This work, if read in isolation, has extremely troubling political ends that went against its author’s human aims. Tempered in *A Thousand Plateaus* and more directly acknowledged in *What is Philosophy?*, Deleuze and Guattari slowly came around to face the inhuman horrors that romanticizing an indifferent nature brings about and provided at least a partial platform on which superjective, humanistic thinking might one day take place.

While these poetic formulas were penned more than fifty years ago, the sentiment remains the same; they are the foundational problems that we are still attempting to untangle today in an array of artistic, humanistic, and scientific disciplines. The difference is, however, that much of *the fourth dimension* that Kant began to open up within his critical philosophy and causes time to become “out of joint” has now been effectively theorized and empirically validated. At the risk of stating the obvious, science had moved on from Kant by the time of Deleuze’s formulations and reflections on the philosophy of cinema; huge technological and scientific advances were made that allowed Deleuze to comprehend aspects of the universe that in Kant’s time must have appeared speculative in the extreme or totally indecipherable, *not the least of which the discoveries of general relativity and quantum mechanics*. As stated above, after Einstein, among others, we simply cannot look at nature the same way, and cannot fairly ignore the relativistic nature of time, nor can we completely forget the quantum nature of space. As a result, Deleuze was better able to comprehend the impact of Kantian critique by drawing on these advances and incorporating some of their findings into his view. In fact, it is not unfair to say that Einstein’s formulations of special and general relativity bear as much or even more weight on Deleuze’s methodologies concerning the space and time of cinema than Kant’s theories do, even if, as a philosopher, Deleuze grounded his work by critiquing the latter. The point is much of what could once be thought of as theoretical opinion has, over time, become empirical fact. Thus, in order to properly address the space and time of cinema, one must not only follow Deleuze’s use, *but also incorporate contemporary scientific understanding of these terms*. And, indeed, this is one of the most fruitful platforms from which to critique or update Deleuze’s system in turn.

While it is nearly impossible to know precisely what conceptions of space and time Deleuze had in mind when writing *Cinema 1* and *Cinema 2*, it is blatantly clear that scientific notions of space and time were a vital part of the picture. In *Cinema 1*, for example, Deleuze cites the “physiological domain” as corresponding to his use of “milieu,” which is embodied, actualized space, and the “mathematical domain” to correspond to the “notion of space” in its more abstract sense when formulating his ideas of the cinema of the Large and the Small¹⁴ (*Cinema 1* 186). Moreover, as cited above in his comparisons between Resnais and the thermodynamic physicist Ilya Prigogine and the mathematician Rene Thom’s link to Jean-Luc Godard, Deleuze not only acknowledged but was rather fond of charting parallels between philosophy, including his own cinematic concepts, and scientific findings. Deleuze sees Bergson’s thought, for example, as “closely linked to Riemannian spaces¹⁵ in mathematics and physics” (*Negotiations* 30). Elsewhere, Bergson’s studies on time and duration were for Deleuze “the metaphysical counterpart of modern science,” through which Bergson sought to “give the theory of relativity the metaphysics it lacked” (*Two Regimes of Madness* 341). Bergson’s magnum opus, *Matter and Memory*, which is the very same work upon which Deleuze’s theories of cinema are grounded, “draws the conditions for a new metaphysics of memory

¹⁴ It is also not merely coincidence that Deleuze cites Herzog as the director to explain the figures of Large and Small cinema. See *Cinema 1*, pp. 184-186.

¹⁵ Deleuze is acutely aware of what Riemannian space can mean for both philosophy and cinema. This “differential geometry” that can mathematically explain “manifolds” serves as a key inspiration for Deleuze work on Leibniz, *The Fold*. It also serves as a cornerstone of “The Smooth and the Striated” in *A Thousand Plateaus*. Finally, in *Negotiations* Deleuze states of Riemannian space, “I see after the war a new kind of space based on neighborhoods appears, the connections between one little portion and another being made in an infinite number of possible ways and not predetermined. A sort of disconnected space. If I say the cinematic space is Riemannian, it seems facile, and yet in a way it’s quite true. I’m not saying that cinema is doing what Riemann did. But if one takes a space defined simply as neighborhoods joined up in an infinite number of possible ways, with visual and aural neighborhoods joined in a tactile way, then it’s Bresson’s space. Bresson isn’t Riemann, of course, but what he does in cinema is the same as what happened in mathematics, and echoes it” (124).

from a scientific conception of the brain” (ibid.). According to Deleuze, to continue such a line of research today means “developing a metaphysical image of thought that corresponds to the new lines, openings, leaps and dynamics discovered by molecular biologists of the brain: new connections and reconnections in thought” (ibid.). It is therefore clear that when Deleuze described the spaces and times of cinema, he inevitably had scientific parallels in mind; one must have at least a general awareness of scientific definitions of space and time in order to fully appreciate the conceptual apparatus provided by Deleuze in *Cinema 1* and *Cinema 2*.

Though it might seem a commonplace contention, another difficulty that comes with the “spin” of Deleuze’s cinematographic concepts is that the way one understands the terms space and time differs greatly across scientific disciplines and has changed a great deal throughout history. Theorizations of space and time not only “progress” toward more scientifically rigorous definitions, at times they even “regress” to something more closely akin to previous formulations. Aristotle’s “aether,” for example, was used frequently in scientific literature from Ancient Greece up until the late 1800s to describe the substance that permeated all space beyond Earth, before it was by and large abandoned after the findings of the Michelson-Morley Experiment in 1887.¹⁶ Aether’s synonym, quintessence, however, is now being utilized in scientific discourses surrounding dark

¹⁶ This experiment, undertaken in Cleveland, Ohio, was centered around comparing the speed of light in perpendicular directions. Light was projected and its speed measured through “luminiferous aether” hoping to detect the relative motion of matter. The result of the experiment, however, was negative and there was no significant difference in the speed of light through the presumed aether and the speed of light emitted at right angles. This was the first empirical evidence going against the then popular theorizations about aether and paved the way for the research that led to Einstein’s formulations of special relativity, which invalidated the concept of a stationary aether altogether. This is also why the Michelson-Morley is often considered to be “the most famous failed experiment in history.” Einstein himself commented, “If the Michelson-Morley experiment had not brought us into serious embarrassment [about being incorrect concerning aether], no one would have regarded the relativity theory as a (halfway) redemption” (Albrecht Fölsing (1998). *Albert Einstein: A Biography*, 219).

matter and dark energy, the as of yet still hypothetical substance that accounts for roughly 85% of the universe's mass and the immanent energy of empty space, which likely accounts for two-thirds of all cosmic energy.¹⁷ The point is that when one discusses space and time as I do in this study, it is vital to understand that these terms have histories and uses that extend far beyond their everyday conceptions. Moreover, they have varied uses that can often confound the reader or lead them astray; they have changing definitions that can often be mutually exclusive if one looks at them from a scientific perspective compared to their general public use or even their philosophical definitions. *In each dimension, space and time are not the same thing.* As such, no full account can be given. Certain problems with the concepts of space and time are inevitably going to emerge due to these dissonances, but it is nonetheless important to provide a few points of further context for how space and time will be utilized in our central concern with the philosophy of cinema and in analyzing the films of Werner Herzog.

Scientifically speaking, space and time as separate entities are in light of special and general relativity little more than a semantically helpful illusion, a more convenient way to talk about and envision spacetime, because its full reality exceeds our sensory capabilities. Given that humans experience the world chiefly in terms of three dimensions, it is only fitting that we also talk about it in similar terms. Nonetheless, empirical reality is rather more complicated and in the wake of Planck (quantum mechanics) and Einstein (the photoelectric effect and relativity), there is undeniable

¹⁷ Quintessence is, for example, used as the title for the cosmologist Lawrence Krauss' revised monograph on the physics of dark matter. Krauss' work is a particularly important example, as we will see, in connection to Werner Herzog. Not only is Herzog acutely aware of Krauss' work, he has recently utilized Krauss as an actor in his narrative film *Salt and Fire*, as well as an important interviewee in the documentary *Lo and Behold*, both of which are analyzed in detail in later chapters. Krauss' roles clearly demonstrate a direct link between particle physics and cinematic efforts for Herzog.

scientific proof of at the very least a fourth dimension to spacetime and very likely more. Thus, when one speaks of space or time as separate, one is *prescinding* the complicated nature of their empirical reality for the sake of easily communicable *language*. In other words, speaking about *spacetime* is particularly difficult because it forces one to set aside this extremely practical bias and consider empirical or “real” much that lies beyond the veil of human senses. In *A Brief History of Time*, for example, Stephen Hawking provides a glossary of terms, concisely defined as they are utilized in contemporary physics, identifying spacetime as “the four-dimensional space whose points are events” with events in turn being “a point in space-time, identified by its time and space” (200, 203). Such events are precisely the “events” that Deleuze has in mind with his philosophy of cinema: ‘events’ and ‘becoming’ occur beyond the pale of three dimensions, but they do not occur beyond the reach of thought - they can and are thought and experienced, *but they are always done so through the creative endeavors of philosophy, art, and science*.

In fact, for Deleuze, coming to terms with and expanding such spatiotemporal perspectives is the entire point of developing a rigorous philosophy of cinema. When Deleuze speaks of the “direct time-image” that grounds his work in cinema, he is more precisely speaking of a spacetime event, what he terms a “temporal structure” that “goes beyond” the traditional “succession of time - past-present-future” (*Cinema 2* xii). That is to say, Deleuze – and I along with him – was firmly convinced that *empirically* “there are yet more temporal structures” and that the “whole aim” of analyzing film from the perspective of a realist ontology is to “release those [structures] that the cinematographic image has been able to grasp and reveal, and which can echo the teachings of science” (ibid.). Reading a cinema like Herzog’s as a grammar of images is to research the “temporal

structures” that extend beyond the frequently assumed dimensionality and linear progression of past-present-future.

The best way to come to terms with this contention conceptually and empirically is to explore the actuality/virtuality distinction that Deleuze invokes throughout his philosophy dating back to *Difference and Repetition*. As noted above, the concept of the virtual plays a vital role in Deleuze’s thinking and in particularly his philosophy of cinema. And, in fact, the virtual as something empirically “real” lies behind the whole of Deleuze’s philosophy. Deleuze claimed that “the virtual is not opposed to the real but the actual” and never tired of reiterating that fact (*Difference and Repetition* 208). Moreover, Deleuze felt that “the virtual must be defined as strictly part of [any] real object – as though the object had one part of itself in the virtual into which it plunged as though into an objective dimension” (*Difference and Repetition* 209). The virtual is inherently part of everything we consider “real” and perhaps is best seen as a sort of differential, probability space out of which actual events emerge. For Deleuze the “reality of the virtual is structure” – and he means this in a completely empirically verifiable, scientific sense (ibid.). The virtual is a material structure of the universe, not a metaphysical, ghostly realm, but rather a physical realm that operates at a microscopic magnitude we have yet to fully understand.

While many ideas that likely influenced Deleuze’s thinking concerning virtuality were in the air during his lifetime, since his death, many of these formulations have come to seem both obvious and undeniable from a scientific point of view. For example, before Deleuze’s death “virtual particles” were already theorized and empirically verified to a degree by experimental physics, but were still rather vaguely understood. These particles, which are one of the foundational concepts of

quantum mechanics, are defined as “a particle that can never be directly detected, but whose existence does have measurable effects” (Hawking 204). Such particles seem to pop in and out of existence, emerging from what seemed at one point to be nothingness, but is now conceptualized under the umbrella of the quantum field. In a recent *Scientific American* article, Gordon Kane, the director of the Michigan Center for Theoretical Physics at the University of Michigan, attempted to relate to the intellectual public that:

Virtual particles are indeed real particles. Quantum theory predicts that every particle spends some time as a combination of other particles in all possible ways. These predictions are very well understood and tested. Quantum mechanics allows, and indeed requires, temporary violations of conservation of energy, so one particle can become a pair of heavier particles (the so-called virtual particles), which quickly rejoin into the original particle as if they had never been there. If that were all that occurred, we would still be confident that it was a real effect because it is an intrinsic part of quantum mechanics, which is extremely well tested, and is a complete and tightly woven theory – if any part of it were wrong the whole structure would collapse.¹⁸

Thus, it should be no real stretch of the imagination to take Deleuze’s concept of the virtual seriously or even to treat it as empirical fact. Thousands of scientists are doing so on a daily basis across the entire globe and, as of yet, no proof exists that can invalidate quantum functioning.

The virtual is therefore not to be thought of simply as a philosophical construct, but is rather a key component of material structure, the “temporal structures” found in cinema and the universe itself. Take, for a second example, the very recent discovery of the Higgs boson and the Higgs field in 2013.¹⁹ This field is theorized to permeate spacetime and proved that at the quantum level,

¹⁸ <https://www.scientificamerican.com/article/are-virtual-particles-real/>

¹⁹ According to the Italian particle physicist Carlo Rovelli, the discovery of the Higgs particle and Higgs field “was actually observed and found to have precisely the properties predicted by the Standard Model” (*Reality* 129). This proved definitively that “the world is not made up of fields and particles but of a single type of entity: the quantum field. There

virtuality is as iron-clad a theory as gravity itself. And if the philosophy of cinema is to continue on from Deleuze's formulations, it must do so by refining its terms or even adding them in light of the discoveries of modern science. Recent experiments in CERN particle accelerators, the 2019 imaging of black holes for the first time, research into quantum gravity: all of these advances point not to the question of whether or not the virtual is real, *for that has already been proven*, but instead are beginning to discover precisely how the virtual works and how actualized space and time arise from virtual events. Experiments are underway that seek to better comprehend the virtual field, to understand its purview and more accurately explain its functioning.

Cinema must keep up with and stage, or "monstrate" these scientific results as best it can in order to maintain its relevance as anything akin to an art, as an important tool for human thought. Yet, this is no easy process. Just like the mathematics of the quantum realm, that can only treat their subjects indirectly and conceptualize them only through actual effects, the cinema is incapable of simply showing this process in its entirety. It is never a matter of a single, still frame within a film that could capture the virtual itself. Instead, in order to make this as of yet unrepresentable realm comprehensible, cinema must explicitly or implicitly acknowledge its existence, as well as chart process of formation for its underlying concepts, the times and spaces that comprise the images of cinema themselves. Furthermore, to aid in this task, the cinema now demands the creation of new, nonlinear narrative strategies and methodological approaches to montage and cinematic music that

are no longer particles that move in space with the passage of time, but quantum fields whose elementary events happen in spacetime. The world is strange but simple" (ibid.). There is, quite literally and empirically, a virtual plane from which "actual" matter emerges, much like Deleuze argued long before his theorizations could be scientifically verified.

are but nascent in their development. It is not the task of cinema to “show” the virtual, so much as make it – and the dangers that come with it – known.

With this in mind, it is vital to reiterate that this dissertation is not a classical critique of a Deleuzian philosophy of cinema. Instead, I have taken up the task of thinking *with Deleuze* about Herzogian cinema. I am not seeking to validate the virtual itself, as its empirical reality is beyond doubt, but rather to examine in what guises it appears and to investigate how it functions in Herzogian cinema. Much like Isabelle Stenger does in her magisterial study of Whitehead, I map Herzog’s films along Deleuzian lines to see where that might lead at both the analytical and conceptual level. In other words, I am using Deleuzian theory as a tool to think through Herzogian cinema in a manner that might shed new light on his films – some of which have seen little to no critical attention – and in the end show how those very same films might in turn provide a platform for new investigations into the philosophy of cinema. I do not critique Deleuzian methodology wholesale, though I do seek to build upon it in my conclusions. The fact is, if one doesn’t mind the apt pun, that a Deleuzian approach to cinema is light-years ahead of any other currently available; this is because Deleuze, unlike most traditional philosophers, built his theories on a wide range of *artistic, philosophical, and scientific works* rather than conceptual works alone. While Deleuze himself was the first to admit that his philosophy of cinema was in some ways incomplete – as all philosophies inevitably are – the system he developed, rooted deeply in Peircian semiotics, is so robust to changes *at the grammatical level* that it might be fairly described as bordering on scientific. And just like within science, one does not and cannot dismiss valid functions; there is thankfully no question of throwing out the baby with the bathwater. Instead, I can only hope that, through

creative thought and experiment, new concepts, affects, percepts and functions can be discovered and that the old can be rethought and refined. It is a matter of coming to better terms with Deleuzian philosophy and its contemporary social implications rather than overriding it. And one simple but vital way that Deleuze's philosophy of cinema can be further developed is by bringing his conceptual schematics up to date with the contemporary findings of cutting-edge scientific research, creating parallels and resonances with contemporary scientific fields and recent films.

Finally, I would like to include a summary note for this work. In *Dark Deleuze*, Andrew Culp mentions, "Deleuze once told a friend that a 'worthwhile book' performs at least three functions: polemics, recovery, and creativity...the author must reveal that (1) other scholarship commits an error; (2) an essential insight has been missed; and (3) a new concept can be created" (1). This dissertation sets similar goals for itself. By applying a thoroughly Deleuzian reading to several of Herzog's films and especially recent films that have generated little to no commentary thus far, I demonstrate that Herzog scholarship has (1) committed and continues to commit the error of reading him ironically, as a neo-Romantic, as politically suspect (2) Herzog's pragmatism and diagrammatics have been overlooked, as well as his Stoicism, his humor. These contentions serve as a foundation for new interpretations that view Herzog's efforts toward forging a new grammar of images as inextricably bound to an empirically informed philosophy of cinema. And (3) new concepts can be created through analyzing Herzog's landscapes, his reveries, his micropolitics. If Herzog's oeuvre begs the philosophical questions "what is the cinema?" and "what are its ethics?" as I argue, a new taxonomy of cinematic syntax – and potentially even morphology – suggests itself alongside further theorizations of its spatiotemporal grammar.

Beginning with Chapter I, I attempt to explicate Herzog's "non-ironic" efforts to formulate a new grammar of images and how this relates to Deleuze's own mission to engender a new image of thought. A Stoic and a pragmatist, Herzog draws on humor and an indifferent Nature to ground his cinematic projects. In Chapter II, I utilize Deleuze's concept of the time-image to provide a polemical reading of Herzog's *Herz aus Glas* set against those found in secondary literature up until now. Defending Deleuze's contention that, "in this film Herzog has set out the greatest crystal-images [a type of time-image] in the history of the cinema," I argue that Herzog's cinema is grounded in the logic of time-images and that this film serves as an apology for his role as a filmmaker (*Cinema 2* 75). Moreover, this position confirms Herzog's denial of those works that seek to paint him a Romantic filmmaker and demonstrates instead how his entire cinema focuses on the post-Kantian problematics that the virtual field brings in tow. In Chapter III, I present an analysis of one of Herzog's most prevalent landscapes: the volcano. Arguing that volcanic landscapes in Herzog's oeuvre further cement his position as a four-tiered, pragmatic filmmaker, I demonstrate that for Herzog volcanoes are intimately tied to the problematic of landscape/face and ultimately serve as a powerful percept: the ur-landscape of thought itself. Finally, in Chapter IV I analyze Herzog's recent documentary *Lo and Behold* in detail, focusing on the film's emergent relationship with informatics. By examining Herzog's take on the Internet, I present an account of how Herzog can also be seen as "the most metaphysical of cinema directors" but also that his metaphysics works in tandem with contemporary physics to present a humanistic challenge to informatics and critique its fundamentally binary logic (*Cinema 1* 185).

It is no coincidence that these three chapters in some way parallel the “Daughters of Chaos” in Deleuze and Guattari’s *What is Philosophy?*: philosophy, art, and science (208). Now, as ever, philosophical concepts, artistic percepts and affects, and even scientific functions must find a new way of interacting and furthering each other’s creativity for such a thing to be achieved. For example, the Deleuzian concept of the time-image and the percept within Herzog’s work I call “volcanic (sur)face” offer starting points for future spatiotemporal critiques of film, which must face the cinema’s “internal struggle with informatics” and science in general if new aspects of cinematic grammar, syntax, and morphology are to be revealed (*Cinema 2* 270). In my conclusions, I provide a brief summary argument and gesture toward the possibility for a unifying concept for cinematic spacetimes that might yield profound ethical and aesthetic ramifications, and micropolitical consequences.

Chapter I: Werner Herzog and his New Grammar of Images

One of the most striking aspects of the secondary literature on Werner Herzog is the majority of his critics' utter reluctance to believe anything he says. In fact, the very terms of his comments are not merely ignored, they are all too frequently turned against his explicit intentions. Alan Singer, for example, describes Herzog's cinema as achieving an "ironic sublime," that pits representation against itself (204). The director, for his part, insists not only that his intentions are not to create irony, but that he is utterly incapable of irony as such, that he lacks a "sensory organ for irony" (*Guide for the Perplexed* 40). Comparing himself to the French, who he claims are masters of irony, Herzog styles himself a "brooding, squatting Bavarian bullfrog" that is "incapable of discussing art with people" (*Guide for the Perplexed* 41).

To back up his claims, Herzog relates several stories in *A Guide for the Perplexed* (2014), an in-depth series of interviews with Paul Cronin that runs to nearly 500 pages. He recalls when Harmonie Korine prank phone called him, claimed to be a painter, and attempted to sell him some of his work – which Herzog refused, stating "I don't have any art on my walls, only maps. Sometimes a family photo, but never a painting" (*Guide for the Perplexed* 40). Herzog was unable to identify his friend because he took every word literally and the ruse wasn't dispelled until Korine began to laugh and told Herzog who it really was and that he was joking. Embarrassingly, Herzog claims that Korine "didn't change his voice" and that it was simply his lack of irony that prevented him from recognizing his friend's voice, taking each word, as it were, at face value (*ibid.*). Similarly, Florian Fricke – a musician Herzog has collaborated with on numerous occasions throughout his career – once called him pretending to be from the German Ministry of the Interior and saying there

had been a mix up, that Herzog had been falsely awarded the *Bundesfilmpreis* for his first major film *Signs of Life*. After “ten minutes” of Herzog reprimanding the minister for such a gross error (“You as Minister of the Interior are responsible for many things, including internal security and the safety of our borders. In what kind of state is your house?”), it was once again Fricke’s *laugh* that made Herzog realize he was being fooled (*Guide for the Perplexed* 40-41). Yet, once he knew what was going on, Herzog realized Fricke “hadn’t even used a different voice when he was playing the minister’s personal assistant, but I still took them as two different people. That’s how bad my communication defect is. When it comes to irony, there are things common to almost everyone that are lost on me” (*Guide for the Perplexed* 41).

This lack of irony is a key component to understanding and interpreting Herzog’s films. Some scholars, like Eric Ames, attest to Herzog’s statements concerning his ironic “defect”: “*Werner Herzog Eats His Shoe* demonstrates his claim to take everything literally, without irony” (*Ferocious Reality* 14). But far more often critics repeatedly place irony at the heart of Herzog’s work. Timothy Corrigan argues one must view Herzog as an ironic director, but one whose sense of irony does not fall into “traditional or modernist” categories, but rather “may very well subvert any binary distinctions” (14). This, Corrigan claims, “would align Herzog with other contemporary directors like Terrence Malick, Chantal Akerman, or Nagisa Oshima” (ibid.). Roger F. Cook writes of Herzog’s “ironic ecstasy” and “self-irony” in *Woodcarver Steiner* (281-298). Laurie Johnson writes on “interiority and irony” in *The White Diamond* (518-521). The list could go on. But it is key to note that the insistence of a central ironic element to Herzog’s work by the large majority of his critics is not only widespread, it evinces a fundamental misunderstanding of the philosophical traditions his

films share an affinity with (many of which are, perhaps ironically, French). Shortly put, it misapprehends Herzog's beginning as his ends. Contrary to such positions, I argue that Herzog's lack of irony is drawn from his *pragmatic empiricism*. Rather than reveling in ironic ecstasy, which would be lapsing back into the Kantian Romanticism of *The Critique of Judgment*, Herzog instead takes this problematic *as his starting point*. Herzog's films should be read as an attempt to come to terms with and move beyond the "poetic formulas" of Kant, not to simply chart a lineage of their development. Failing to recognize this causes us to underestimate the vital importance of *the critique of language* and the central aim of working on the grammar of images within Herzog's films, the threads of which run from start to finish through his oeuvre and ground the conceptual framework of his cinema.

Within empirical reality there are functional dimensions which bypass our senses and our understanding without scientific intervention. Empirical truth is to our common sense far stranger than fiction for the simple reason that words and information do not boil down to the same thing, despite sharing many structures. Information is never ironic, for it is not a demonstration but a monstration. It is only through playing with words and the concepts that underpin them that irony might arise. And Werner Herzog does his best to tightly cling to the information at hand, rely on direct representation rather than the joys of irony or metaphor. While Herzog has a proven track record of being hyperbolic, he is rarely so without a precise and calculated weighing of words. In fact, his responses are so distilled, so obviously measured, that his responses can at times seem scripted. Frequently portrayed as enigmatic or deliberately misleading, Herzog is most certainly elusive when asked for concrete meaning, for an ideology that extends beyond the scope of his films

and their functioning. Yet, about the films and about himself, Herzog has been remarkably candid, effusive even. To a degree that far surpasses almost any other living director, he has been willing to speak at length about his personal life, his films and the process of their creation, as volumes such as *A Guide for the Perplexed* and countless other lengthy interviews attest. Throughout his entire career, however, he has never wavered once on the issue of irony, insisting that he and his films have a great sense of humor to them, but no ironic elements whatsoever.

While it is hard to imagine a human being *completely* free of irony, one can most certainly ascertain that Herzog indulges in far less than his fair share of the stuff and strains against irony when it arises. How, then, are we to ally such differences of opinion between creator and critic? One cannot and should not dismiss scholarship such as Singer's, Corrigan's, Cook's and Johnson's out of hand, which, it must be said, is rigorous and at times compelling. Yet, the vast majority of secondary literature on Herzog's films leave their readers with the unsatisfying notion that the analysis is incomplete, that an exegesis of his films is unattainable. Elements and even entire scenes often do not fit within the analytic paradigm presented, most noticeably when psychoanalytical. This stems from a failure to take Herzog at his non-ironic word. For lacking irony is not simply a "defect" of character as Herzog intimates, but rather an entirely different philosophical and analytical position concerning film itself. While one can draw interesting conclusions from ironic readings of Herzog's work, approaching his films with a non-ironic philosophy and analytic, *through pragmatism and a realist ontology*, however, brings a cohesion to them that almost all other interpretations lack. When viewed in this light, Herzog's films often show themselves to be what he claims: efforts toward a "new grammar of images." Herzog's films are investigations into the nature of the cinematographic

image *in addition to* being compelling stories. They are *experiments* rather than solely representational artworks.

The term a new grammar of images, which will prove vital to the analysis undertaken here, comes not coincidentally from the same short film Eric Ames claims demonstrates Herzog's lack of irony, *Werner Herzog Eats His Shoe*. The film has a rather humorous, even silly origin. In it, Herzog likens being a filmmaker to being a "clown." Following suit and splicing in scenes from *The Gold Rush*, where Charlie Chaplin, too, eats his shoe, Les Blank, the short film's director, links Herzog's clownishness not merely to Chaplin himself and his famous "Little Tramp" character, but also Chaplin's inspirations for making the film. Chaplin claimed that *The Gold Rush*, and especially the scenes involving his shoes, were sparked by reading an account of the Donner Party, who resorted to cannibalism and consuming the leather of their shoes in order to survive after becoming snowbound in the Sierra Nevada. That is, eating one's shoe is an act born of desperation, but also an amazingly humanized one, considering the alternative. *Werner Herzog Eats His Shoe* rests on subtly similar, self-referential humor. Hoping to spur on his friend and fellow director Errol Morris – who often lamented his inability to maintain enough financing to make his first feature film, *Gates of Heaven* – Herzog prompted Morris to make his film, no matter the obstacles involved, to do absolutely anything necessary, and announced "I'll eat the shoes I'm wearing the day I see your film for the first time" (*Guide for the Perplexed* 179). Herzog, it seems, wanted to make his friend Morris aware that, even in the direst of straits, one could find a means to go on.

While few, including Morris, took the statement seriously, after *Gates of Heaven* was released, Herzog contacted Les Blank to film him eating what he had been wearing on the day, "ankle-high

Clarks desert boots, with a sole that melted away like cheese on a pizza” (*Guide for the Perplexed* 180). But rather than merely use the absurdist humor as some sort of publicity stunt, Herzog used eating his shoe as a platform to make a clear declaration of his own ambitions as a filmmaker. In the film’s final scenes, Herzog forcefully issues something akin to a personal manifesto, a declaration of why he is a filmmaker in the first place:

Our civilization doesn’t have adequate images, and I think a civilization is doomed or is going to die out like dinosaurs if it does not develop an adequate language or adequate images. I see it as a very, very dramatic situation. For example, we have found out that there are serious problems facing our civilization, like energy problems, or environmental problems, or nuclear power and all this, or over-population of the world. But generally, it is not understood yet that a problem of the same magnitude is that we do not have adequate images, and that’s what I’m working on – a new grammar of images. (*Werner Herzog Eats His Shoe*)

Herzog has returned to the concept of a new grammar of images on many occasions throughout his career. In fellow New German Cinema director Wim Wenders’ 1985 *Tokyo-Ga*, Herzog claims that unlike Wenders, he is primarily concerned with *images* and not just *signs*, marking a distinction between the two, that he is not after symbolism as much as our direct experience of cinematic imagery. Herzog claims that “there are few images left, and that one would have to work like an archeologist with a shovel to find something new in this ‘insulted landscape’ (*Aesthetic Ecstasy and Truth* 10). That is, for Herzog, a cultural semiology is not enough.

Understanding signs and their symbolic economy is not sufficient on its own. Rather, what one needs is a creative semiotics: *one must experiment with and expand upon the grammar of images rather than merely toy with their accepted syntax*. A syntax of signs is a closed analytic and not the same as a syntax of images, which, in film, would be nothing other than montage. Likewise, a grammar of

signs can only relate to a given cultural paradigm; it is an extrinsic property. A grammar of images relates, however, to empirical reality itself; it is intrinsic and intensive. In the Herzogian mindset, the landscape of images is “insulted” not because there is nothing new, but rather because solely focusing on a closed system of signs all too often leads to a tiresome repetition of syntactical arrangement, the re-presentation of what one is already looking at, so to speak. Signs become tired, worn out; they become clichés over time and lose their functionality. But by looking into images, by looking into the fundamental properties of film, one opens up the opportunity for entire new arrangements, for new aspects of *film logic* to be ascertained. Through these images one learns more of nature itself and simultaneously discovers the preconditions for cultural semiologies, for human devised systems of signs.

Echoing Herzog’s statement’s in *Werner Herzog Eats His Shoe*, it is my fundamental contention that Herzog’s films should be read as investigations into the grammar of images and not simply as relating to the syntax of signs. Following Deleuze, I argue that Herzog’s notion of a grammar of images cannot simply be uncovered; it is instead formed in an interstice, in the movements across the synaptic gaps that link philosophy, science, and cinema together. No one of these fields is capable of addressing the grammar of images completely on its own, but requires influences and disruptions from the other fields to further complement and critique its own conception of cinematic images and their human grammar. Furthermore, I firmly believe that Herzog views cinematic images as empirical rather than ironic, linguistic properties; Herzog maintains a strict policy of filming only “real,” naturally occurring physical events, eschewing most special effects, and outright rejecting computer animation. In his most famous example, Herzog

went to unbelievable lengths in *Fitzcarraldo* to design and implement a pulley system capable of pulling a massive boat over a mountain rather than relying on special effects.²⁰ The heart of this “natural” grammar of images lies not in some idiosyncratic compulsion to deny irony and obscure meaning on Herzog’s part, but rather a way to show the various frictions between *language and medium of film itself*, between the syntax of words and empirical structure of reality that film captures. That is, working on a new grammar of images is also a *philosophical and even scientific problem* rather than a purely cinematographic one in that it looks deeply into how we view empirical structure. The results of such experiments, should they be successful, would extend well beyond the laboratories in which they were made.

Surprisingly, very little has been written about Herzog or the grammar of images from an empirical perspective. Similarly, and despite the staggering number of parallels in Herzog and Deleuze’s work, Deleuzian readings on Herzog’s work are few and far between. On the surface, the correlations are so numerous as to almost be clownish in turn, with each thinker creating an uncanny caricature of the other’s thoughts through their separate but intertwined fields: Herzog’s self-proclaimed “efforts to get away from the ‘Daddy’s cinema’ that predated New German Cinema” and the writing of *Anti-Oedipus* (*Aesthetic Ecstasy and Truth* 16). “Becoming-animal” and the story of Timothy Treadwell in *Grizzly Man*. The shared influence of Kafka, Kleist, Büchner, and Nietzsche and the creative force of madness, but also the mutual condemnation of fetishizing madness and a penchant for sobriety. Herzog’s “physical” and “athletic” filmmaking alongside Deleuze’s embodied,

²⁰ See the director’s own commentary concerning this in Les Blank’s 1982 *The Burden of Dreams*, as well as Herzog’s his collected notebooks from the film set, *The Conquest of the Useless*, published in 2009.

anatomical philosophy of cinema. And perhaps most importantly for our purposes, *the absence of irony* or what each considers metaphorical obfuscation, remarkably housed in the same terms of “lacking” an organ (*body without organs*). Yet, as seen in the Introduction, this is not to stake a claim that they are somehow doing the same thing, but rather that they ask a similar question of cinema in their own manner, arriving at similar conclusions diagrammatically: what are cinema’s fundamental properties?

To question the importance and functioning of cinema, to develop its conceptual practice, is also to mount an investigation as to what cinema actually is. As Stanley Cavell writes in *The World Viewed*, “‘What is the importance of art?’ is *grammatically related to*, or is a way of answering, the question ‘What is art?’” (italics mine. 4). This seems especially true of cinema because it claims a unique place among the arts through its very medium. Erwin Panofsky declares that “The medium of the movies is physical reality itself” (16). Similarly, theorists such as Siegfried Kracauer considered the task of film “the redemption of physical reality” in his *Theory of Film*. But what is truly striking about considering the task of a filmmaker like Werner Herzog as working on a new grammar of images is not some saving grace or redemption of a fallen physical reality. Instead, what becomes paramount is that the cinematic quest for a new grammar of images, while fundamentally different in its creation of percepts and affects taken from reality, not only begs but forces the Deleuzian question of a new image of thought. To create or discover new aspects of grammar within cinematographic images, is to alter the preconditions of thinking itself. That is, cinema is inherently tied to thinking in the Deleuzian sense. And thought is not an aberration of, but rather a probabilistic outcome of empirical reality.

According to Deleuze, cinema, like thought, has grounds directly in its images that lie *a priori* to any language of signification. Any new grammar of images must be undertaken from a starting point that has the critique of language in its focus. Yet, this cannot be sufficiently formulated until language's origins are established or assumed. Like the aforementioned quote from Stanley Cavell, to ask the question of what importance a new grammar of images might have is to simultaneously ask what grammar is, what images are, and more specifically a cinematographic grammar of images. Indeed, language itself, however defined, cannot be conceived of as separated from the issue of grammar; traditional notions of language imply meaning and relational and/or transcendent sense. For our purposes, however, grammar should be conceived of not merely as a set of rules particular to a language to determine proper usage such as the case of English Grammar. Instead, following Deleuze, we conceive of grammar as a machinic system that utilizes correlate presuppositions to create meaning and allow for action. Language is an aspect of human semiotics functioning on the level of symbolic logic, but biologically derived. *Grammar, on the other hand, is an extension of the sensible before it becomes a linguistic structure; as such grammar allows for both meaning and differentiation.* Any grammar of images taps directly into sensory correlates, which serve as its "raw materials," and functions as the foundation of their symbolic but also sensory economy. A *human grammar of images* is a specific grammar that forces the occurrence of thought and lies at the base of economic-political-mythic organization rather than being their product.

It is no coincidence that Deleuze used the work of Charles Sanders Peirce as a foundation for his taxonomy of cinematographic images in *Cinema 1* and *Cinema 2*. Deleuze considered Peirce's work to be "undoubtedly [the] most complete and most varied" classification of signs and images

available and likened its rigor to “Linnaeus’s classifications in natural history, or even more Mendeleev’s table in chemistry” (*Cinema I* xiv). Peirce’s taxonomy of signs is one of scientific precision for Deleuze, theoretical in the sense that electromagnetism might be conceived of as a theory - ceaselessly operating and elegantly surmised through Maxwell’s equations.²¹ In fact, while Deleuze himself was somewhat reluctant to cite Peirce directly and did so only sparingly, one can hardly begrudge him for doing so. In many ways, Peirce likely hit too close to home, and a great number of the core ideas within their work are nearly identical. As a wildly prolific and extremely precise writer, an encompassing overview of Peirce’s semiotics cannot be fully expounded here. However, a few key Peircean elements should be mentioned as they apply directly to Deleuzian film theory and Herzog’s new grammar of images.

First of all, it must be underscored that Peirce equated the science of semiotics with logic itself, with thinking in all its forms and at all levels. “Logic, in its general sense, is... only another name for *semiotic*, the quasi-necessary, or formal, doctrine of signs” (*Logic as Semiotic* 98). But more than that, Peirce demonstrates the triadic forms he develops through semiotics challenge Platonic dualism not by overriding it, but expanding it with a third term and also showing how the *movement*

²¹ Maxwell’s Equations are four relatively simple equations that fundamentally set up the force of electromagnetism. According to Lawrence Krauss, these equations “ultimately changed everything, including our notions of space and time” (*Greatest Story* 36). Electricity and magnetism were traditionally viewed as separate forces, but Maxwell demonstrated beyond doubt that they were in fact “different manifestations for one and the same force,” revolutionizing research and the human technologies that utilize this force (*Greatest Story* 38). Furthermore, Maxwell concluded in 1862 as a result of his equations that *light* was an electromagnetic wave and paved the way for the unifications in physical theory that arose in the 20th century, most notably Einstein’s Relativity. Though the equations are to this day inexact, they function at our level but are the classical limit of quantum electrodynamics. In short, these equations amount to one of the most monumental scientific discoveries ever made.

between each term is necessary for the functioning of thought and the genesis of meaning. Peirce begins with a simple definition of what a *sign* is and propounds its basic function:

A sign, or *representamen*, is something which stands to somebody for something in some respect or capacity. It addresses somebody, that is, creates in the mind of that person an equivalent sign, or perhaps a more developed sign. That sign which it creates I call the *interpretant* of the first sign. The sign stands for something, its *object*. It stands for that object, not in all respects, but in reference to a sort of idea, which I have sometimes called the *ground* of the representamen. . . . In consequence of every representamen being thus connected with three things, the ground, the object, and the interpretant, the science of semiotic has three branches. The first is called by Duns Scotus *grammatica speculativa*. We may term it *pure grammar*. It has for its task to ascertain what must be true of the representamen used by every scientific intelligence in order that they may embody any *meaning*. The second is logic proper. . . . the formal science of the conditions of truth of representations. The third. . . . I call *pure rhetoric*. Its task is to ascertain the laws by which in every scientific intelligence one sign gives birth to another, and especially one thought brings forth another. (italics in original. "Logic as Semiotic" 99)

It is this first level, the level of ground and pure grammar that most centrally concerns us. Grammar, just as Peirce says, has at heart the task of providing the *preconditions* for the embodiment of meaning. A new grammar of images can be no different; it is a grammar in precisely the same way that Peirce conceived of Firstness as pure grammar. Of Firstness, Peirce wrote, "We must not consider whether it exists or is only imaginary, because existence depends on its [Firstness'] subject having a place in the general system of the universe" (*Philosophical Writings* 87). That is, even if it cannot be directly accessed in the same manner as indexical or symbolic signs, as Secondness and Thirdness, the pure qualities of Firstness are *a priori conditions* for indexes and symbols to function. This leads Peirce to declare quality itself "the monadic element of the world" without which there would be no sense (ibid.).

Contrary to the representations of signs, Deleuze believed that *images* can then be seen within Peirce's system as – at first seemingly paradoxically – *direct representations*, “which partake of simple qualities, or First Firstness” (*Logic as Semiotic* 105). That is, images are empirically verifiable events, a meeting of the ground and something capable of sensing a quality, of drawing on *pure grammar* to give this interaction meaning. This is the meeting of empirical events with consciousness, or at the very least, the nerve impulse, the foundational realm of sense. Peirce sets images against signs, against indexical *diagrams*, which “represent relations, mainly dyadic,” and symbolic *metaphors*, a special type of signs which “represent the representative character of a representamen by representing a parallelism in something else” (ibid.). In other words, while signs correlate to Secondness (indexical meaning) and symbols correlate to Thirdness (the symbolic meaning in human language), images are not strictly speaking representations at all, but presentations and are grounded in pure grammar, in First Firstness; images are monstrations rather than demonstrations. For Deleuze, this is equivalent of saying that in Peirce's thinking it is not simply the case that everything can be conceived of through linguistics – to do so would again simply be a regression into Platonic dualism. This would be a world bounded fully by linguistic representation and the logic of his semiotic would not function as it would then lack the necessary qualities of Firstness: it would make grammar not only ineffable, but incomprehensible.²²

²² While there are certain complications to this structural view of the semiotic from within Peirce's own work – one could, for example, fairly state that for Peirce Firstness simply prescind from Secondness and Thirdness – Deleuze is essentially arguing that Firstness and its logical, semiotic processes can be considered independently of Secondness and Thirdness by pressing the empirical foundation of Firstness, of quality, beyond the point that Peirce himself thought possible. According to Deleuze, Firstness would have its own logic – different than indexical or symbolic logic – that operates in tandem with them at human scale or at least parallel to it. Yet, Deleuze was also adamant that this sort of logic, empirically speaking, continues to function in the absence of Secondness or Thirdness. This would not be an organic logics of human and animal life, but rather a “logic” tied to inorganic growth, change, or organization. Perhaps

Though it is easy for humans to simply lump everything under the umbrella of language given that thinking itself is so tightly ensnared in it, a triadic semiotic demonstrates that there are difficulties involved in accepting this notion. Contrary to conventional wisdom, Peirce shows that the indexical and symbolic systems of human language are not functional on their own, that something exists *a priori* to representational language and even structures it. He relates it with a wonderful example:

Possibly, there may be Representamens that are not Signs. If a sunflower, in turning toward the sun, becomes by that act fully capable, without further condition, of reproducing a sunflower which turns in precisely corresponding ways toward the sun, and of doing so with the same reproductive power, the sunflower would become a Representamen of the sun. But *thought* is the chief, if not the only, mode of representation. (italics in original. *Logic as Semiotic* 100)

In a move that seems impossible, Peirce takes an empirically verifiable example that, upon analysis, demonstrates that grammar must serve as the ground of language and not the other way around! Grammar is not inherently a part of language, but rather a structural part of the semiotic and empirical reality itself that supersedes representational expression of thought through language. That is to say, even his system which takes into account pure grammar is likely incomplete and the possibility of a *different logic* than the one he develops might be possible, based on a *different form of representation* than those signs that become human language (at the indexical level of Secondness and the symbols of Thirdness). Much like the sunflower that turns toward the sun and can replicate the

the best example of this would be crystalline “life,” which is capable of growth, self-organization and other markers of “life.” While this might appear to some as a mystical turn on Deleuze’s part, it should be argued that he also underscored that this was always an empirical matter; Deleuze was not trying to make grand claims but rather was attempting to conceptualize scientific findings. This question of crystalline “life” continues to this day in scientific research and popular literature, such as this contemporary article from Wired magazine: <https://www.wired.com/2013/01/living-crystal/>

possibility of its action through its repetition, its reproduction, a pre-linguistic realm must of necessity function in order for language to even appear. And, at the very least, even if this were not the case, an as of yet undetermined logic would need to function at *both* the pre-linguistic and linguistic level, combining them in a common symbolic quality.²³

Peirce does not himself follow this line of thinking fully, though as we will see below, Deleuze attempts to. In fact, this is precisely why Deleuze viewed Peircian semiotics rather than semiology as appropriate to any investigation into cinema's concepts: *because cinema's concepts are specific types of images*. Deleuze bases his taxonomy of cinema on Peirce in the first place because there is "a profound mirroring of images and signs" (*Negotiations* 65). According to Deleuze, the Peircian semiotic "considers language only in relation to this specific content, images and signs" while other approaches to cinema fall back into a logic that "is of linguistic inspiration" and has a habit to "cut language off from the images and signs that make up its raw material" (*Cinema 2* 262). In other words, film theories that build their foundation on linguistics and interpretation remove all Firstness from consideration: with this action, the semiotic loses its triadic functioning and lapses back into the dyadic and Platonic dualism. "A semiotics based on linguistics worries me," Deleuze writes, "because it does away with both the image and the notion of the sign. It reduces image to an utterance, which seems very bizarre, and then of course finds in it the linguistic components of utterances – syntagms, paradigms, the signifier. It's a sleight of hand that makes us forget about movement" (*Negotiations* 65). When Firstness is ignored *movement* is halted and the pre-linguistic

²³ Or, as yet another possibility, a drastic change in scale – or even human biology – might necessitate expanding the semiotic to include Fourthness. This is, however, at present nothing more than likely conjecture.

field of grammar is as a result ignored as well. But one cannot fairly set movement aside precisely because modern science has shown that while pure grammar may be ineffable in linguistic terms, it can indeed be sensed and even measured: the preconditions out of which representations, including language, rise, can be indirectly observed and calculated.

Deleuze writes in the conclusion to *Cinema 2* that cinema demands inspection of its foundational concepts, its movement-images and time-images, if it is to complement and challenge philosophy:

Cinema is not a universal or primitive language system, nor a language. It brings to light an intelligible content which is like a presupposition, a condition, a necessary correlate through which language constructs its own 'objects' (signifying units and operations). But this correlate, though inseparable, is specific: it consists of movements and thought-processes (pre-linguistic images), and of points of view on these movements and processes (pre-signifying signs). It constitutes a whole 'psychomechanics,' the spiritual automaton, the utterable of a language system which has its own logic. The language system takes utterances of language, with signifying units and operations from it, but the utterable itself, its images and signs, are of another nature. This would be what Hjelmslev calls non-linguistically formed 'content,' whilst the language system works through form and substance. Or rather, it is the first signifiable, anterior to all significance, which Gustave Guillaume made the condition of linguistics. (*Cinema 2* 262)

This position stands in radical opposition to traditional film theory and its aims. As Flaxman notes, such an approach to film "has little in common with the familiar categories of film studies" (*Brain is the Screen* 23). Deleuze's theory is not simply another linguistic analytic, or even an analytic for that matter; it is an effort to expand the semiotic of cinema. It flies in the face of interpretive theories such as Christian Metz's "*grande syntagmatique*" that approach cinema "by analogy (cinema is like a

langue, the shot is *like* an utterance)” (italics in original. *ibid.*). Deleuze’s repudiation, or, as Flaxman puts it, “evisceration” of Metz or any other film theory that relies on an analogically based semiology stems from his fundamental disavowal of the distancing inherent within the process of linguistic signification (*Brain is the Screen* 23). *The Deleuzian philosophy of cinema is not geared toward creating a new representational schema, but rather to chart the new logic that cinema demands—one that forces thought at the level of direct representation, or monstration, at the level of sense.*

At this level, the issue of *irony* once again becomes key. If, as I argue, the new grammar of images functions within Herzog as an investigation into the psychomechanics of cinema by forging pre-signifying signs and pre-linguistic images, then the cinema of Werner Herzog can be defended as a philosophical endeavor and, what’s more, as *humorous* rather than *ironic* filmmaking. In *The Logic of Sense*, Deleuze assigns a vital function to humor by juxtaposing it to irony. Rallying against Plato, who sometimes “wonders” if pure events and pure becoming “might not have a very peculiar relation to language,” Deleuze declares Platonic thought incapable of coming to terms with the “verbs of pure becoming,” where “all identity disappears from the self, the world, and God” (*Logic of Sense* 2-3). Much like the aforementioned example of Peirce’s sunflower, Deleuze argues that the *natural world itself* furnishes empirical examples that demonstrate language to be grounded in sense (or even nonsense) rather than the other way around. As Deleuze notes, “the logic of sense is inspired in its entirety by empiricism. Only empiricism knows how to transcend the experiential dimensions of the visible without falling into Ideas,” that is, into Platonic dualism and dyadic interpretation that does away with grounds, with Firstness (*Logic of Sense* 20). It is only with empiricism – an empiricism based on scientific findings rather than personal experience – that one can account for creative

genesis and not lapse back into the “remembrance” of transcendent Ideas. If, however, one wishes to remain within the realm of the empirical and to eschew the philosophical dualisms of Plato, what practical tools might work? The burden becomes discovering how, if at all, one might develop a logic that exists anterior to signification within language itself.

To accomplish this task, Deleuze turns to Stoic philosophy. Contrary to Platonic thought, the Stoics draw a firm line between the irony of identity and the humor of paradox. The same can and must be done for an empirically inspired film semiotic. Stoicism distances itself from Platonism and irony by taking stock of examples, of monstrations rather than merely demonstrations, by direct experiences rather than linguistic representations of those experiences. Following a triadic process of signification akin to Peircian semiotics, Stoicism does not ignore Firstness, nor does it ignore movement. Moreover, Stoicism contends that monstrations, or direct representations, are humorous without being ironic. Within the logic of sense, “humor is the art of the surface, which is opposed to the old irony, the art of depth and heights” (9). Deleuze describes this as a battle, where “Sophists and Cynics...made humor a philosophical weapon against Socratic irony,” but one that was truly settled with the advent of Stoicism (ibid.). It is only with the Stoics, Deleuze claims, that “humor found its dialects, its dialectical principle or its natural place and its pure philosophical concept” (ibid.) What the Stoics accomplish with their dialectics of humor is to open new avenues for thought by doing away with the transcendent distancing demanded by irony, by altering “the task of language both to establish limits and to go beyond them” (ibid.). Stoicism allows for the advent of the event, of *the verb*, the Peircian *copula*; it does not employ the philosophical “sleight of hand” that excludes movement espoused through Platonic Forms, eternally existent Ideas. Simply put, Stoicism

is a philosophical vein that can be utilized to revive and conceptualize signs and images *as surface events*. Stoicism, through humor, can account for spacetime events in the scientific sense. Therefore, when I argue that one should read Herzog as a Stoic and a humorist rather than an ironic film director, I am merely claiming that Herzog is viewing the world in terms of ubiquitous and unceasing movement, envisioning a world where nothing can be said to be truly static. And, it must be stressed, empirically, this is very much the case. Nothing truly “is” but rather “is” something only insofar as it interacts with other things, it “is” only in its “doing.”²⁴

Empiricism can therefore be thought of as a network of monstrations rather than demonstrations, as pure events of becoming rather than being. A classic philosophical example of this comes from Diogenes the Cynic and shows the marked movement toward humor and away from irony. When Plato defines man as “a biped and featherless animal,” Diogenes presents to him a “plucked fowl” (*Logic of Sense* 139). When asked ‘what is philosophy?’ Diogenes presented “the most moral of animals” and the one that best sums up the “problem of language”: a fish, dangling from a string (*ibid.*). These direct representations or monstrations are humorous, but not ironic; they are literal and empirical but not intended to be metaphorical. While any good Platonist might scoff at such a seemingly cheap ploys – much like Plato did himself – they prove vital in that they open the

²⁴ In a parallel move to Peirce and Deleuze, and housed in remarkably similar terms, the contemporary Italian physicist Carlo Rovelli writes, “Nature, for its part, is what it is...If our [linguistic] grammar and our intuition do not readily adapt to what we discover, well, too bad: we must seek to adapt them. [Linguistic] grammar developed from our limited experience, before we became aware of its imprecision...we must not allow ourselves to be confused by an inadequate grammar” (*Order of Time* 98-99). This sentiment leads him to conclude that, “the spatiality of the world consists of the web of their interactions [elementary particles, photons and quanta of gravity - or rather ‘quanta of space’]...they interact incessantly with each other, and indeed exist only in terms of these incessant interactions. And this interaction *is* the happening of the world” (*Order of Time* 108).

possibility for humor to emerge. An extended, important passage from Deleuze's *Logic of Sense* elucidates this:

Plato laughed at those who were satisfied with giving examples, pointing or designating, rather than attaining the Essences: I am not asking you (he used to say) who is just, but what is justice. It is therefore easy to ask Plato to follow down the path which he claimed to have made us climb. Each time we are asked about a signification, we respond with a designation and a pure 'monstration.' And, in order to persuade the spectator that it is not a question of a simple 'example,' and that Plato's problem was poorly posed, we are going to imitate what is designated, we are going to eat what is mimicked, we will shatter what is shown. The important thing is to do it quickly: to find quickly something to designate, to eat, or to break, which would replace the signification (the Idea) that you have been invited to look for. All the faster and better since there is no resemblance (nor should there be one) between what one points out and what one has been asked. There is a difficult relation, which rejects the false Platonic duality of the essence and the example. This exercise, which consists in substituting designations, monstrations, and consumptions, and pure destructions for significations, requires an odd inspiration – that one knows how to 'descend.' What is required is humor, as opposed to the Socratic irony or to the technique of the ascent. (*Logic of Sense* 139-140)

The issue that lies at the heart of empirical monstrations is, therefore and perhaps oddly, humor itself. Yet even once this "descent" into humor is achieved, the descent to the level of signs and images, a further problem arises in terms of signification, for sense itself. While the Cynical position utilizes humor, it is still an absurdist humor. Descent as opposed to ascent leads from true significations to pure denotations, which "replace and negate" those significations; they lead not to false assertions but to absurd presentations, much like Diogenes' fish (*Logic of Sense* 140). Echoing Deleuze, I believe that "the condition of truth is not opposed to the false, but to the absurd: that which is without signification or that which may be neither true nor false" (*Logic of Sense* 15).

Precisely because of this, language cannot be grounded in the absurd any more than it could be fairly grounded in the idealist sense. This is the foundational problem of the Cynical position – it leads to pure denotation, to absurdity, to the non-sense of the depths juxtaposed with the signification of Platonic heights. Yet from depths of the Cynical position, there is a way one might break through to a level ‘deeper’ still: the paradoxical ‘depths’ of the surface.

According to Deleuze, it is surface that is the deepest layer of all. Following Valéry’s maxim that “there’s nothing deeper than the skin,” Deleuze describes philosophy itself as “a general dermatology or art of surfaces” and explains that his efforts in *Logic of Sense* are geared toward trying “to describe such surfaces” (*Negotiations* 87). “By the same movement with which language falls from the heights and then plunges below,” Deleuze writes, “we must be led back to the surface where there is no longer anything to denote or even to signify, but where pure sense is produced. It is produced in its essential relation to a third element, this time it is the nonsense of the surface” (*Logic of Sense* 15). This sort of surface “nonsense” is completely different than absurd “non-sense” derived from the Cynical position. While the latter leads to the absurd and is therefore set against truth, the former is simply grounded on the deeper level of Firstness – it allows for truth as a human contention but links monstration, links empiricism, directly to Firstness. What one discovers with the nonsense of the surface are “pure events considered from the perspective of their eternal truth...from the point of view of the substance which sub-tends them, independent of their spatiotemporal actualization in a state of affairs” (ibid.). One discovers not only their actuality, but shockingly an ‘underneath’ to the actuality of events. Differently presented, this essentially means that one “finds pure singularities...independent of the individuals and persons which embody them

or actualize them” (ibid.). One finds pre-signifying signs and pre-linguistic images, the preconditions of language itself, but even more than this, one finds *a field* anterior to direct sense itself that can nonetheless be *indirectly* intuited, observed, and even calculated. One finds the chaos from which everything we can sense, everything we can say, arises: the virtual field.

A Zeroness has been introduced to Firstness, Secondness, and Thirdness. Thirdness functions through symbolic logic; Secondness functions through indexical logic; Firstness functions through a logic of sense; sense arises from Zeroness, from the probabilistic virtual events of the (sur)face. Humor’s role, its ‘true paradoxes’ within the logic of sense, makes a conceptualization of Zeroness possible and is what makes Stoicism so important for any analysis of Herzog’s work. Stoicism delves into singularities and events, directly into sense itself and even below it, through the lens of humor rather than irony. The ironic position is not ironclad and enduring, but rather an anthropocentric and symbolic creation that enables the psychologically comforting position of moral truth to be asserted in the face of empirical evidence. Plato, in the end, proves to be stuck in his own Cave.

The “adventure” of the “Stoic sage,” or, as I am arguing, Herzogian characters, is therefore precisely to be seen as the “two-fold dismissal of height and depth to the advantage of the surface,” for, let there be no doubt, Herzog is, if not strictly speaking a Stoic himself, deeply influenced by Stoic philosophy (ibid.). As particularly humorous evidence of this, we have such accounts as Herzog being shot while giving an interview, lifting up his shirt to reveal blood, but, realizing that it only

created a minor flesh wound, claiming that the bullet “is not significant.”²⁵ Moreover, though Herzog continually denies his own capability for irony, he also frequently underscores his sense of humor and its importance within his cinema. When asked in an interview whether or not he had a sense of humor despite lacking an understanding of irony, Herzog simply replied “Of course!” (*Guide for the Perplexed* 42). According to Herzog, “There’s a big difference between irony and humor. I can understand humor and laugh at jokes, even if I’ve never been very good at telling them myself...Often overlooked is the humor in my films...My audiences laugh all the time, and an audience that laughs is always in the right; that’s a *law of nature*...Seeing audiences laugh at my films has always been important to me” (italics mine. *ibid.*). Humor is not idle fun, but rather a way to get to the surface of things.

This topological preference, this focus on surface and humor, as opposed to heights and irony is no small matter for Herzog. It extends even into his personal linguistic usage, as well as his approach to language when aiming toward a new grammar of images within his filmmaking. Comparing himself again to French filmmakers, he notes: “The French love to play with their words, so to master their language is to be a master of irony. Technically I can speak French; I have the vocabulary and know the grammar, but will only do so when forced to. Only twice in my life has this happened” (*Guide for the Perplexed* 41). While the likely wild stories of these two occurrences remain unimportant, it *is* important to note that even coming as close to irony as Herzog feels speaking the French language entails is something only to be done under duress, “only when there is

²⁵ This video can be seen at:

https://www.reddit.com/r/videos/comments/9o14cw/director_werner_herzog_casually_gets_shot_during/

a real necessity, otherwise I withdraw and become a denizen of the crag” (ibid.). It is not simply a matter of obstinance or arrogance that lends Herzog this position, but rather a fundamental lack of interest in what the lofty heights of irony offer: an idealized truth. Nor does he seem interested in exploring the depths of the human, the unceasingly negative movements of Platonic dialectics. Instead, keeping his focus and his films aimed at the surface, Herzog explores “the inner landscapes” and “ecstatic truth” of humans. He does so by experimenting with the grammar of images.

Now that my foundational claims concerning the grammar of images are in place, let us turn to the functioning of these claims within cinema specifically. A realist-ontological stance toward cinema means approaching cinema at the levels of Zeroness and Firstness. Images are the *concepts* of cinema, not to be taken in the simple sense of a picture, but as the integral units of existence, what Schwab says amounts within cinema to “an ontology of images” or an “image-world” (109). *An “image” is therefore never intended to represent an individual frame abstracted from a film, but rather the spacetimes captured and monstrated within the film, drawn from empirical reality.* Images are “blocs of space-time;” they are the constituent parts of the universe itself, which, following from Deleuze’s reading of Bergson’s *Matter and Memory*, allows one to fairly conceive of “the universe as cinema in itself, a metacinema” (*Cinema I* 59). This is to say, there are images within film, but they are not solely within film. They are material, empirically verifiable events. The body, the brain, all the way up to the cosmic level of the earth and stars, and back down to microscopic planes – these are all “images” within a pragmatic, empirically driven philosophy of cinema.

In terms of cinema specifically, there are two fundamental concepts, two types of images out of which Deleuze develops his taxonomy: the movement-image and the time-image. Let me begin by

explaining the movement-image. This type of image is “identical” *with matter itself* and the “material universe” is nothing other than the whole of movement-images, or, more precisely, the “machine assemblage of movement-images” (ibid.). When Deleuze speaks of movement-images, he is therefore speaking of all that which is empirically identifiable by direct sense. When I speak of movement-images in Herzog, I mean the same thing, and, furthermore want to underscore that “IMAGE = MOVEMENT,” that is, movement-images are matter *in motion*, in its actions and reactions (*Cinema I* 58). All movement-images are by their very nature active and actual, but they are so relationally, just like physical objects. There are no truly still objects in the universe and neither are there truly still images.

Questions immediately arise, however, from such a conception of the movement-image; they arise in a movement parallel to that of Firstness and grammar as I broached above. As Deleuze asks, “what happens and what can happen in this acented universe where everything reacts on everything else?...an *interval* appears - a gap between the action and the reaction” (emphasis in original. *Cinema I* 61). That is, we must conceive of a special image that is the site for the encounter, the “when and where” for any actualized encounter to “occur.” In other words, there are always coordinates of space and time, of spacetime, for any event. But, for *human concerns like the philosophy of cinema*, these events occur on and through a special type of image. This interval, this gap, is for Deleuze the human brain itself, the privileged image that grounds sense and the perception of all other images in humans: “the brain is nothing more than this - an interval, a gap between action and reaction” (*Cinema I* 62).

Deleuze makes it clear that the brain is not an actual “center” of images but rather simply “constitutes one special image among the others. It constitutes a center of indetermination in the acentred universe of images” (*Cinema I* 62-63). The human brain is a spectacular development, a special case, but it is not to be seen as the center of the universe and the material universe would go on functioning just fine in its absence. But it is the center of human perception. This is because in a universe where the movement-image and matter are identical, “the thing and the perception of the thing are one and the same thing, one and the same image, but related to one or other of two systems of reference” (*Cinema I* 63). The brain is simply the special image *for us*, the special interval, from which we “perceive the thing, minus that which does not interest us as a function of our needs” (ibid.). The brain houses our subjectivity through its interactions, which are inherently “subtractive” (ibid.). The brain is not something that merely allows us to know or experience, it is an interval that allows us to actively shut out certain stimuli and in the same process focus in on anything we want. Therefore, the first “avatar” of the movement-image is the subjective perception of objective things: the perception-image, any movement-image that is “related to a center of indetermination [the brain]” (ibid.). The brain, banal as it might sound, and as difficult as it is for our identities to grasp, is that which allows us to perceive.

The perception-image leads directly to the second “avatar” of the movement-image: the action-image. This is because the subjective position of the brain in accordance with movement-images also implies an operation and “we should not think that the whole operation consists only of a subtraction” (ibid.). Instead, when related to a special image like the human brain, “the universe is incurved and organized to surround it...perception is only one side of the gap, and action is the other

side. What is called action, strictly speaking, is the delayed reaction of the center of indetermination [the brain]" (ibid.). Action is the subjective reaction of the brain to an objective thing. In fact, the action-image is this subjective passing or incurving of the universe; it is the "second material aspect of subjectivity" (*Cinema I* 65). This "imperceptible" change from perception to action is the "incurving of the universe" and this "simultaneously causes the virtual action of things on us and our possible action on things" (ibid.). The relation between perception-image and action-image is what opens up the realm of possibility and our awareness of *virtuality*. Importantly, Deleuze quotes from Bergson's *Matter and Memory* here: "Perception is the master of space in the exact measure that action is the master of time" (ibid.). In this second material aspect, the privileged image of the brain is able to interact with both actual movement-images [matter/space] and imagine *future* movement-images [probabilistic events/time]. Action is able to occur from a remarkable formulation of imagination, through a subjective displacement of the self in time, wherein the brain can envision *probabilities of the future*.

The third and final fundamental type of movement-image, the affection-image, is presupposed in the interaction of the first two. For the interval [brain] is not just a "specialization of the two limit-faces, perceptive and active. There is an in-between" (ibid.). And this "in-between" is the affective capacity of the brain itself, the human ability to make – first and foremost for and within themselves – objective and subjective distinctions, and to navigate the intricate webs of subjective and objective realities that make up our mental lives. Affection is "a coincidence of subject and object, or the way in which the subject perceives itself, or rather experiences itself or feels itself 'from the inside' (third material aspect of subjectivity)" (ibid.). Affection is the human ability to look

at the world outside of itself and then to perceive aspects of its own subjective perceptions, to make internal changes of form from external stimulus. Adding this third movement-image type achieves the possibility of forming a grammar of images, of creating a logic or sense of sense based around a privileged image that incurve the universe around the human brain.

The triadic functioning of these three material states of subjectivity not only serves as the ground of that subjectivity, it is that very subjectivity in its embodied form. Here, our subjective position is able to perceive and act upon itself, to be affected, but here, through interference from the logic of sense, one also encounters the problematics summarized in the “poetic formulas” drawn from Kantian critique. With the three material states of subjectivity in mind, the Ego truly is no longer the I for the I is another; here time is now conceived of as truly out of joint. Deleuze writes, “in affection...movement ceases to be that of translation in order to become movement of expression, that is to say quality...each one of us, the special image or the contingent center, is nothing but an assemblage of three images, a consolidate of perception-images, action-images and affection-images” (*Cinema I* 66). These material states – all of which appear in and are capable of being monstrated to the human body, to the brain, in the cinema – cause a new “passionate” relationship of the human brain to the images it views, to the specific, taxonomically arranged space-times that it presents to itself on the cinema screen. Here, the brain and our subjectivity with it, undergoes a crisis of perception, action, and affection, and we are able to recognize that we are our brains as well as begin to come to terms with how the images we choose to view affect and are affected by those same images. The brain, though a-centered, reveals the autocatalytic logic of its own material functioning and the role our subjective experiences play in guiding the flows of that logic.

A correlation can now be drawn between the movement-image and Peircian semiotics. Like Peirce's signs, movement-images are not images solely because of our understanding of them *through language*, but are instead formed at the level of actuality and sense. Movement-images are not dependent on a subject/object relation (for two unthinking objects still move in relation to one another), but they are dependent on some interaction of some sort. In our case, this interaction occurs through and to the brain. Movement-images must not necessarily be "seen" but are that through which "prior to any consideration, prior to any analysis, reality presents itself" (Jean-Clet Martin 63). As the foundational "blocs of space-time" that comprise *the actual*, movement-images do not require our attention or awareness in order to exist, but they must, however, *interact with matter in some manner*. One can, for example, easily conceive of a ray of light that exists and is actual, but speeding away from the Earth in a direction that would make it impossible to detect *for us*, but that this same beam of energy could illuminate some other unknown planet. This light could still be conceived of as a movement-image – if it could somehow be captured by some alien cinema. What is far more remarkable than this seemingly sci-fi example, however, is that there are other images that exist beyond, or perhaps more precisely, at a different scale than movement-images: images can be probabilistic, too, and there are *virtual images* in addition to actual movement-images (matter). These images are at the core of a Deleuzian understanding of *thought itself* and are linked to the operation of *time*.

Taking up time as a concern for the cinema introduces what Deleuze briefly mentions and calls a "special perception-image...which no longer simply expresses movement, but the relation between movement and the interval of movement" (*Cinema 2* 31). We should recall that this

interval of movement is the brain itself; this special image is the relationship between brain/thought and the material universe. According to Deleuze, it acts as a “degree zero...there will be a ‘zeroness’ before Peirce’s firstness” (*Cinema* 231-32). But while Deleuze is often distressingly obscure about what this means, the underlying implication is rather simple. Zeroness qualifies as another semiotic level that parallels the empirical human knowledge of the genesis of time (and, though Deleuze ignored the parallel but rather different implications, space). The human brain – most especially through mathematics and other sciences – is capable of thinking processes that exceed its natural sensory limitations, to see microscopic realms and make macroscopic physical predictions. And this ability extends to the concepts of time and space, including their genesis.

While pure qualities exist at the level of Firstness, Zeroness implies an ability on the part of the human brain to conceptualize the very formation of those qualities, the realm out of which quality emerges. Zeroness is also the bridge that grounds human senses in their relationship to cinema’s other fundamental concept: *the time-image*. The movement-image in its three “avatars” ground subjective sense – perception, action, affection. But as Deleuze attests of his initial breakdown of the movement-image into three subtypes, “there is every reason to believe that many other kinds of images can exist...the plane of movement-images is a bloc of space-time, a temporal perspective, but, in this respect, it is a perspective on a real Time which is not at all the same as the plane or the movement. We are therefore justified in thinking that there are time-images which are themselves capable of having all kinds of varieties” (*Cinema* 168). I would like to argue that this sort of “real Time” is nothing other than the quantum realm out of which the physical universe (movement-images) empirically emerges. With this in mind, I would venture that Deleuze believed

time-images, which tie the empirical realities of Zeroness to the rest of the semiotic, reveal an entirely new challenge for the brain in that they task the brain with a plethora of questions that can as of yet only be indirectly observed.

Adding Zeroness to Peirce's pragmatic semiotics is Deleuze's greatest contribution to the field, as well as to the philosophy of cinema, and is the one Deleuze spends the most time thinking through. But, being of a fundamentally different nature, time-images also necessitate understanding the term "sign" in "a completely different way from Peirce" and traditional pragmatics (*Cinema 2* 32). A sign – such as those pure optical and sound situations that arise in modern cinema, opsigns and sonsigns – is for Deleuze "a particular image that refers to a type of image, whether from the point of view of its bipolar composition, or from the point of view of its genesis" (ibid.). He goes on to say that, "signs themselves are the features of expression that compose and combine these images [the various types of movement-images], and constantly re-create them, borne or carted along by matter in movement" (*Cinema 2* 33). Signs in Deleuze's taxonomy are therefore the elements of our perception, affection, and action when derived from the movement-image, but are our referential system between thought and materiality when derived from the time-image. They are the ground out of which subjectivity emerges, is built and altered, which in turn provides us the ability to alter objective materiality. With the time-image, an entire new "second dimension of pure, non-linguistic semiotics" emerges (*Cinema 2* 34).

Time-images are formed from direct presentations of time; they create a crisis within the movement-image and more specifically the action-image, overloading the cinematic hero or heroine with optical and sound situations that cause their active capabilities to falter. Time-images are, again,

not “pictures” of time, but sequences and situations which arise within the cinema that reveal the nonlinear, quantum nature of time and monstrate the pattern of its formation. And, for Deleuze, the cinema is only able to create them because, once again drawing on Charles Sanders Peirce for his foundations, Deleuze felt that the cinema – incorporating science, art, and philosophy within its methodology – was truly capable of being used as a tool for thought, that one could think with the cinema.

Deleuze links his concepts of “affection” and “action,” to Peirce’s Firstness and Secondness respectively. But he goes on to say that “Peirce added a third kind of image: the ‘mental’ or Thirdness” (*Cinema I* 197). This Thirdness is, as I have shown, based on a relation, a symbolic act of law rather than affective quality or indexical action. Deleuze writes of such mental images:

This may seem to be already included in action, but this is not so. An action, that is to say a duel or a pair of forces, obeys laws which make it possible, but it is never its law which makes it act... Therefore Thirdness gives birth not to actions but to ‘acts’ which necessarily contain the symbolic element of a law (giving, exchanging); not to perceptions, but to interpretations which refer to the element of sense; not to affections, but to intellectual feelings of relations, such as the feelings which accompany the use of the logical conjunctions ‘because,’ ‘although,’ ‘so that,’ ‘therefore,’ ‘now,’ etc. (ibid.)

These ‘mental’ images of Thirdness function differently than the other forms of movement-image discussed up to this point in that they take “as objects *of* thought, objects which have their own existence outside of thought, just as the objects of perception have their own existence outside of perception” (*Cinema I* 198). ‘Mental’ images will have “a new, direct, relationship with thought,” achieved at the end of Thirdness, of symbolic logic, by looping back to pre-signifying signs and pre-

linguistic images, by returning to reflections on the origins of the cinema's fundamental units (ibid.). This new, "direct" relationship precipitated a "new thinking image" in cinema. Instead of maintaining a full focus on movement, space, and therefore *actualized matter* – the sensory-motor system itself – this opening up of thought to the 'outside,' to the chaotic world of Zeroness, the cinema allowed for direct presentations of time and its formations and changes the relationship between time and human thought. This marks the emergence of the time-image, which precipitates a crisis within the movement-image and its variations once they are disconnected from the sensory-motor schema.

Overridden by the force of mental images with a direct relationship to thought, modern cinematic heroes and heroines are placed into scenarios that open up direct presentations of time, pure optical and sound situations that act within them, but that they struggle to act upon in a classical manner. This crisis, which still continues in the cinema today and appears ever more frequently, is in fact the origin of modern cinema for Deleuze and what defines it. With the advent of the time-image, the entire relationship of cinema to thought is altered, no longer focused solely on actualized matter in the movement-image, but forcefully opening up subjectivity and exposing the power of *virtuality as both epigenetic and dangerous*.²⁶ Additionally, it presents "a new breed of signs" the pure optical and sound situations that modern cinematic protagonists encounter and struggle

²⁶ While Deleuze does not say this himself, I am arguing that this monumental change is also rather comparable to the discovery of quantum mechanics in physics. While a full explanation of the parallels between the two cannot be taken up here, one must acknowledge the similarity or even partial indebtedness of Deleuze's thinking to scientific works such as Prigogine and Stengers' *Order out of Chaos*, which was published just one year before *Cinema 2*. Deleuze mentions his appreciation for this work in *Negotiations*, pp. 29. Elements of Deleuze's time-based analyses also incorporate the findings of general relativity, but as of yet, it is the quantum nature of Zeroness that is most painfully lacking from current secondary literature on Deleuze as well as within the philosophy of cinema.

against (*Cinema 2* 6). These signs, which exceed the sensory capabilities of the cinematic characters which encounter them, always present indirect, phantasmagorical dangers. Rather than remaining in the spatial materiality of the movement-image, wherein the camera often acts as an objective observer presenting the scene, these new signs therefore present superjective, sensory situations that are often paralyzing, terrifying, and painful and that exceed individual capabilities. Characters are no longer action heroes, but agonized seers, who simply aren't up to the task of solving the horrors that face them on their own.

Time-images are also inherently self-reflective: the characters themselves are aware of their visions and their inability to act on them in the traditional manner. Deleuze felt that “these new signs refer to varied images – sometimes everyday banality, sometimes exceptional or limit-circumstances – but, above all, subjective images, memories of childhood, sound and visual dreams or fantasies, where the character does not act without seeing himself acting, complicit viewer of the role he himself is playing” (ibid.). That is, by revealing direct images of time *as it is experienced in the modern world, as ‘time out of joint’ through the discrepancies between general relativity and quantum mechanics*, time-images and the opsigns and sonsigns they engender present situations in which characters cannot act without an awareness of their actions, cannot but be subjectively affected and affecting, and can no longer act with moral certitude. In cinema that engages with time-images, characters are left with the ethical burden of personal, ethical responsibility rather than a moral certitude they can symbolically represent. They find themselves in a world where space itself is no longer purely actualized, but must incorporate virtual, subjective changes and even superjective changes that Zeroness brings about. In this sort of realm, action can take place in an “any-space-

whatever,” which is “in opposition to action which most often unfolded in the qualified space-time of the old realism” (*Cinema I* 208). Time-images operate in a fundamentally new realism, a new view on spacetime, that does away with traditional boundaries and scales, forging instead microscopic and cosmically immense views compared to everyday human existence. Time-images reveal quantum and relativistic aspects of spacetime to their viewers through *monstrations of time* that form actual events within the brain.

The concepts of cinema cannot and do not stop at the actualized movement-image precisely because *the virtual is real and empirically verifiable*. By staging operations of time within the cinema, cinema opens new ties to the virtual field, it forms a new concept that is different than the movement-image in that it has a more expansive purview of empirical processes. Virtuality in cinema is not a matter of saying whether or not movement-images and time-images are “real” for both are real, but rather a matter of conceptualizing the scale between the two, of accepting a new scale within the semiotics of cinema: adding Zeroness to the pre-established levels of Firstness, Secondness, Thirdness (or just Secondness and Thirdness in analogical, linguistic film theories).

The movement-image is therefore not a “wrong” but rather an incomplete manner to view the capabilities of cinema in much the same way that Euclidean geometry is an incomplete way to mathematically analyze space, because this space functions differently at different levels. A good way to understand this is to draw a visual comparison. Take, for example, geometric figures. A figure with one dimension can be visualized as a point. If one adds another dimension to this figure, something new emerges, and this figure works differently than the first. For example, think of the properties of a two-dimensional figure like a triangle. Mathematically, this 2-D triangle has a certain

height, a certain length, and its angles add up to 180 degrees. It has certain properties and laws that define its form. If you, however, then add a third dimension to this figure, you will have a tetrahedron rather than a triangle, a conic figure with yet different properties now that it is 3-D. The figure now has volume and assuming its sides are set at right angles it has four triangular faces and one square one. While the 2-D mathematics still apply to the individual faces, different equations are required to address the new properties that arise from adding the third dimension. From 3-D, one can move to 4-D by introducing *time* as yet another dimension; the figure would become a tetrahedron with duration, a tetrahedron as a spacetime event. One could then further complicate *that figure* by challenging our experience of a successive past-present-future through adding into consideration nonmetric space and nonlinear time.

This is exactly what time-images are for the cinema and its theorization: a new geometric dimension. Time-images challenge but do not override movement-images, whose equations still work, but only as part of the picture and cannot account for the new properties of the figure that the added dimension(s) that the time-image brings. For example, non-Euclidean geometry was required to address and access the curved surfaces of spacetime. Once these sorts of surfaces had been empirically determined, an entirely new mathematical field was opened up that sought to formulate and describe the geometric aspects of these surfaces. Similarly, time-images open up the possibility for a different type of cinema to be conceived, with fundamentally different properties and different laws: a different morphological structure within shots, a different syntactical approach to montage, a different way of conceiving the spacetimes that form cinematographic grammar. To work on a new grammar of images is therefore today precisely the task of exploring and charting the different

properties and different laws that arise out of time-images and the human brain's new connections to the virtual field.

Without overstating its importance, the time-image can be seen as a truly Copernican revolution for cinema and even for modern thought as a whole. It must be stressed that it does not invalidate or replace the movement-image, but instead reduces its contemporary importance and changes the function of cinema in important ways:

The movement-image has not disappeared, but now exists only as the first dimension of an image that never stops growing in dimensions...[with the time-image] The cinema is going to become an analytic of the image...but in every case it subordinates description of a space to the functions of thought. This is not the simple distinction between the subjective and objective, the real and the imaginary, it is on the contrary their indiscernibility which will endow the camera with a rich array of functions...a camera-consciousness which would no longer be defined by the movements it is able to follow or make, but by the mental connections it is able to enter into. And it [the cinema] becomes questioning, responding, objecting, provoking, theorematizing, hypothesizing, experimenting in accordance with the open list of logical conjunctions ('or', 'therefore', 'if', 'because', 'actually', 'although...'). (*Cinema 2* 22-23)

The time-image is a new way of thinking about and conceptualizing the world, providing the cinema with a new logical function that causes it to spread out and out, unto infinity, by providing logical conjunctions rather than artistic statements. Following in the wake of the two major empirical discoveries concerning spacetime that occurred in the twentieth century – general relativity and quantum mechanics – contemporary cinema tasks itself with teasing out, connecting up, responding to, and experimenting with the ethical dilemmas that occur in human culture once a three-tiered semiotic becomes, as it were, four-tiered, and includes Zeroness. And this is where the

cinema of Werner Herzog fits in. While it might at first seem a stretch, Herzog's non-ironical, humorous cinema has direct ties to the philosophical and artistic resonances of these two scientific theories, as I demonstrate in the following chapters. Herzog's cinema is one that, continually circling back to the question of the genesis of spacetime, presents ethical, human challenges to our scientific and cultural aims. Let us now turn to Herzog's films and take a journey within him in space and time.

CHAPTER II

Cracking the Crystal: Temporal Economy and Politics in Werner Herzog's *Herz aus Glas*

Poetic Formula: "Time is out of joint"

It is the economy of time that serves as the foundation for my approach to the cinema of Werner Herzog. Prevalent from his earliest films, time-images are, as it were, the engines through which Herzog's entire cinema operates. Each of Herzog's films – though their central topics vary widely – inspects the crystalline economy of image and thought. Slowly expanding and refining our understanding of film and its images through ceaseless, meticulously "stylized" repetitions, Herzog's oeuvre is dedicated to the grammar of images by closely inspecting their spatiotemporal operation and how they affect or even give rise to our cultural lives and even our personal subjectivities. And of all his films it is *Herz aus Glas* which forms the "greatest crystal-images²⁷ in the history of the cinema" and meditates most directly on a "fallen" conception of time that is "out of joint."

²⁷ As the foundational form of the time-image, crystal-images change the cinema by becoming an extension to the ever-expanding realm of human thought; crystal-images stage the production of thought itself and its role in human life. They arise from the Kantian problematic of time being out of joint, where action itself enters a state of crisis when confronted by opsigns and sonsigns, pure optical and sound situations that overwhelm a film's characters. With the appearance of crystal-images, the underpinnings and virtualities of time are *overtly* explored through logical conjunctions that present challenges to film characters' subjectivity. Essentially, these new elements allow for the virtuality and the actuality of time and space to be conceived of in a different manner. Once this change occurs, once time is out of joint and can no longer be conceived solely through the linear pattern of a flow from past to present to future, a new economy of thought is engendered. That is, pure optical and sound situations – what Deleuze calls the opsigns and sonsigns of modern cinema – ground a new *economy for thought; they introduce a new form of exchange between thought and movement*. Spacetime, when viewed relativistically and through its quantum nature, likewise requires a rethinking of logic itself, with action and ethics in tow. While I restrict my comments more generally to time-images here, Deleuze's comments are more centrally concerned with crystal-images, which he theorizes in *Cinema 2*, pp. 68-97. While a more directed reading concerning crystal-images in *Herz aus Glas* is lacking in secondary literature on the film, I am restricting myself to the broader concept of time-images for both brevity and to aid those readers who are not already familiar with Deleuze's works on cinema.

That time is of the essence and in a state of crisis is apparent from *Herz aus Glas*'s opening scenes. As Hias relates in his foundational prophecy, "erst kommt die Zeit im Stürzen und dann die Erde...die Wolken kommen in einem Rasen, dann kocht die Erde, dass ist das Zeichen." The viewer experiences this "sign" through two important sequences. In stunning time-lapse that Herzog claims took eleven days to capture and is one of his favorite shots from the film, clouds flow ceaselessly over a mountain and down through a valley. Time itself is transmuted into something fluid, something "like a river," but also importantly something that one can "see" (*Herz aus Glas*, director commentary). Through striking footage of flowing clouds, Herzog seeks to make time directly visible. But the viewer also experiences the fall, the "Stürzen," of this time through a long shot of an enormous and crushing waterfall that disorients directionality and causes the viewer to feel almost as if they were floating as they watch the cataract. It is therefore not merely time, but its spatial orientation that are presented, its direction; rather than the commonplace, linear conception of time flowing or marching "forward" from past to present and from present to future, the great waterfall unhinges space and direction itself. Staring into the water, one cannot tell if they are falling, rising, or somehow achieving both simultaneously. This fundamental breaking of linear time quite literally defies gravity and displaces the Earth beneath the viewer's feet. From this "vision" of nonlinear time Hais' prophecy continues and he goes on to state that "Aus dem Stürzen und Fliegen hebt sich ein neues Land...eine neue Erde." How this change occurs, the movement from an old world to a new one will be a central theme running through the remainder of the film and is taken up time and again throughout Herzog's oeuvre. It poses the question of how – if at all – one can escape from the

economy of the crystal-image. It asks, if there can indeed ever be something “new” under the sun, how the new events form and how time itself comes into being.

Immediately after Hias’ initial visions, the viewer is confronted with how this crisis of time is processed in the everyday world through images and how time is related to language. Walking through what appears to be the Bavarian Alps, Hias encounters a group of villagers. Not coincidentally, Hias’ first contact with the villagers is centered on semiotics and declares figurative language a priori to real, rational definitions, but also underscores just how important the latter are. In what seems to be a direct allusion to Rousseau’s *Essay on the Origin of Languages* (1781), the villagers inform Hias that they’ve heard the news that a terrible giant is at large in the region. Desperately fearful, they relate how the giant will come to destroy their homes and livelihoods, or even kill them outright. But more than that, their entire way of living and thinking is threatened by such a menace. The giant will not merely kill them, it will deprive them of the very organ that makes them who they are. As a young man bemoans, “[Der Riese] lutscht uns das Hirn aus!” But Hias tries to calm them, saying that there are no such things as giants and that the tale’s originator, who claims to have seen the giant firsthand, was simply mistaken. Had he been less fearful and more observant, Hias claims the man would have noticed that the sun was low in the sky; what had actually been seen was the elongated “Schatten eines Zwergs.” The young man’s mind is getting away from him and the empirical reality of the situation does not at all align with his fears.

The relationship between language and image also proves crucial in setting up the film’s central concern – the loss of the secret formula for ruby glass after the death of Mühlbeck, its master craftsman. In an early scene, two forlorn glass workers converse with one another about the missing

formula: “Schreiben hät‘ er doch können...das hät‘ er leicht aufschreiben können“ to which the other replies “hast du schon mal ein Wort geschrieben?” The first man obviously has not (one assumes he is illiterate as nearly all factory workers would have been) and can only shrug “aber reden hät‘ er doch können.” The loss of the secret formula for the ruby glass is all the more painful as it seems to the first man as if Mühlbeck could have simply written it down, turned it into communicable information, a true Word. But the second man puts this into question or at the very least attempts to absolve Mühlbeck, implying that such a task might have exceeded his abilities. Asking the first if he has ever written a Word – and, again, it is assumed he is illiterate and incapable of doing so – lamenting the loss of the formula seems to be fruitless as it might have been inevitable in any case. Still, the first man seems to at least hope that the secret could have been passed on orally, simply told to someone else. Yet in the context of the film, this obviously was not the case – the formula is indeed missing, possibly lost forever. And it is quite uncertain who, if anyone, might be to blame.

In the following scene, Herzog definitively states that this loss of language is not merely about written words or speech, but images. According to Herzog, images that a given people can orient themselves around are vital for the survival of a culture or civilization; without working continually to develop them they are “doomed” and will “die out like dinosaurs” (*Werner Herzog Eats his Shoe*). Herzog goes so far as to compare inadequate images a problem on just as catastrophic a scale as “energy problems, or environmental problems, or nuclear power...or over-population of the world” (Ibid.) And it is just such a light one should consider the position of *Herz aus Glas*’ characters: with the loss of their ability to create ruby glass is not some simple difficulty, it is a

disaster of apocalyptic proportions. The economy of the village seems to reside in their ability to produce the red crystal and it supports their infrastructure and even personal relationships; the villagers' daily lives and their economic security are based upon producing ruby glass, which they now find themselves incapable of doing, having lost the formula with Mühlbeck's death. Without it, they lack an image upon which they can project their future. The master states this clearly in his initial assessment of the ruby glass and why he seeks with increasing desperation and obsession to find a way to rediscover its secret, for without it, he asks himself, "Was schützt mich jetzt von *den Unbilden* des freien Weltes?" (emphasis mine). These "Unbilden" – poorly translated in the English captions to "evils" – should be taken literally as a lack of images, not in the sense of pictures, but as the pre-linguistic elements of Firstness. Both their daily lives and their economy are based upon producing ruby glass, which they now find themselves incapable of doing, having lost the formula with Mühlbeck's death.

The great and grave error of the Master throughout the film is not that he has falsely identified the problem – Mühlbeck really is dead and the formula for ruby glass gone – but rather that he clings to the idea of a fallen world and loss. Speaking of the ruby glass, he is right to think of it as having a "leicht zerbrechliche Seele" and that it seems to fulfill its social function fully only when it is "rein von Flecken," but already begins his descent into religious fanaticism and

destruction by declaring cracks in glass as “sins.”²⁹ For the ruby glass is a symbol of linear time itself, the formula for cause and effect in a world that runs from past to present to future. The Master’s fanaticism lies in the fact that he sees no potential for a broken sense of time or even the possibility for new understandings of time, but rather indulges in a prelapsarian, romantic fantasy of a former perfection that must be regained at any cost; he does not want a broken symbol of time, but rather wants to possess the formula of time and sell it as his own. Moreover, he completely misses or denies the ability of the crack to serve as a site of self-reflection even though this awareness has already arisen within some of the village people. For example, Toni, the man that survives the bar fight early in the film, understands that “Das mit dem Rubinenglass, das ist der Krankheit vom Herrn.” As the Master’s own “Dienstmensch” declares when examining the ruby glass “Es leben Menschen darin. Wie können Menschen in Glashäuser leben?” Gesturing to one side she continues, “Hier, die Kirche. In der Kirche leben Tiere, Tiere aller Arten... aber kein Mensch ist in der Kirche zu sehen.” The viewer gets the sense that the Master lives in just such a Church, devoid of humans but full of animals. That it is a horse that emerges from the glass rather than a human figure in a later scene only reinforces the point. There is an inhumanness and fervent religiosity in the Master’s desperate search for a perfect Word to revive the lost formula; his subjects do indeed live in glass houses – but houses of his own devising, whose formula he owns – and as the increasingly ominous prophecies of Hias show punished as sinners for any flaws with damnation and death. If the Master cannot literally “own” the operation of time and its economy, he is willing to burn the entire village down.

²⁹ Though it cannot be expanded upon here, this scene is also crucial in developing Deleuze’s conceptualization of pure optical or pure acoustic images linked to the crystal-image. The full quote in this passage concludes with the intriguing phrase “Nach dem Sündenfall gibt es keinen Ton mehr” to which his steward Adelbert provides an emphatic “Amen.”

Understanding the master's mad search for the secret of ruby glass as a quest for pure, linear time and limited semiotic that do not require critical self-reflection and could eradicate the "sin" of "cracks" also provides a certain logic to scenes in *Herz aus Glas* that otherwise remain bizarre or even senseless. For example, when the master has Mülbeck's davenport brought in and tears it open with a "Brieföffner." Certain that he is going to find the secret formula, the torn open couch only reveals to the Master a tangled mass of animal hair. Yet, this does not stop him. Sifting through the hair he says, "Wir werden diese Nachricht lesen. Kann er das entziffern?" After a while, he is given pause at the apparent lack of the secret message, but still reads the animal hair as a sign, indeed as a message: "Wenn einem ein Brief erreicht, ohne Papier, sodass die Buchstaben herumlegen, dann ist das ehe zum nachdenken." His mad chase after the secret of the ruby glass *subjectively* experienced as a loss of language, or, more specifically, a letter, a message—he has lost his ability to have and create meaning and this must be given to him from an external source. He does not want a direct image of time, but rather an indirect one that will wholly legitimate his power, wealth, and social position. This is the core of his madness. His drive to receive and understand such a message is all-encompassing, overwhelming, and arouses such profound longing and fear within him that he will recreate it at any cost; he will completely abandon his own logic and reason in order to provide himself the illusion of the message having arrived, even if for just a moment. By this point, the Master is so far gone that the "message" doesn't even require that the letters be arranged into anything legible. The message doesn't have to have any sense at all—everything has become a symbol for his delusion of regaining the ability to make ruby glass, to have a perfect soul free from cracks, free from sin, to restore the

easily calculable progression of time from past to present to future, and to regain control of the economy of time, symbolized by the glass itself.

This reading also reveals the conception of time to be a specifically political problem or rather the problematic out of which politics flow. And certainly, whether loved or loathed, *Herz aus Glas* provokes what can only be called a visceral response in terms of its political content. In one scathing review that has become famous in Herzog scholarship, Eric Rentschler outright attacks Herzog on political grounds and claims he has turned both his characters and his viewers into unthinking “cogs” in the machine of his “feverish instrumentalism” (178). Rentschler’s venomous account of the film finds “striking resemblances” between *Herz aus Glas* and Leni Riefensthal’s *The Blue Light*, a film that “resorts to a romantic anti-capitalism decidedly characteristic of Nazi ideology” (170-171). It also critiques the film’s expressionistic character from the Kracauerian perspective, declaring that Herzog has cast himself as a seemingly “benevolent Caligari” (160) and insisting that “The Cabinet of Werner Herzog demands a captive audience” (162). Rentschler goes so far as to compare the mechanics of what he sees as Herzog’s thinking to none other than Hitler’s minister of propaganda, Joseph Goebbels, with the small caveat that they “do not fully coincide” (174-175). Rentschler believes those that so keenly followed Herzog in his hypnotic project often take a tone that “smacks of the most devout Führer-worship” (162). Nor is Rentschler alone in his condemnations; in the same volume, Corrigan also labeled Herzog a “unsocialized and narcissistic son” (18).

Herzog, for his part, doesn’t fail to provide a response in bombastic style. Speaking of critics that reduce his films to political statements or hope to discern his personal credo through his films,

Herzog states, “Grasp this with a pair of pliers, but the credo is the films themselves and my ability to make them” (*Guide for the Perplexed* 77). That is, in his opinion he is not trying to make grand claims, as he is so often inclined to underscore, but to try and expose new images already within the world and ourselves as humans, always aimed at understanding their grammar. He is staging repetitions of temporal structures because it is those structures that most fundamentally condition us. Those that continually press him and his films for manifesto-like statements are missing the point and have “tunnel vision” (ibid.).³⁰ It is, according to Herzog, “as if they were looking through a straw they picked up at McDonald’s. They keep searching. No wonder they get desperate” (ibid.). The political poignancy that such critics force upon the film stem from viewing it solely within the realm of the movement-image. The political critiques of Rentschler and others in the end make the fundamental error of approaching Herzog’s films at the wrong scale, by viewing them, as it were, through a warped lens of time and fail to take into account the complexities of Herzogian identity structures.

More favorable reviews tend to eschew political grievances and instead highlight the film’s linking of body and materiality (Heringman 2012), or its ability to “reassimilate myth to its historical exigencies” when one reads Herzog’s efforts in *Herz aus Glas* as efforts toward an “ironic sublime” (Singer 1986). Some, such as Forbes claim that *Herz aus Glas* simply isn’t “a narrative film,” and that “story told, the film remains disconcertingly ‘about’ something else” (256). But these,

³⁰ Here Herzog shows off a particularly Nietzschean bent that appears at times in his work. Deleuze writes that the striking difference between Herzog’s metaphysical style and that of the German Expressionists to whom he is often compared is “a problem of Good and Evil to which Herzog is indifferent” (*Cinema I* 185). This is, of course, a matter of concern from the position of practical politics, just as it has always been. However, it can be argued that Herzog’s films warrant a reading from a “micropolitical” stance through their staging of ethical problematics rather than providing a wholly positive example that fits into a given political paradigm.

too, are half-truths for they leave, as Rentschler rightly claims, the film “as a whole unaccounted for” (166). From my own perspective, it seems prudent to highlight Wahl’s comments, which have an unwittingly pragmatic coloring to them and provide a platform from which to supply my own reading of the film as working toward a new grammar of images through its temporal economy:

‘Hypnotic’ films like *Heart of Glass* tend not only to lull the concentration of the viewer, but demand, for precisely that reason – in contrast, for example, with action films – the highest degree of concentration, and they make great demands on the conscious mind. Eric Rentschler does not take account for this. (246)

The images in *Herz aus Glas* are indeed hypnotic, but blatantly so, and for that very reason prompt the viewer toward self-reflection with a power that few other films have ever attained. As Prager notes, “this film is one of Herzog’s most demanding feature films to watch” (*Aesthetic Ecstasy and Truth* 97). Furthermore, Prager adds, “it could very well be asserted that film’s irrationality - its unanswered questions, its relentless circularity and its implicit critique of the Enlightenment - aids in stimulating rational responses” (*Aesthetic Ecstasy and Truth* 95). It is precisely the lack of clear action and everyday narrative that *Herz aus Glas* forces the viewer to conceive of the film as more than just another story. Though the narrative seems to advance through the Nostradamus-like prophecies of Hias and the obvious obsession and madness of the unnamed “Herr,” it is the townspeople, the society of the village at large, that are of greatest importance. Often overlooked, this simple contention is crucial. It is not a question of good or evil actions or individuals, but *how*, as if in a trance induced stupor, they can do the things they do – and in the end, really do nothing at all – in the face of prophecies that keep coming true and a delirious leader that slips ever more blatantly into madness. The film demands its characters to be read *as a collective system* rather than as individuals

the viewer should celebrate or decry. It presents *a tangled intersubjectivity*, no less wrought with difficulty and strife than subjective models in the classical vein, but one that functions entirely differently in terms of action and thought and puts the question of individual freedom into question, or at the very least asks for its reimagining.

As critics like Rentschler are right to note, connections to National Socialism are apparent; Herzog himself admits this with his intentions when making the film. Calling *Herz aus Glas* a “tale of collective madness, of people aware of an approaching catastrophe yet who do nothing,” Herzog goes on to state that “after all, the idea of people walking into a foreseeable disaster is an unfortunately familiar situation in German history” (*Guide for the Perplexed* 133). But as I demonstrated above, it is *a crisis of time itself and images in themselves* that sets the whole thing in motion. Nonetheless, Herzog also offers up new potentialities for future action and thought, even if they do not have a “pure” political nature. And he does so by not only creating time-images within *Herz aus Glas*, but by also blatantly showing how politically dangerous the logic of the two central characters can be when isolated, with the Master indeed harboring the danger of a Fürher-like psychopathy and Hias the danger of sitting and seeing, but doing nothing.

Indeed, perhaps the most important and most easily identifiable political commentary in *Herz aus Glas* emerges through core relationship of Hias and the Master. Eric Rentschler becomes important once again for both identifying critical relationships within the film and simultaneously drawing wildly negative conclusions by viewing Hias and the Master as individuals, rather than as a bound and crystalline economy. Citing the visionary Hias’ relationship with the Master – who Rentschler constantly and tellingly refers to as “the industrialist,” despite the term being utterly

lacking in the film, in Herzog's commentary on the film, or even in the screenplay – Rentschler believes, “Hias...correspond[s] to Herzog's preferred self-image. The seer, nevertheless, becomes indistinguishable from his double, the industrialist” (175).³¹ Rentschler defends this position by citing a scene in which the two men's shadows blend together upon first meeting, but utterly lacks any further commentary on the fact that it is the “shadows” that touch and blend, rather than the men or their actions themselves, assuming, as it were, that the “shadows” were the real or true essence of each man and that their words and actions – which are often at complete odds in their presentation – were meaningless. It is my contention that Hias and the Master are indeed bound together by their “shadows,” and are indeed doubles, but that neither can or should be read as a solely positive or negative example, rather as the actual and virtual sides of a single figure, two-sides of the same coin. Their core relationship is a political problem presented to the attentive viewer, not a political position to be glorified or taken up.

Hias, for example, surely cannot be thought of as a wholly positive character, if only for his lack of effectuality. As a prophet, he does not see certainties of the future, but rather the probabilities of a virtual field, achieved by his reverie on time that grounds all subsequent visions. Moreover, he is aware of this fact, as well as his own impotence to act on the behalf of another and does not even have any conviction that his visions might come true, merely that he does indeed see them. As he mentions to one of the townsfolk concerning a prophecy, “Glaubst du es oder glaubst du es nicht –

³¹ Rentschler also interestingly links this to the future development of Fitzcarraldo, where “there is no distinction between the visionary and the entrepreneur” (176). The operation of time-images, and more specifically crystal-images, does indeed appear to be the same as that of capital (uneven exchange). Yet, puzzlingly, Rentschler seems to eternally imply that Herzog seems to be glorifying this movement of capital rather than inspect or express its functioning for an ethical purpose. He seems, as it were, to be viewing it with respect to a form of representation that capital defies with its functioning, epitomized by the internal movements of time-images.

das ist deine Sache. Ich sag nur was ich sehe. Ob's sein wird, weiss ich nicht.“ While Hias can often see the potential for catastrophe, he also frequently gestures toward the possibility of some sort of agency, at the very least in the guise of “belief.” Moreover, he actually provides many of the townsfolk with suggestions to avoid the disasters he has foreseen. The *Dienstmensch* is, for example, warned to get away from the Master by Hias well before her murder. Read in this way, his prophecies, and in particular the larger historical prophecies he intones near the film's conclusion demonstrate not future events, but the channels of potentiality that extend out from what he sees *in the present*. Hias does not look into the future, but rather far off into what Herzog frequently refers to as “distance,” he sees into the “virtual” dimension of time itself, which is not the future, but rather the empirical historicities of the past that form the preconditions for probabilistic emergence. He does not see ‘the future’ so much as the myriad ‘futures’ that exist in the present: all of those virtual pasts that also exist in the present. He literally sees probability spaces and offers advice to those who care to listen.

My contention that Hias' visions are not of the future itself, but rather complex probabilistic potentialities derived from glimpsing time is evident throughout *Herz aus Glas*. Take, as an example, Hias' long prophecy that seems to vaguely predict European history in one fell swoop, before extending into modern times and possibly beyond. Some of these events can be now seen to have come to pass or even have multiple interpretations, but others have not:

Dann fängt der Kleine einen Krieg an und der Große überm Wasser macht es aus. Dann kriegst du um 200 Gulden keinen Laib Brot mehr. Dann kommt ein gestrenger Herr, der zieht das Hemd über dem Kopf und die Haut dazu. Nach dem Krieg meinst du das es ist eine Ruhe, es ist aber keine...Die Bauern werden sich

gewandten wie die Stadtleute und die Stadtleute wie die Affen. Die Weibern ziehen sich Hosen und Stiefeln an. Die Bauern werden mit gewischten Stiefeln mitten in der Miststadt stehen. Die Bauern werden Kuchen essen und politisieren... In jedem Haus ist ein Krieg. Kein Mensch wird auch den anderen mögen. Die reichen und feinen Leuten werden umgebracht. Wer feine Hände hat, wird totgeschlagen. Die Bauern werden ihren Häusern mit einem hohen Zaun einzäunen und auf die Fenstern an die Stadtleute schießen. Die Stadtleute werden betteln, "Lass mich akern!" aber sie werden umgebracht. Kein Mensch wird mehr den anderen mögen. Wenn zwei auf einer Bank kommen und der eine sagt "rück ein wenig" und der anderen tut's nicht, so ist das sein Tod. Das ist die Zeit von Bänkeabräumen." (*Herz aus Glas*)

This long, virtual history is what Hias sees not as the absolute future, but as what will occur from the trajectory of the present *if nothing is done by the people, if they learn nothing from their own past*. For, as the film cleverly demonstrates, the virtual is something accessible, even if it is not actual, and because of this it can be identified and fought.

That the virtual is both real, but also actionable is forcefully evident in Herzog's use of "the bear" throughout the film. Surprisingly, an analysis of the bear does not appear in secondary literature on *Herz aus Glas* even though it proves vital to connecting the film's content to Hias' final vision at its conclusion. In fact, bears are an incredibly important and under-researched aspect of many of Herzog's films. In the wildly successful *Grizzly Man*, wild bears are of course front and center, however, *Herz aus Glas* and another one of Herzog's films that deals quite expressly with semiotic issues, *Jeder für sich und Gott gegen alle*, use the figure of the bear in a very particular manner. Herzog seems to draw his inspiration for this utilization from Heinrich von Kleist. Herzog

has never shied away from acknowledging his admiration of Kleist³² and his use of bears in these two films reflects and expands upon the problem that the trained bear at the end of Kleist's *Über das Marionettentheater* illustrates. At the culmination of the short tale, Kleist's protagonist – who is initially interested in understanding how certain marionettes he encounters are able to dance gracefully, while being artificial – is told a story by the marionette operator about a man that is invited to fencing practice by an acquaintance, the Herr v. G. The latter being a superior swordsman, this man is utterly astounded when Herr v. G. informs him that he is a very good but imperfect swordsman, having studied with one that is indeed perfect. Shockingly, this is not another person, but a bear that has been taught to fence. Kleist writes:

Der Bär stand, als ich erstaunt vor ihn trat, auf den Hinterfüßen, mit dem Rücken an einem Pfahl gelehnt, an welchem er angeschlossen war, die rechte Tatze schlagfertig erhoben, und sah mir ins Auge: das war seine Fechterpositur (807).

But as he begins to fence with the bear as Herr v. G. suggests, he is astonished to find that the bear is easily able to parry every one of his strikes, and with minimal effort at that: “der Bär machte eine ganz kurze Bewegung mit der Tatze und parierte den Stoß” (ibid.). This is incredible enough in and of itself, but what is utterly astonishing is that the bear only responds to true attacks. It passively identifies and ignores all feints, but never fails to parry any actual, intended attack: “auf Finten (was ihm kein Fechter der Welt nachmacht) ging er gar nicht einmal ein: Aug in Auge, als ob er meine Seele darin lesen könnte, stand er, die Tatze schlagfertig erhoben, und wenn meine Stöße nicht

³² In an interview with Geoffrey O'Brien, Herzog declares that Kleist – along with writers like Büchner and Hölderlin – provide their readers with “the innermost landscapes of human beings, and that is why they will outlive everything else” (*Interviews* 127-128). He is also listed along with Hölderlin, Kuhlmann, Montaigne, Thucydides, and Virgil as one of the “small number of authors important to him” that he keeps books of in his home (*Guide for the Perplexed* xv).

ernsthaft gemeint waren, so rührte er sich nicht” (ibid.). The bear, chained with its back to the wall, is the perfect fencer because it can clearly differentiate between actual and virtual threats; it can sense the moment that the virtual intent becomes actual. And this is the key: the bear has to have a thoughtful awareness of the emergence of the actual from the virtual to differentiate between mental “feints” that do not result in actual attacks and those that do. It cannot be argued that the bear simply has no comprehension of the virtual and exists solely in an actual realm when its sensory-motor schema, because it both reacts perfectly to the stimuli it receives, but also immediately identifies mental subterfuge. It can, unlike the seer or visionary, always identify those “futures” will become actual and dismiss those that will not or perhaps simply does not have to contend with them in the first place. The bear has a perfect, yet ossified view on time, which presents “actions” as predetermined events, with the future being entirely “visible” within the present. But, more troubling, this sort of perfection comes at a grave cost. Recalling my discussion of the Master and his search for the perfection of the ruby glass, the bear can be shown to occupy just that state of grace that the story’s narrator is trying to understand, where time can be completely “owned” through the present. Yet, as Kleist points out, *this is not necessarily to be envied*. With his final sentences, there comes an apocalyptic warning:

Mithin, sagte ich ein wenig zerstreut, müßten wir wieder von dem Baum der Erkenntnis essen, um in den Stand der Unschuld zurückzufallen?

Allerdings, antwortete er [der Marionettenmeister]; das ist das letzte Kapitel von der Geschichte der Welt.
(ibid.)

In other words, to achieve such a perfect recognition of time as something pure paradoxically becomes a suicidal mission. It leads to the destruction of the world by eradicating the indiscernible and with it the possible emergence of the new. It has formed a pure historicity that unifies time into a singular entity or conception.

This conception of the bear – completely overlooked in secondary literature on *Herz aus Glas* – proves critical to a full analysis of the film. Hias mentions the bear when he meets the Master for the very first time, warning the Master of its dangers and asking for the help of a hunter in order to slay it. Yet, the master does not seem to heed Hias' request, instead pressing on in his search for the missing formula of the ruby glass. "Du sollst die Beigabe fürs Rubinglas sehen" to which Hias replies, "Ich weiss aber nicht die Beigabe." The master continues, reducing it to a matter of *money* "für zehn Gulden weiss er es" and when Hias still does not respond, the Master continues, "Dann weiss er es für tausend." Hias' final reply is categorical and clear, "Ich bin nur wegen dem Jäger da." That is, Hias wants the master to do what he cannot – to mobilize his wealth and power to deal with the threat of the bear, to act where he, as a simple cowherd tied to his visions of the virtual, seemingly cannot.

The Master ignores this request and the film continues to take its course, barreling headlong toward the tragedy and catastrophe that Hias foresees. Yet, still, Hias has hopes that there is a way to thwart the impending doom that the town and its people face, even if he cannot quite place a finger on precisely how that might be achieved. Eventually, chaos breaks out and the Master murders the Dienstmensch and sets fire to the Glashütte, landing himself and Hias with him in prison for seeing the tragedy but failing to prevent it. Crucially, it is at this juncture that the bear becomes important

again. Indeed, without it the hopeful ending of the film would seem an aberration. Trapped together in prison, Hias paces crying “ich muß in den Wald!” The Master takes this as Hias wishing to escape society, a romantic move to return to Nature and asks “und Menschen, wirst du keine sehen? Du gefällst mir. Du hast ein Herz aus Glas.”

It is with the Master’s approval that Hias’ heart and purity of vision finally break, where the seer becomes more than merely the master’s virtual double by recognizing himself as the mirrored counterpart of a madman. Through this recognition, a “crack” occurs and Hias’ position toward his visions and the virtual itself radically shifts. The scene ends and what the viewer suddenly encounters *is time*, the literal passing of a season, which the visionary alluded to in his conversation with the shopkeeper just before his capture. The next time the viewer sees Hias, he has been freed from prison even though it is not shown precisely how this occurs. Hias marches through the woods, still partially decked with snow, with winter passing and spring emerging. But instead of seeking isolation and the solace of Nature as the Master assumed, Hias marches straight toward a small cave and, crawling halfway in to get the creature out, provokes a fight with the bear he has been mentioning throughout the film. But the bear is invisible, is virtual, not opposed to the real but rather the actual. Hias pulls his knife from his sheath and, wrestling and fighting for his life, finally slays the bear. Moreover, the bear, though invisible, is not only presented as a real adversary, it is life sustaining and even, in its own way, necessary; Hias actually eats it, “So, und jetzt der Bär braten.” This is a grave warning that life for Hias, for the whole community, will not go on until the bear – the human desire for an understanding of time that is flawlessly linear and calculable, totally actualized – is destroyed, cooked, consumed.

Immediately after he slays and eats the bear, *an action that requires an awareness of the virtual but also practical, political effort*, we see Hias' final vision. He imagines a man on an inhospitable landscape, a "Felseninsel" far off the shore. Standing alone, he casts his gaze out across the water wondering if in fact the world is flat – for word has not reached such an isolated location that the sea does not end in an Abyss as the islanders believe. Hais calls this man, "der erste, dass zweifelt." The perseverance of his doubts eventually takes root in the community and, after several years, he is joined by three others. Seeking proof for the reality of the horizon they face, they decide to set out across the sea and finally, "brechen sie auf, in einem viel zu kleinen Boot." Yet, the film concludes with a dramatically hopeful and uplifting statement. As the men row out to sea with birds whirling above their boat, words appear on the screen: "Es mochte ihnen ein Zeichen von Hoffnung erscheinen, dass ihnen die Vögel aufs offene Meer hinaus folgten."

How then is the viewer to take this shift in perspective and action? Throughout the film, Hias' prophecies have predicted only catastrophic events: deaths, fires, even wars. But, once freed from the prison he shared with the Master, after slaying and consuming the bear, he suddenly foresees a hopeful, if difficult path. For as we, the film's viewers, know, the Earth is not flat. Should the islanders survive their difficult voyage, they will indeed find new land. So, what exactly has changed for Hias in his confrontation with the Master? In his confrontation with the bear? It is my contention that Hias not merely discovered the crystalline nature of his relationship with the Master, that he is, as a "pure" visionary, both his opposite and complementary double, but he also comes to understand the importance of the "crack," *of interval* and is able to take upon himself the slaying of the virtual bear, releasing new hope, an image of the "new world" he foresaw in the film's opening

sequence, but could not comprehend. No other explanation seems satisfactory to understand the film in its entirety.

Another way to think of this is to relate it back to a temporal summation between Hias and the Master. The Master, as an emblem of the present, seeks to control its economy by regaining the formula for the ruby glass in order to allow the economic and even subjective lives of the villagers to flow out from himself and his possession of the formula: he is in all of the politically suspect ways a Führer figure, the font of political and economic power within the village. Hias, looking not into the future, but rather into the virtuality of the past that exists in the present, “sees” the probability spaces of future events not as they will inevitably unfold, but rather as a superposition of states that are likely to occur within a particular, progressive historical line. No matter what the Master might do, no matter what Hias might see but then fail to act upon, in the end the true political choice becomes a matter for the villagers, for the people as a collective unit, to decide their fate. Following the infernal circuitry of the time-image, the double bind of political action becomes apparent. One must act, but also never fail to look into the virtual field of those pasts that exist in the present in order to chart the probable outcomes of future events.³³

To follow a Master blindly, hypnotically, and to avoid looking into the virtual is a political negligence that continually funnels political power into tighter and tighter circuits, leading ultimately to a single human figure, an individual face, out of which all economies flow. Such

³³ Herzog and his characters’ positions on temporal economy are not completely new. One could make mention of, for example, apocalyptic time from the *Revelations of St. John* or Walter Benjamin’s *Theses on the Philosophy of History*, particularly in their commentary on the artist Paul Klee’s “Angelus Novus.” What is novel in Herzog’s cinema is the direct monstration of such a spatiotemporal perspective and the central character Hias’ struggle to come to terms with viewing the world in this manner.

stupefied passivity of the masses has a well-documented history and foreseeable, bloody ends. Yet, to dwell solely within the dreamy realm of visions does nothing to mitigate such futures. A recognition of the seer as the double of the tyrant is of necessity demanded for the formation of any politics that might remain ethical. Ethics arrives not in the formation of the time-image, but rather from escaping its economy. Ethics is not a moralistic certainty, but a tight-rope balancing act that juggles both vision and industry.

Through its unending and circuitous time-images *Herz aus Glas* does not provide political ideals to be aimed for, but instead diagrams the mechanics of politics itself, down to its temporal economy. Viewed as participating in the selfsame physical structures of the world, time-images monstrate the uneven exchange of material and social flows, they trace economic and political realities, putting to question not simply their realities, but how one assesses and alters them through thought and action that extends beyond the individual. If the film has a politics, it is simply that of identifying and slaying the bear; if there are any political means within the film, they are in the end a call to reexamine our understanding of temporal structures as a means of reexamining ourselves, of writing our own history. Time-images are not ideals but rather physical problems we face, temporal structures we must think. Time-images are the infernal circuits of time we must continually escape to hold any ethical sway over our future. In the end, *Herz aus Glas* paints the micropolitical quandary of a time that is “out of joint.”

CHAPTER III

Volcanic (Sur)face: Landscape and Subjectivity

Poetic Formula: "I is another"

In my analysis up to this point, I have painted a novel portrait of Herzog as a pragmatist dedicated to his project of working on a new grammar of images. In the introduction I identified Herzog as a non-ironic director with a humorous but Stoic disposition. In Chapter II, Herzog's *Herz aus Glas* was demonstrated to adhere to and explore the logic of the time-image. The economic functioning of time-images, which provided a glimpse of time in the pure state, endlessly dividing itself, forking. This "perpetual exchange" proved to raze the ground of not merely the factory that plays such a central role in the film and the livelihood of its characters, but also of their subjectivity, which, with time out of joint, flowed forth from a point of *indiscernibility* between the "real and the imaginary," between action and vision (*Cinema 2* 273). This was caused by the character Hias' "visions," his new awareness of time out of joint and the "pure recollections" that arise from "seeing" the past that exists within the present and coming to terms with virtuality. In the movement-image, subjectivity "appears as soon as there is a gap between a received and an executed movement." (*Cinema 2* 47). With the time-image, subjectivity takes on "a new sense, which is no longer motor or material, but temporal...that which 'is added' to matter, not what distends it" (*ibid.*). With time-images, a post-Kantian subjectivity emerges that maintains the functions of its previous form, but also adds a superjective dimension that no longer allows for subjectivity to be conceived merely as an individual identity, but rather also a product of the processes of subjectification; the subjects linear everyday gets shot through with a nonlinear and dynamic temporality. And with this new temporal

perspective, the subject finds itself, much like the doubting men at the end of *Herz aus Glas*, setting out toward a new and uncertain future.

For Herzog, this contention has profound effects on the way his cinematic subjects must be conceptualized. Post-Kantian subjectivity is not a firm or solid state, but rather our mode of operation as humans, both conscious and unconscious, *in time and with the inhuman*.³⁴ In a time that is out of joint, one approaches the subject not as an unchanging entity, but as an ever-changing process: and this applies in the cinema just as much as it does in everyday life. Cinematic subjectivity is therefore not to be confused with individuality or identity in Herzog's oeuvre. Instead, the subjectivity of Herzogian characters must be viewed not as singular but rather split and by nature social throughout the entirety of Herzog's work.³⁵ And, indeed, it is this particular mode of subjective operation, of processual subjectification rather than an essence of the subject, that is of deepest interest to both contemporary philosophy and film: not a singular subject or given individual, but rather that split and multiple subject whose "I is another."

³⁴ We should be reminded here that Bergson – who Deleuze bases the foundation of his research into cinema on alongside Charles Sanders Peirce – believed that “the only subjectivity is time, non-chronological time grasped at its foundation, and it is we who are internal to time, not the other way around. That we are in time looks like a commonplace, yet it is the highest paradox. Time is not the interior in us, but just the opposite, the interiority in which we are, in which we move, live and change” (*Cinema* 282).

³⁵ As Guattari notes in his *The Three Ecologies*, “The subject is not a straightforward matter” (24). In the last chapter, along with Deleuze, we located the subject *in time*, and specifically a time out of joint, rather than conceive of it as a clearly bounded and bounded identity. Guattari recommends abandoning the analysis of ‘the subject’ in favor of what he calls the “components of subjectification,” the actively functioning aspects of the world that lead to the production of subjects (*ibid.*). “This would lead us, necessarily, to re-examine the relation between concepts of the individual and subjectivity, and, above all, to make a clear distinction between the two. Vectors of subjectification do not necessarily pass through the individual, which in reality appears to be something like a ‘terminal’ for processes that involve human groups, socio-economic ensembles, data-processing machines, etc. Therefore, interiority establishes itself at the crossroads of multiple components, each relatively autonomous in relation to the other, and, if need be, in open conflict” (*Three Ecologies* 25). To me this seems particularly evident of cinematic characters that, in their very being as fictional assemblages, are more patently social in nature: no film without a viewer, no subject without a socius. The cinema provides a wonderful platform to inspect the visceral processes of subjectification with minimal political risk.

An I which is another comes, as I have argued, as a result of a particular conceptualization of nonlinear time. In Herzog's cinema the present and the past which exists in the present are grounded in the time-image, but creation and the future itself are not. They are instead grounded in escaping from the crystalline logic of the time-image, from slaying the bear and making way for new ground. And, as I have shown within *Herz aus Glas*, this site of creation is also an ethical and political dilemma. At some point, it becomes insufficient to merely provide the prophecies that "vision" brings with it; one must also confront the virtual directly, must identify the threat of the bear and rout it out, in order that a different future might be conceived.

The future and creation are therefore not a synthesis of dialectical processes *within* time-images. The future and creative acts can instead better be thought of as discovering a way out, of cracking and escaping from the crystal itself. With its *internal movements* a time-image forms nothing more than an "infernal circuit" that would have to collapse back onto a supreme Concept, on an ultimate subject from which the world issues forth, in order to warrant a future. Yet for Herzog the future must be *spoken* rather than simply warranted; it must be created through an encounter with something outside of its own circuits, a Herzogian *ecstatic truth*.³⁶ It is from *external movements* that time-images allow us to trace backward through our development in a manner not dissimilar to what a scientific analysis of the Big Bang might provide. By utilizing the empirical information, we can ascertain from the present, we improve our knowledge of the past and better

³⁶ Herzog defines his concept of "ecstatic truth" most directly in his Minnesota Declaration, where he states that, "there are deeper strata of truth in cinema, and there is such thing as a poetic, ecstatic truth. It is mysterious and elusive, and can only be reached through fabrication and imagination and stylization." This is set against "the truth of accountants." The point is that ecstatic truths – much like Deleuzian percepts and affects – are "direct," unmediated experiences, even though they still participate in a historical milieu. Ecstatic truths can otherwise be defined as actual spacetime events.

understand the path of our own development. Only once we come to terms with our origins might we come to terms with the probabilistic realities of our future. Only in this manner can we ascertain how a given *event*³⁷ was formed and how future events might come to occur, how we might shape and guide the temporal flows that form those same future events.

The complex and multiple nature of subjectivity, derived as it is from a conception of time that is out of joint and the logic of time-images, is one of the areas in which Herzog's films resonate most forcefully today. If the advent of the time-images demands, as I have argued, a rethinking of time itself with human subjectivity enthralled and in tow, it also precipitates a reexamination of land itself, *of actual firmament*, in both its creation and function and how physical space informs the processes of subjectification. Picking up where *Herz aus Glas* leaves off, the logical conclusions drawn from time-images demand an exploration of the "neue Erde" that Hias foresees at the film's outset, the new lands that the doubting men set out to discover the film's conclusion. Such new worlds are physical locations – they are actual space – yet they are also the foundational possibility of new subjectivities and new modes of subjectification; they are, in a manner of speaking, the probability spaces of the future too. To undertake this reexamination, I will turn to Herzog's use of landscape, including his well-documented penchant for filming what he calls "inner landscapes," but I would like to suggest upfront that it is Herzog's use of *volcanic landscapes in particular* that should be read as an investigation into these modes of subjectification.

³⁷ While it cannot be taken up directly here, Deleuze's conception of an encounter with the outside, the concept of the event, is defined in his 'Twenty-third Series of the Aion' in *Logic of Sense*. It is no coincidence that this is taken up in the same small chapter that demonstrates both his theory of time, including his concept of the Aion and his theory of language, including his understanding of its foundations (*Logic of Sense* 167-172).

While there has been next to nothing written on Herzog's use of volcanoes in secondary literature, there is a considerable amount of critical commentary on Herzog's landscapes and their central importance in his films is widely acknowledged. For Matthew Gandy, landscape in Herzog "plays a pivotal role" and "emerges as a dramatic provocation for Herzog and his cinematic protagonists: an existential motif for mortality that contrasts the ephemerality of human life with the indifference and infinitude of nature" (528). Yet this approach suffers by introducing them as representative of an externalized and objective "nature," and quickly ensnares Herzog's work within the framework of "neo-romanticism;" it falls immediately into the same old trap of being unable to approach Herzog and his films non-ironically, unable to take him at his word. Gandy continues:

Although I make use of Herzog's own testimony...I do not consider that his words can provide more than a useful starting point for analysis since it is a characteristic feature of romanticist aesthetics to emphasize the role of the individual human subject rather than their cultural or political context. Indeed, the presence of the 'extreme subject,' which is a feature closely associated both with Herzog's own persona and those of his main cinematic protagonists, raises its own set of questions for any critical understanding of the enduring resonance of human encounters with landscape within contemporary cinema (529).

The fundamental fault with this approach is that it is making the common mistake that we broached above: it is confusing subjectivity with identity. Gandy's viewpoint inverts the problematic of Herzog's nonlinear cinema by applying linear rules, *for in any cinema that engages with time-images, cultural and political contexts arise out of subjectification rather than focus on a singular subject arising out of cultural and political contexts.* Such subjectivities are in and of time *in addition to* being located within space, actually and objectively. Contrary to what Gandy and others might believe, Herzogian subjectivity functions not through neo-romantic individualism, but as a social multiplicity in a post-

Kantian world where an I is always another. For Herzog there is no romantic, but only an indifferent Nature. As a result, subjectivity never has at its core a question of an individual genius capable of conquering or harmonizing with nature. Instead, despite our uncanny ability to view ourselves as discrete individuals, the subjectivity of Herzogian characters inevitably reveals a non-romantic, pragmatic and social relationship between the individual and their physical environment, where the latter shapes the former and inevitably snuffs it out.

This contention upends a great number of positions taken within critical commentary on Herzog's work, especially concerning Herzog's positions on aesthetics and politics. In his thorough, book-length study on the cinema of Werner Herzog, *Aesthetic Ecstasy and Truth*, Brad Prager claims, "Politics is something Herzog sets aside as a simulacra, something that can only distract from or diminish aesthetic ecstasies" (11). Prager then adds that for Herzog, "Part of his self-understanding as an artist who transcends the sphere of the political – his separation of aesthetics from politics – comes from the idea that he has special access to a social unconscious. *In this regard, his famous fascination with landscapes becomes a central concern*" (italics mine. *ibid.*). This is, perhaps oddly, both accurate and backward. Linking Herzog's interest in landscapes to politics, aesthetics, and *a social unconscious* is both fair and important, but this contention, too, seems to have an inverted understanding of subjectivity and its role in Herzog's films. It is not that politics are absent from Herzog's work, but rather that they arise from the depths of his aesthetics. Herzog's films demonstrate a micropolitics of function rather than a macropolitics of declaration; they seek the grammar of images rather than to impose a closed system of syntax. As such, Herzog's politics within

his films are only indirectly legible, derived by tracing backward through the physical systems that form particular cultural and political positions.

Strikingly, this political contention is also the bedrock on which Herzog's use of *landscape* operates – including his concept of inner landscapes – though this fact is often overlooked. Critics like Prager are well aware that “Herzog has insisted that landscapes are always already within us” and, quoting the director directly, Prager notes that Herzog has explained: “For me a true landscape is not just a representation of a desert or a forest. It shows an inner state of mind, literally inner landscapes, and it is the human soul that is visible through the landscapes presented in my films” (ibid.). Yet by failing to acknowledge Herzog's pragmatic and post-Kantian view on subjectivity, even commendable work such as Prager's is inevitably led to ally Herzog's work with the movements that the director so strongly rejects, and in particular romanticism, providing various caveats along the way. For example, Herzog is not for Prager a “Romantic in the traditional sense,” but rather a Romantic in the vein of “[Caspar David] Friedrich,³⁸ Archim von Arnim, Heinrich von Kleist and others” (*Aesthetic Ecstasy and Truth* 12). And this pseudo- or neo-romanticism leads straight back to the difficulties we have already encountered concerning Herzog and irony. “In addition to the

³⁸ Herzog is rather frequently associated with Romanticism despite frequently denying the claim, and vehemently at that: “You can't get a more contrary position towards the Romantic point of view than mine” (*Guide for the Perplexed* 141). He does, however, claim to have ties to the Romantic painter Caspar David Friedrich, particularly through their similar understanding of landscape. “While almost everything about romanticism is foreign to me, Caspar David Friedrich is someone I do have great affinity for. In his paintings *Der Mönch am Meer* and *Der Wanderer über dem Nebelmeer* a man stands alone, looking out over the landscape. Compared to the grandeur of the environment surrounding him, he is small and insignificant. Friedrich didn't paint landscapes per se, he revealed inner landscapes to us, ones that exist only in our dreams. It's something I have always tried to do with my films” (*Guide for the Perplexed* 142). Tellingly, this quote also attests to Herzog's understanding of social subjectivity as more important and powerful than an “insignificant” individual identity. This, in the end, seems to be what so forcefully separates him from the Romantic tradition. It is not a matter of the individual as becoming one with Nature, but rather the individual being an insignificant part of an indifferent Nature.

question of how Herzog depicts landscapes,” Prager explains, “another key link with the history of German ideas comes by way of Herzog’s irony” (*Aesthetic Ecstasy and Truth* 14). This is not necessarily to be viewed in the exact same manner as Platonic irony for Prager, but in the Romantic way of thinking as “gestures that reflect on the medium itself” (ibid.). This sort of “formal irony” and reflection on the medium of film is indeed evident in Herzog’s work; Prager is right to affirm that this “is not the same as the irony of a joke that presents itself as seriousness, but rather a question of how a particular medium is employed; it is a means of acknowledging the author’s presence set against the illusion that the work exists independently of its author” (ibid.). But conceiving of Herzog’s landscapes through irony seems to be more of a convenient (as well as confounding) way to keep his work closer to his predecessors rather than fair or fruitful. It, once again, seems to be asking a cinema grounded in time-images to play, as it were, by the rules of movement-images; it ignores the dimensional problematics of nonlinear time which are so prevalent in Herzog’s work. Adopting Romanticism and irony as metrics fails to acknowledge Herzog’s pragmatic, social approach to subjectivity and should therefore be abandoned in efforts to come to terms with his cinema. Even if the conclusions drawn from Romantic critiques offer some food for practical thought, they do little to come to terms with the mechanics and the underlying micropolitics of Herzog’s work.

For a fresh perspective, I want to highlight Herzog’s own comments on his use of landscape before extending them to volcanic landscapes specifically. Despite the reservations of critics like Gandy, this position allows us to better understand the director’s intentions and provides a platform

to both understand and critique Herzog's micropolitical examinations, all of which stem from his social view of subjectivity, both internally and externally.

An initial, fundamental contention is that, for Herzog, landscapes are not merely backgrounds. "I never present literal landscapes in my films. What I show are instead landscapes of the mind, locales of the soul" (*Guide for the Perplexed* 97). Herzog is never just showing his viewers a landscape; he is instead revealing the resonances that landscapes have with the human, how landscapes relate to and help form human culture in all its varied forms. Landscapes are linked to thought and awe instead of being simple or natural stages for Herzog's characters; they always reveal something about Herzog's characters themselves and the human condition, demonstrate the limits of each rather than merely serve as a backdrop for their actions. Furthermore, Herzogian landscapes are not stagnant things or neutral places, but something akin to living entities that can be manipulated according to the director's cinematic vision. Speaking of the Peruvian jungles that serve as the setting for *Aguirre*, Herzog relates:

It was as if the landscapes had no choice; they had to fit my imagination and submit themselves to my idea of what they should look like. Although sometimes I struggle to find actual environments that match those in my head, I'm good at reshaping physical landscapes and making them operative for a film...Often I try to introduce a certain atmosphere into a landscape, using sound and vision to give it a definite character. The fact is that I can direct landscapes, just as I do actors and animals. (ibid.)

Herzog believes that he is able to direct landscapes, because they have their own "rhythm and sensuousness" that he can use to stylized effect (*Guide for the Perplexed* 64). Herzog has stated that "a landscape always adapts to a given situation" and in his work as a director he coaxes them along to these sorts of adaptations or modulations (*Werner Herzog: Interviews* 19). To achieve these

adaptations and modulations, his well-documented “stylizations,” Herzog is willing to go to great lengths, manipulating not only the landscape itself to fit his vision, but also utilizing visual and sound effects to reveal more forcefully these “locales of the soul.” Herzog always finds something physical, preexisting in his present, and then adds sensory dimensions to his footage, altering its content in the process. Speaking of the now famous scene that features countless windmills in his first major feature *Signs of Life*, Herzog states:

Take, for example, the windmills in *Signs of Life*. They are in a valley in Crete. No one has counted, but there are about ten thousand windmills on a plateau in Crete. That’s a reality. When you see them in the film, you think it’s a trick. I’m thrilled by this because it makes reality become strange, you can no longer trust it. And there is something in that which is similar to insanity...I want to add something else. I always try to introduce a different aspect, a different character into a landscape. For the windmills in *Signs of Life* sound is important. Here’s what I did: I took a recording of nearly a thousand people clapping at the end of a concert and distorted it electronically until it sounded like wood banging. Then I added another sound over it - what you hear in the countryside when you put your ear on a telegraph pole and the wind passes through the wires. You hear a humming that children call “angel song.” Then I mixed the banging wood with the “angel song” and used the resulting sound as if it were noise from the windmills. This changes the windmills. I am not saying that it changes them physically, but it changes the image and our perspective. And this new and very direct perspective on things is what I am trying to show and render visible. It’s a way of perceiving that might become a part of your consciousness and intuition. Regarding landscapes in general, what I am looking for is a decent place for human beings, a place that measures up to humanity. (ibid.)

This passage points to two key elements for analyzing Herzog’s landscapes. First, it must be underscored that what Herzog is after, this “new and very direct perspective on things,” is in fact a

percept³⁹. Rather than presenting or revealing some particular quality of an exotic location, a landscape in Herzog is always a reciprocal and inter-affectual relation between firmament and psyche, between physical space and human thought. For Herzog, the human psyche itself is “spatial,” *it is a landscape*, a topography we actively map rather than simply represent (*Aesthetic Ecstasy and Truth* 103). The human psyche is topological rather than typological or teleological in Herzog’s view. This is why Herzog is so keen to harp on the literal qualities of “inner landscapes,” those already given but constantly shifting contours of human psychic existence. He is not interested in landscapes as objects, but rather as effective locales for *the process of subjectification, the spaces of subjectification*.⁴⁰ Second, Herzog works toward his aim of achieving a “new and very direct perspective on things” by utilizing optical and sound situations like those described in his example from *Signs of Life*, by forming opsigns and sonsigns that strain the senses to the point of delirium. While a common definition of landscape would likely exclude sound from its concept – or potentially even the windmills for that matter, given that they have been built by human hands – Herzog’s understanding does not. In fact, these intensive sounds and visions are used more like tools

³⁹ As Deleuze and Guattari note, one must be careful not to confuse percepts and affects with “perceptions or feelings” respectively (*What is Philosophy?* 24). Instead, works of art - including film - are to be thought of as “a bloc of sensations, that is to say a compound of percepts and affects” (*What is Philosophy?* 164). Percepts in particular are “no longer perceptions; they are independent of a state of those who experience them” (ibid.). They are “beings of sensation” in their own right that exist in time, that exists “in itself,” without requiring individual perception as an *a priori* (ibid.). This clashes with Prager’s contention that it is an “illusion” that a work of art exists independently of its author; for Deleuze and Herzog it could be argued that they do indeed exist independently *in time*, and that our own identities are drawn from a social subjectivity, that we and our work are produced by the process of subjectification rather than being truly individual entities. A percept always forms as a landscape that the human is forced to relate to, changing their subjectivity in the same process.

⁴⁰ Without stretching too far, this could also go some way toward explaining Herzog’s preference for maps compared to artwork within his home, as evinced in our introduction. Landscapes, both external and inner, provide the processes of subjectification that interest him, including those that lead human beings toward the creation of ‘art’ and somewhat diminish or even eliminate the latter as a productive category. It would essentially all be there in the maps and the mapping.

to sculpt or change the landscape in a manner akin to an excavating company preparing the ground before a new building might be constructed: the potential is already there conceptually, but one coaxes it out with active stylizations. The percepts created through his stylizations then provide new platforms from which one can again map the landscape and so on unto infinity. Herzog's landscapes are therefore not flat backgrounds, but "layered images" that form the essence of his films, images that are by his own admission "prepared by cultural modes of perception, conditioned by historical precedents, surrounded by discourse, and governed by relations of power" (*Ferocious Reality* 49). They are images with their own particular historicity, a spatialization of thought that continually forces new thought through its human mapping.

These contentions are especially important to underscore because landscapes are the inspiration for *nearly all* of Herzog's films. They also set up an important juxtaposition for both Herzog and a pragmatic philosophy of cinema: the relationship of landscape and face. In Paul Cronin's initial collection of interviews, *Herzog on Herzog*, the director declares "Though I do not like most of his films, it seems that for Ingmar Bergman his starting point is a human face. The starting point for many of my films is a landscape, whether it be a real place or an imaginary or hallucinatory one from a dream" (83). He continues with a small caveat, "Actually, maybe I should say that the landscapes are not so much the impetus for a film, rather they become the film's soul, *and sometimes the characters and the story come afterwards, always very naturally*" (italics mine. *ibid.*). This view seems to be reiterated from a 1973 interview with Nouredine Ghali, the very same interview where he provided his views on the windmills in *Signs of Life*. There Herzog stated, "many of my films have begun with landscapes. Ingmar Bergman, whose films I don't like for the most part,

begins with faces. His starting point is the face. For me, my starting points are landscapes or imaginary places and aberrations, hallucinations...When I speak of landscapes, I don't mean landscapes in the provincial sense. It's something different" (*Werner Herzog: Interviews* 19). Landscapes are mentioned yet again – and still with a comparison to Bergman and the human face – in *Guide for the Perplexed*, where Herzog stated “For Ingmar Bergman, the starting point of a film seems to be the human face, usually the face of a woman. For me, it's a physical landscape, whether a real or imaginary or hallucinatory one” (4).

Like many of Herzog's interview statements, these comments are given so often they seem almost scripted. Personal distaste for Bergman aside, in almost every conversation concerning landscapes, Herzog relates them to faces and takes a critical distance from the latter. This is no coincidence; the connection between faces and landscapes is well documented, particularly within contemporary pragmatics⁴¹. But whereas these theories focus chiefly on the affect of the face, Herzog

⁴¹ Deleuze and Guattari have most clearly outlined this relationship in ‘Year Zero: Faciality,’ a chapter in *A Thousand Plateaus*. Here “The face digs the hole that subjectification needs in order to break through; it constitutes the black hole of *subjectivity as consciousness or passion, the camera, the third eye* (italics mine. 168) The face is presented as “a surface;” it is the “inhuman in human beings” (170-171). While their concept of the face/faciality cannot be fully explored here, what is important to note is that the face is inevitably linked to the landscape for Deleuze and Guattari: “The face has a correlate of great importance: the landscape, which is not just a milieu but a deterritorialized world” (172). Citing “Christian education” as a particular way in which the face/landscape correlation is used, Deleuze and Guattari go on to say that such education “exerts spiritual control over both faciality and landscapity” (ibid.). This is most centrally the case within aesthetic education. While there is no shortage of literature focusing on faciality - in particular from affect theory - there is far, far less concerned with “landscapity.” This chapter, hopes, in some small way to begin correcting that. For our purposes, it is also important to note that the face/landscape relationship is strikingly declared to be the heart of film itself: “The close-up in film treats the face primarily as a landscape; that is the definition of film, black hole [face] and white wall [landscape], screen [landscape] and camera [face]” (ibid.). This is because in film, “All faces envelop an unknown, unexplored landscape; all landscapes are populated by a loved or dreamed-of face, develop a face to come or already past” (172-173). This position, however, hinges upon taking post-Kantian subjectivity into account, with individuals viewed as “multiplicities” here rather than truly individual entities. As argued throughout this chapter, Herzog takes a very similar approach, by dreaming up landscapes for the origin of his films. It is quite likely that landscapity has thus far been largely ignored because it seems a logical fallacy from any transcendent view that externalizes Nature as object related to an individual subject.

places his primary emphasis on percepts drawn from landscapes. If Herzog – even though he clearly seems to understand the theory of affect – is chiefly interested in “landscapes and visions” rather than, like Bergman, “faces and becomings,” it could very well be simply because he is not attempting to engage faces, which are always “a politics,” but rather provide focus on landscapes which he sees as the precondition for *any potential politics, any face* (*A Thousand Plateaus* 181).⁴² For in Herzog’s films, it can be argued that a given politics or a given face is always comprised of landscapes, that they grow out of and are continually formed by landscapes. It is not my intention to wholeheartedly support this position politically, for, in the end, it is far more difficult to distance oneself from the politics of the face than Herzog seems to believe it is. But this is an important contention to come to terms with the mechanics of Herzog’s films and their micropolitical functions, especially in more recent works where this becomes more forceful. The undeniable fact is that – at the very least in structural terms – the micropolitics of landscape takes precedence over the politics of the face in Herzog’s oeuvre and, as I argue, this position is of necessity aligned with post-Kantian

⁴² For Herzog, faces appear to be of less consequence than landscapes because in his films, just like Deleuze and Guattari, “what chooses the faces [as well as the individual face] is not a subject...it is faces that choose their subjects” (*A Thousand Plateaus* 180). Deleuze and Guattari return to and expand the relationship between face and landscape in their final collaboration, *What is Philosophy?*, specifically in their discussion of percept, affect, and concept. Percept - which I claim is Herzog’s central interest - is first linked with the novel rather than film: “The novel has often risen to the percept - not perception of the moor in Hardy but the moor as percept; oceanic percepts in Melville; urban percept, or those of the mirror, in Virginia Woolf” (168-169). This likely explains to some degree why Herzog’s screenplays fall somewhere between novel, play, and screenplay, rather than following traditional form. In Deleuze and Guattari, percepts and landscape are further aligned with a Herzogian position through their emphasis on vision and the role of the visionary. “The landscape *sees*... The percept is the landscape before man, in the absence of man...characters can only exist, and the author can only create them, because they do not perceive but have passed into the landscape and are themselves part of the compound of sensations...percepts - including the town - are nonhuman landscapes of nature” (169). These empty, humanless landscapes of nature are easily identifiable in nearly every one of Herzog’s films, documentaries and features alike.

conceptualization of subjectivity, which is not individual but rather in the Nietzschean sense at least individual.

To illustrate this contention, one need only take an in-depth look at Herzogian volcanoes. Volcanoes and volcanic landscapes have a long precedent in Herzog's work. While Herzog's early films do not address them directly, volcanoes are nonetheless present and important. For example, Herzog's 1970 *Auch Zwerger haben klein angefangen* is set amidst the volcanic background of the Canary Islands. More specifically, the action takes place on the easternmost island, Lanzarote, which is home to the "Tunnel of Atlantis" – the world's longest known submarine volcanic lava tube. This volcanic tube is connected to the larger surface structure known as the Cueva de los Verdes and was formed roughly 20,000 years ago when the Monte Corona volcano erupted on the island. Volcanoes are an integral part of Lanzarote's geography, history, and even modern tourist industry, with Los Volcanes Natural Park and Timanfaya National Park – a massive expanse of land on the western side of the island comprised entirely of "volcanic soil" – being popular destinations. Major eruptions happened on Lanzarote in 1730-36 and again in 1824 and many of the island's volcanoes are still active. While there is no eruption in *Auch Zwerger haben klein angefangen*, the film's nervous and gloomy atmosphere is certainly heightened by the volcanic landscapes it is set against and, in the end, its small protagonists stage a rebellion that could be described as volcanic in its fury and impartiality. Furthermore, Herzog was most certainly aware of the geographical features of Lanzarote, and as a landscape it must play a role in any analysis of the film.

To provide another example, one need only look, once again, at *Herz aus Glas*, where the volcanic landscapes of Yellowstone National Park are included as part of Herzog's stylized vision of

Bavaria; the impending doom of a “supervolcano” is right at home with the world ending and world generating mythology the film explores through its time-images. Here one sees the brilliant blue pools of the Grand Prismatic Spring in Yellowstone’s Midway Geyser Basin, as well as long shots of Mammoth Hot Springs and its cascading slopes of calcium carbonate. These volcanic expanses set the apocalyptic tone that Hias’ visions reveal and resonate with the fiery ‘soul’ of the ruby glass in both the deep red of its final form and the scenes within the factory that show the glowing, molten stages of its attempted production. In fact, I believe time-images and the landscape of the volcano are intimately bound in Herzog and it is not coincidental that the ruby glass has an inner “fire” akin to the lava and magma of volcanoes. If time-images ultimately serve as Herzog’s apology for filmmaking as a visionary mode of thought and production, the volcano serves as the landscape par excellence that relates to both the apocalyptic and hopeful sides of such vision: volcanoes become the “inner landscapes” that resonate most forcefully with the processes of world formation and destruction within human thought.

This can be taken up and defended by quickly examining Herzog’s very next film. Immediately after completing *Herz aus Glas* in 1976, Herzog tellingly made his first film overtly featuring volcanoes, *La Soufrière*⁴³. Prager has argued that *La Soufrière* “conveys the same impression of deferred apocalypse found in *Heart of Glass*, in which the men at the film’s end set sail in a boat: they might be off to meet their doom, yet this is not something that we are permitted to view” (*Aesthetic Ecstasy and Truth* 115-116). The premise of *La Soufrière*, which bears the subtitle “Warten

⁴³ Herzog states in *Encounters at the End of the World* “way back in 1976, when I first filmed a volcano...” Yet, Herzog is mistaken as both *Auch Zwerge haben klein angefangen* and *Herz aus Glas* have volcanic landscapes that, as I argue here, play important roles. He is correct, however, in that it is only with *La Soufrière* that volcanoes become a central concern.

auf eine unausweichliche Katastrophe,” was not, however, focused on the volcano itself but rather an impending eruption on the island of Guadeloupe in August 1976, during which Herzog hoped to find and interview a man that he heard had refused to be evacuated. Speaking of the film’s production and intent in an interview, Herzog states: “I was not interested in the volcano. I was interested in one single man that refused to be evacuated, a different attitude toward death. 75,000 people being evacuated and he stayed on!” This remaining man plays a pivotal role in the film’s progression and, at least to some extent, Herzog is capable of capturing what he sought when he finds the man asleep under a tree: a human attitude at peace with death, waiting calmly for its embrace rather than fleeing in fear. Yet despite Herzog’s self-affirmed central concern with “a different attitude toward death,” the volcano La Soufrière nonetheless functions as an overwhelmingly powerful landscape, a ticking countdown that will surely erase all life on the island, and is just as important to analyzing the film as any of the man’s comments – which would be meaningless without the volcano’s impending eruption.

The volcano La Soufrière – literally meaning ‘sulfur’, but also reminiscent of the French ‘souffrir’ or ‘to suffer’ – is a typical Herzogian landscape as previously described: an inner state of being, symbolic of our knowledge of natural apocalypse and it serves as an example of the eventuality of death and human extinction rather than just a background (*Aesthetic Ecstasy and Truth* 115). Early in the film Herzog claims that the volcano is going to explode “with the force of 5 or 6 atomic bombs,” quickly linking it to catastrophe and apocalypse, to worlds and lives gone in the blink of an eye. After finding scientific evidence of a likely eruption, Herzog explains that almost every last person evacuated the town of Basse-Terre as fast as they could; and it is in such an empty world that

the film takes place. Herzog states that upon arrival, “The place was completely deserted, but in their haste, they [the townspeople] had forgotten to turn off traffic lights.” Chillingly, Herzog declares Basse-Terre a ghost town and recounts how the city, empty of inhabitants, is akin to what the world might look like after sudden human extinction: “The telephones were still working and the air conditioners and refrigerators in many houses were still on. In one house, we even found a TV set still operating.” The abandoned town was “as spooky as a science fiction locale” and, Herzog claims, when he and his cinematographer looked at the horizon, they were sure that “the mountain seemed about to explode.” With poetically charged voice over, Herzog assures his viewers that even the animals were preparing for a cataclysmic eruption and that, in the face of certain death, much of the fauna were fleeing to the ocean: “The sea was full of dead snakes. They had crawled down during the night by the thousands from the mountain jungles and fled into the sea, where they promptly drowned.” But most poignantly, Herzog describes the entire island as cloaked in a palpable tension driven by utter silence: “The silence grew ever deeper and the volcano, La Soufrière, shrouded itself in clouds. Nobody knew if the eruption would happen in the next few minutes, or the next day, and because one could not see a thing, the fear became anonymous.”

But, of course, as a “unausweichliche Katastrophe,” La Soufrière does not erupt. At the film’s culmination, Herzog states, “The volcano did not explode. Days came and went. The signs of a catastrophe began to diminish. After some weeks the population began drifting back to their homes, and villages and towns. It will always remain a mystery why there was no eruption. Never before in the history of volcanology were signals of such magnitude measured, and yet nothing happened.” The film that was to unveil a catastrophe and show a new attitude toward death has become

“embarrassed” and “has become a report on an inevitable catastrophe that did not take place.” The eruption has become a non-event. The “new attitude toward death” that Herzog sought to expose and explore in the end proves to be one and the same with the old attitude: waiting on an apocalypse that seemingly refuses to come, but still affects us. The film, which perhaps had the underlying ambition of revealing a voice from beyond the grave, instead captures and demonstrates a virtual event’s consequences. But more than just that, *La Soufrière* extends beyond capturing an attitude toward death by problematizing the volcano itself as landscape. In the end, the volcanic landscape of *La Soufrière* proves to be the real star of the film, despite the director’s intentions. The volcano, as landscape and percept, becomes both the literal and symbolic presentation of devastation and extinction that exists within all of us *as part of the preconditions for human culture, thought, and life itself*. Without the volcano, no film; without its imagined but staved off eruption no visceral contact with extinction and death and therefore no human meaning. The volcano always functions as a precondition of the human and also gestures toward the inhuman. The film is not an account of a disaster, but rather humankind’s ability to imagine a world that they are not a part of. *La Soufrière* captures a glimpse of a world evacuated, ripe for destruction, ready to be reformed.

For Herzog, this virtual catastrophe of *La Soufrière* is at bottom *the imagining of death and destruction of the human*: a vital part of the grammar of images. Yet it is also and inevitably linked to the creation of the new, and to the creation of the future – while one does not see it on film, it is obvious that life returns to the island and moreover goes on much as it did before. While *La Soufrière* presents these complementary and intertwined attitudes, it does so quickly and unreflectively, without fully fleshing them out, saddling Herzog with far more questions than it

provided answers. Given the superficial coverage of the volcano itself, it is more likely that the experiences of filming and producing *La Soufrière* piqued Herzog's interest in volcanoes and volcanic landscapes rather than demonstrated something he had carefully planned or thought through: the practically non-existent pre-production and skeleton crew for the film underscore this point. Instead, *La Soufrière* appears to have served as the spark that ignited the director's more specific and conscious interest in volcanoes and is likely one of the main reasons Herzog has returned to them time and again in more recent work.

This return, however, was long in the making. While there is ground for some comparison with volcanoes in works like *Lektionen in Finsternis* with its oil fields shooting geysers of flame, actual volcanoes are not returned to until 2009's *Encounters at the End of the World*. *Encounters*, set in frigid Antarctica, might at first glance seem an odd choice for discussing volcanoes – and the film does indeed explore a number of different themes and landscapes, not merely volcanoes – but several important scenes are framed around a group of volcanologists. Furthermore, Herzog cites his interest in a particular volcano, Mt. Erebus, as one of his inspirations for making the film. Working with only his cinematographer Peter Zeitlinger, Herzog wanted *Encounters* to be in the vein of Virgil's *Georgics* and described his vision for the project to Zeitlinger in the following terms: “He [Virgil] never explains anything, he just names the glory of the land. Let's do the same.” (*Guide for the Perplexed* 383). One of these Antarctic glories, Herzog explains, was Mt. Erebus, a massive Antarctic volcano: “[Mt. Erebus] is more than twelve thousand feet high and of particular importance for scientific study because the inner Earth is directly exposed inside its crater. Only two other such volcanoes exist on the planet. The glowing magma continuously spits out lava bombs, some of which

are the size of Volkswagens. There is a strange curiosity we humans have for the power of volcanoes, perhaps because they are capable of wiping out our entire species” (*Guide for the Perplexed* 384).

This strange power is once again linked to annihilation much like in *La Soufrière*, but this time on the global/species scale rather than in reference to a single island and its inhabitants. In *Encounters*, it is no longer an individual attitude toward death, but rather a social attitude toward species extinction that captures Herzog’s interest and focus.

Arriving at the top of the volcano, right at the lip of its massive crater, Herzog and Zeitlinger encounter the group of volcanologists, some of them lying prostrate and suffering from altitude sickness. “First thing,” Herzog states as the viewer sees aerial footage of the smoking crater, “we were instructed in the etiquette of dealing with this volcano.” One of the volcanologists and the leader of their expedition, William McIntosh, then explains in detail to Herzog the safety protocol for avoiding lava bombs. Reminding Herzog and the film’s viewers that one must under no circumstances turn their backs on the crater and the magma, McIntosh explains one must instead look straight ahead, attempt to judge the lava bomb’s course, and just “step out of the way.” The ecological implications of meeting natural and man-made dangers head-on resonate strongly, but also subtly here with the threat of volcanoes themselves being chiefly underscored. Directly thereafter in the following scene, Herzog turns his attention to another volcanologist. Speaking with Clive Oppenheimer – Herzog’s future collaborator on 2016’s *Into the Inferno* – Herzog presents to his viewers an account of an apocalypse that has already occurred, again at global scale. Oppenheimer states:

If we go back into the geological record, we see that there are huge volcanic eruptions, massive, explosive eruptions that produced thousands of cubic miles of pumice, showering large parts of the earth with fine ash. And these have been demonstrated to have had a strong impact on climate. And one of the biggest of these events 74,000 years ago has been argued even to have affected our human ancestors. And may have played an important role in the origins and dispersal of early humans. So, these events will recur and I think the more we understand about them, the better we can prepare for the...the...the...eventuality.

Herzog takes this provocation, an imagining of apocalyptic recurrence due to volcanic activity, and runs with it. In the portentous tone of one of his visionary characters, Herzog declares:

For this and many other reasons, our presence on this planet does not seem to be sustainable. Our technical civilization makes us particularly vulnerable. There is talk all over the scientific community about climate change. Many of them agree the end of human life on this earth is assured. Human life is part of an endless chain of catastrophes, the demise of the dinosaurs being just one of these events. We seem to be next. And when we are gone, what will happen thousands of years from now in the future? Will there be alien archeologists from another planet trying to find out what we were doing at the South Pole?

Ratcheting up the scale of annihilation from town to planet, as well as complimenting the idea of annihilation with the idea of a time that extends beyond the human, however, does not sate Herzog's interest in volcanoes. Continuing on from the initial contentions one finds in *La Soufrière* and *Encounters*, Herzog follows two lines of reasoning that conceptualize the volcano, both virtually and actually, with two more films, one narrative and one documentary, and both released in 2016: *Salt and Fire* and the aforementioned *Into the Inferno*. Each of these films utilize and further develop the links between landscape, subjectivity, and politics that I have argued for above.

Into the Inferno begins in typical Herzogian fashion. If the screen can be thought of as an entire world, this world is a volcano and nothing but a volcano. Set to a sweeping, operatic

soundtrack, the opening shot is a meditation on a volcano's lines and curves, a hovering study of its topography, its contours. As the camera hikes up the mountain face and peers down into the crater, revealing glowing red magma that churns and flows, the credits roll.⁴⁴ Yet it becomes quickly apparent that *Into the Inferno* does not present volcanoes merely as symbols of destruction. Herzog's on-screen interview with Clive Oppenheimer demonstrates this and frames the exploration of volcanoes in *Into the Inferno*:

Clive: Do you see them only in destructive terms, volcanoes?

Herzog: No, I do not. [pauses] Something different – it's good that they are there...and, uh...the soil we are walking upon is not permanent. There's no permanence to what we are doing. No permanence to the efforts of human beings, no permanence to art, no permanence to science. There is something of a crust that is somehow moving and it makes me fond of the volcano to know that our life, human life, animals, can only live and survive because volcanoes created the atmosphere they breathe.

Nor are volcanoes simply objects of scientific interest in the documentary:

Obviously, there was a scientific side to our journey. But what we were really chasing was the magical side; the demons, the new gods. This was the itinerary we had set for ourselves, no matter how strange things might eventually get.

And this “magical side,” these “demons” and “new gods,” are for Herzog nothing less than mythic and political forms, human forms of faith and belief. “Of all the volcanoes in Indonesia,” Herzog

⁴⁴ One is immediately shown that, while maintaining sole directing credit, *Into the Inferno* is “a film by Werner Herzog and Clive Oppenheimer,” a collaborative project. It is important to note that Oppenheimer, one of the volcanologists that Herzog met at the summit of Mt. Erebus while filming *Encounters*, receives creative credit. As a scientist, Oppenheimer supplies the film with a more precise, functional perspective on volcanoes, as well as professional connections within the field of volcanology that allow for focused interviews. Herzog, for his own part, sculpts the film into something more than a simple documentary, weaving Clive's interviews into a tapestry of Herzogian tropes and ensuring *Into the Inferno* fits into Herzog's larger body of work. But by specifically assigning a *creative role* to Clive Oppenheimer, Herzog creates a connection between the work of film and science that is central to his semiotic. By granting equal creative status to scientific inquiry, Herzog is making the bold move of making science and film interdependent in a novel way, as argued below.

claims, “there is no single one that is not connected to a belief system.” Volcanoes do not resonate with particular faiths or beliefs, but instead are bound to the very creation of those faiths and beliefs, be they mythic, religious, political, or even economic. Furthermore, for Herzog and his film’s subjects, volcanoes are again shown to be active landscapes, not just a destructive potentiality, but wellsprings of meaning, communication, and even kinship. The volcanoes of *Into the Inferno* do not simply inspire fear, but are instead presented as living entities that have an affective role for individuals, societies, and the species as a whole. To Herzog, they seem to form the pre-conditions of human existence tout-court. The volcanic landscape as percept *acts*. Volcanoes are therefore both benefactors and annihilators, givers of life and harbingers of death; in *Into the Inferno* they serve as an ur-landscape, perhaps the first of all, upon which all human endeavors take place and by the grace of which they continue to exist, both in terms of biology and culture.

This contention is the thread that ties the disparate times and places the film explores together. Early footage focuses on the village of Endu on the island of Ambrym in the Vanuatu Archipelago. Herzog provides a brief history of the village and its people: “A year ago, most of it was destroyed by a tropical storm of phenomenal force. But the village also has to endure the periodic fallout of volcanic eruptions. Punctuated by catastrophes, time does not seem to have found a grip on the community.” With the grip of time absent – more specifically a modern, Western time, a time that has put the subject in a position of crisis and has ever-increased its linearity and regimentarity to preserve and enhance Western identity structures⁴⁵ – Herzog demonstrates that

⁴⁵ For further explication of this process, see Isabelle Stengers and Didier Gilles essay, ‘Time and Representation,’ in *Power and Invention*, pp.176-211.

realms of human meaning and self-conception are still able to take on forms many in the contemporary world might find archaic, *specifically in reference to the volcano*. After brief introductions, Clive Oppenheimer sits down to speak with the village chief, Mael Moses. When asked what he feels when he looked into the volcano – an object of scientific study for Oppenheimer – Moses replies:

I felt very frightened to look at the fire. Secondly, I felt that I was not on the isle of Ambrym, I felt I was somewhere else. And the other thing, how powerful that fire is...It is our belief that spirits are in the fire. The fire is burning through that spirit...We are more or less related to the volcano...Once, I dreamt about the volcano. I saw people in that fire. People, women and men, they're cooking their food in there. So, it makes me believe there is somebody who is the spirit...We believe that anybody who dies here goes to the volcano and that the volcano has become the village. We can talk to them and they can talk to us. [When asked if he can talk to the volcano] I cannot because I'm not related to the volcano. But one of my brothers is. He was talking to the volcano.

While this passage functions primarily as a novel approach to volcanoes for Herzog's viewers, it also exemplifies the actualized side of crystalline functioning from its very beginnings, especially through its self-referentiality. The volcano, through its spirit, its fire, has reciprocal, familial relations with the inhabitants of Endu. By being both the origin and terminus of its people, the volcano is simultaneously an engendering, sustaining, and consumptive landscape.⁴⁶

⁴⁶ As Moses mentions almost directly thereafter, "Once upon a time our people were cannibals." The tribal dance and song that the children of the village reenact for Herzog's camera is meant to symbolize this past. The idea of self-referential consumption to usher in the new runs throughout the film and, it must be said, much of Herzog's work.

The subsequent scenes of *Into the Inferno* continually return to the tropes of self-referentiality, creation, sustainability, and destruction.⁴⁷ These tropes are chiefly addressed through the lens of national and cultural identity. In a scene near Lake Toba, Indonesia, Herzog presents a scene of “dignitaries” that are “charged with the task of reconciling the goddess of the ocean with the demon of the volcano.”⁴⁸ They do so through a ritual in which they reenact “a sexual union between an ancient sultan and the queen of the sea” and this ritual sustains their culture. In Ethiopia, Herzog looks at fossil evidence of the very first humans, imagining the “volcanic event” that caused the speciation of homo sapiens: an eruption so catastrophic that the human population was decimated and we nearly became extinct, uniting the entire species into a single lineage that stems from a small population that survived in Africa. In Iceland, Herzog presents a series of eruptions that show devastation but also life’s ability to change and adapt to post-apocalyptic conditions. Herzog links these eruptions to both poetry and national identity:

These primordial occurrences influenced the sense of mythical poetry of the Icelanders. There is a text that defines the spirit of the people. It exists only in a single manuscript. For Iceland, it is as important as the Dead Sea Scrolls are for Israel. The Codex was given as a present to the king of Denmark by an Icelandic bishop in

⁴⁷ In one scene, Herzog and Oppenheimer discuss the Kraffts – a French volcanologist couple who ultimately died in an eruption in Japan. Astonishing footage of rolling, roiling rivers of lava and fountains of flame from the Kraffts’ archives show them unnervingly close to volcanic events. Herzog then shows the pyroclastic flow that kills them as it blooms on the mountainside, with temperatures over 800 Fahrenheit. This underscores his position about how close one gets to a volcano is a practical matter of prudence. Herzog and Clive’s stance is to remain “sane” in all explorations, be they artistic or scientific. One must observe and report, but always at a critical enough distance to prevent being consumed by one’s subject.

⁴⁸ In the same scene, Herzog makes an important, ancillary comment. When Herzog sees the Sultan’s Mercedes “Wrapped in a bubble of plastic” he likens it to the “conceptual artist Christo.” This artist, along with his wife and partner Jeanne-Claude, (oddly born on the same day of June 13, 1935) is known for using “wrapping” public sites and buildings. This approach is said not to be ideological or teleological, but for its immediate aesthetic impact. For Christo (and Jeanne-Claude before she died in 2009), the purpose of this art is simply to “create works of art for joy and beauty and to create new ways of seeing familiar landscapes.” One imagines Herzog particularly enjoying Christo and Jeanne-Claude’s work as its inspiration is in some ways parallel to his own.

the 17th Century. Hence its name: the Royal Codex or Codex Regius. In 1971, Denmark returned it to Iceland. Knowing that it constituted the soul of the country, the Codex was put on Denmark's largest battleship and escorted by a whole fleet. No amount of money in the world would be enough to purchase this manuscript from Iceland, although it is battered and crumpled and filled with holes. [In the opening passages] There is an apocalyptic vision of the end of the pagan gods. This seems to describe a huge volcanic event. Similarly, in North Korea, *Into the Inferno* underscores the link between national, political identity and volcanic landscapes, grounded through the myth of Mt. Pektu, "the sacred mountain of the revolution." Oppenheimer states that "the spirit of the mountain is in all of the Korean People." Here, Herzog shifts perspective by presenting the social subjectivity engendered by the volcano *in both a positive and a negative sense*. A social rather than individual sense of subjectivity can have affective, unifying effects such as the ceremony of "collective dance" where the people utilize colored cards to literally become a work of art, perhaps unsurprisingly forming a landscape of Mt. Pektu. But despite the impressive form and presentation of the event, Herzog states:

In all this display of the masses, I find an underlying emptiness and solitude. Because of the North Korean ideology of political and economic self-reliance, and because of internationally imposed sanctions, the country is unique. The population at large has very limited contact with the outside world. There are no international phone lines or Internet available to the public. No radio or television from the outside world. To our eyes it is strange to see people not glued to their cell phones. There is no advertising anywhere, instead just the ever-present propaganda. There are no newsstands, only the official Party newspaper on display. In the subway, in the streets, you will find pictures of the leaders, always in the vicinity of the volcano.

Such tight knit, communal identity can activate and promote incredible individual human capabilities, evinced by the little girl piano prodigy. Yet – and more often it seems – it can also cause great difficulty by stifling personal expression. The unifying ideology of Mt. Pektu also turns news

and information into State propaganda and foments a dearth of individuation. In the end, Herzog finds that “the propaganda seems to create a quasi-religious experience.” And this propaganda is overpowering. When asking questions “meant to illicit a personal response,” party policies are provided rather than individual answers. To Herzog and Oppenheimer, “personal opinions seem to us as a mirror-image of the omnipotent ideology of the People and their Leadership.” In other words, they have taken the social nature of their subjectivity so far that they have come to shun individuality itself.

The final scenes of *Into the Inferno* return to the Vanuatu Archipelago, this time to Tanna Island and the volcano Mount Yasur. Herzog likens a new cult on the island to a capitalist ideology that likely hits closer to Western viewers:

Similar to North Korea, this volcano has created a new god – the name of the deity, John Frum, a mythical American GI who descended from the clouds. Each Friday night, the Islanders celebrate his cult...[already] different denominations and even a schism in the Church seem to have materialized. [John Frum] promises to return with copious cargos of consumer goods.

When interviewing the chief of the village, Clive Oppenheimer asks, “Is John Frum like a god? [chief nods] The one God? [chief nods].” The chief then answers, “John Frum is like a gate. Like Jesus. You have to pass through before going to God.” The American capitalist, replete with goods, will return, a modern Savior. Furthermore, seeing as it directly follows on from the critical position Herzog takes toward the North Korean lack of individualism, Herzog appears to be hinting the capitalism presents the same dangers when elevated to a natural law or a religious principle. Contemporary, late capitalism reinforces a move away from individual freedoms and toward a social, split subjectivity that is only placated through the narrow joys of what goods one can buy.

That Herzog chooses to end his film with an exotic new religion based on American consumerism and the nearly ubiquitous economic system of late capitalism is a powerful move to demonstrate how closely bound we all are to volcanic landscapes, no matter where, no matter when. Each of the locales he investigates is, of course, worthy of further exploration in their own right, though these cannot be fairly undertaken here. But what is vital to note is that, for Herzog, nobody and nothing, regardless of any circumstances, remains unaffected by volcanoes. Regardless of what culture one comes from or how one chooses to live their life, volcanoes play a key role for us as a species. Herzog states:

It is hard to take your eyes off the fire that burns deep under our feet. Everywhere, under the continents and sea beds, it is a fire that wants to burst forth and it could not care less about what we are doing up here. This boiling mass is just monumentally indifferent to scurrying roaches, retarded reptiles, and vapid humans alike.

In *Into the Inferno*, Herzog paints volcanic landscapes as an underpinning of human existence and thought, as the anchor of political and mythical being. Their inhuman power, their complete indifference, must be contended with; but one too must not become mesmerized by our own fascination with their awesome capabilities as both destructors and creators. To do so would be to risk one's sanity and life. Instead, one must come to terms with volcanic landscapes *in some measured way*. One must come to know the landscape (volcano) as an a priori condition and simultaneously take ethical responsibility for the various faces of human culture it engenders (myth and politics). Herzog dramatizes this contention in his final film that directly concerns volcanoes, *Salt and Fire*.

Salt and Fire is a narrative film is centered around the abduction of a "scientific delegation" sent by the UN to investigate a rapidly expanding salt flat in South America. These salt flats are known to be expanding at an alarming rate. Importantly, this is also widely known to be a man-

made disaster. Led by Professor Laura Sommerfeld (Veronica Ferres) – who is accompanied by the lecherous, yet poetic Dr. Fabio Cavani (Gael Garcia Bernal) and the conscientious and exacting Dr. Arnold Meier (Volker Michalowski) – the scientific delegation has as its mission to collect data and discover precisely at what rate the salt flats are expanding. This “ecological disaster” is known as “Diablo Blanco,” the thinly veiled gloss of White Devil.⁴⁹ Though the disaster is at present an unfamiliar term, Sommerfeld assures viewers that “Diablo Blanco will soon be a household name.” Before the delegation perform their research, however, they are kidnapped by Matt Riley (Michael Shannon), the CEO of “the Consortium,” a corporation that is according to Sommerfeld, “responsible for the Diablo Blanco disaster.” Riley – though he was not CEO when Diablo Blanco began – feels responsible for the disaster, even though Sommerfeld comes in some small way to his defense by stating it is “not a singular event” but instead has “developed over decades,” facts which can be checked and verified by scientific data and statistics.

Diablo Blanco, however, is not the only ecological danger present in the film. *Salt and Fire* also uses the massive “dormant volcano,” called Uturunku, as a major plot device. At a crucial stage in the middle of the film, Riley explains to Sommerfeld that Uturunku will one day destroy the

⁴⁹ The Diablo Blanco is another sign that Herzog view’s face/landscape in a pragmatic manner much akin to Deleuze and Guattari. The latter assign “year zero” as the foundation of the “faciality machine,” simultaneous with the birth of Christ and “the historical development of the White Man” (*A Thousand Plateaus* 182). The ever-expanding “White Devil” in South America seems an obvious reference to the effects of colonialism geographically, politically, religiously, and economically. What is most threatening about the Diablo Blanco is its homogenizing effect - that it has the potential to turn all of the landscapes of the world into one giant sea of salt. What this actually does, Deleuze and Guattari argue, is to attempt to eradicate all other semiotic systems. “Our semiotic of modern White Men, the semiotic of capitalism, has attained this state of mixture in which significance and subjectification effectively interpenetrate... we must, however, assess the states of the mixture and the varying proportions of the elements” (ibid.). And, as presented below, it seems more than coincidental that Herzog houses Riley’s attempts to show Sommerfeld that there is more to her life and the world’s problems than a scientific study of the Diablo Blanco by showing her anamorphic versions of Rembrandt’s *Descent from the Cross* and the literal inner landscape found within the halls of the Santissima Trinità.

world. He claims that the volcano is expanding rapidly and they are already experiencing “permanent, around the clock tremors.” “When Uturunku erupts,” Riley declares, “our entire planet will be obscured for decades. It won’t matter if you live in the Arctic, the Himalayas, or Australia. We will disappear as a species.” To this Professor Sommerfeld replies: “I am more concerned with what we have created here, here and now: a gigantic salt flat that is expanding rapidly.” He counters: “So am I. But what may overtake it all is the fire lying underneath. We must face both. Salt and Fire. Here lies a monster on the verge of waking. My guess is one day soon, everyone will know how to pronounce ‘Uturunku’...Uturunku.”⁵⁰ The characters thus face two impending problems and must find a way to face both the ever-expanding salt and the planet-wide threat of volcanic annihilation.

This connection between salt and fire – between man-made and natural apocalypse – is a direct parallel to *Salt and Fire*’s ties between landscape and face, between social subjectivity and politics. An early scene where Sommerfeld and Riley speak for the first time illustrates and develops this beautifully. Blindfolded and handcuffed, Sommerfeld is led into a lavishly furnished room and seated. All of her captors wear ski-masks, their faces obscured. When Sommerfeld asks for the name

⁵⁰ This speech is the obvious inspiration for the film’s title, *Salt and Fire*, but it is also important to note that both of these phenomena are – at least to some degree – grounded in reality. The Diablo Blanco scenes were filmed at the Salar de Uyuni in Bolivia, the world’s largest salt flat at 4,086 square miles. The Salar de Uyuni is also the flattest area on Earth with an average elevation change of only one meter across its entire surface. Because of this, the Salar is used to calibrate the altimeters of Earth observation satellites. Uturunku, too, is a real, physical location rather than a fictive aspect of the film’s structure. Uturunku is an actual volcano in the Cordillera di Lipez mountain range in Bolivia, with two peaks that raise up either side of a fumarole field, a direct opening in the Earth’s crust. The highest peak is a staggering 19,711 feet above sea level. Since 1992, satellite data has indicated that a major uplift of the ground is taking place centered around Uturunku, most likely an indication of an immense magma intrusion under the volcano. This has led contemporary scientists to believe Uturunku might be the site of large-scale volcanic activity in the future, possibly including “supervolcanic” eruptions and caldera formation. Riley is aware of these facts and kidnaps the delegation of scientists by and large to make these views known. But it is important to note that while the threat of supervolcanoes like Uturunku is indeed scientific fact, the Diablo Blanco is empirically fiction. The Salar de Uyuni upon which it is based is not man-made at all, but was formed by through sequential transformations in several prehistoric lakes and is not expanding.

of her captor, he replies, “as long as I wear this mask, I have no name.” To which Sommerfeld rejoinders, gesturing to Riley’s associate, “But I know the face of this gentleman.” Riley understands that she has indeed seen his associate, that the mask is superfluous. Calling him “Krauss” (tellingly, Lawrence Krauss, an actual theoretical physicist and cosmologist), the associate removes his mask. Yet, this confuses Sommerfeld due to the fact that when she met him initially, the man introduced himself as “Aristides.” The brief conversation that follows establishes an important initial connection:

Sommerfeld: Krauss? You said your name was Aristides.

Krauss/Aristides: In fact – if facts count here – it isn’t Aristides.

Sommerfeld: So, it is Krauss?

Krauss/Aristides: Yes and no.

Sommerfeld: And how were you able to get here so quickly?

Krauss/Aristides: We have our ways.

Sommerfeld: And who is we? I would like to know.

Riley: We? That is basically me.

Krauss/Aristides: I am the brain.

Sommerfeld: I’m leading a delegation; I’m responsible for its members. Where are they? Are they alright?

Riley: I can assure you they are fine.

Sommerfeld: I accept no assurances from an unidentified man with no name and no face. I want to see them now!

Riley: Well, hopefully, the time will come when there are no more secrets between us.

Sommerfeld’s position as a scientist and political representative shows her marked connection to the face and to names as a marker of individual identity. But Krauss/Aristides – and to a degree Riley’s – positions confound her, stemming as they do from a social subjectivity or multiplicity. Sommerfeld

wants a clear distinction between individuals, but none is given. Each of the men are “basically” a “we,” rather than an I. They do not take a transcendent subject position, but rather an immanent position within subjectivity, a subjectivity *within time*.⁵¹

This novel, social view on subjectivity can also be linked back to landscape in a later scene focusing on anamorphosis. Still questioning the validity of Sommerfeld’s insistence on certainty and scientific data, her predilection for politics and faces, Riley presents Sommerfeld with an aesthetic example of his own position: an anamorphic version of Rembrandt’s *The Descent from the Cross*⁵²:

Riley: You see, this is what your situation must look like to you: unclear, contorted. But if you move one step further everything falls into place. Everything makes sense. At least that’s what I think; it’s a question of what angle you choose to look from.

Sommerfeld: That sounds like a banality. Like, like...

Riley: Like what? I’m open to criticism.

Sommerfeld: Well, I don’t want to sound insulting, but it sounds like a shallow pseudo-argument, like ‘all Africans have rhythm in their blood.’

Riley: I bow to you. May I be more precise about different angles, perspectives?

Riley’s different angle is another anamorphic example from Rome in the Convent of Santissima Trinità. Here, a long corridor shows an idyllic picture of “a saint, sitting under a tree.” But as one walks down the corridor and their perspective shifts, the form of the saint changes. “The nearer one

⁵¹ Riley underscores the multiplicity within subjectivity in a later scene, where he declares that “truth is the only daughter of time.” That is, for Riley – and by extension Herzog – human truths, including any sense of true identity are temporal subjective formations, processes of subjectification literally born of time, rather than being transcendent objective states.

⁵² Supposedly according to Rembrandt himself, *The Descent from the Cross* portrayed “the greatest and most natural movement:” an unanimated body drawn toward the Earth with the full force of gravity. This work shows Jesus’ dead body being taken down after crucifixion, but does so in a stark realism that previous versions of the moment – such as Rubens’ *Descent from the Cross* – lacked. In Rembrandt, Christ does not appear heroic in the slightest, but as an ugly, dead weight: a body and nothing more being lowered after expiration.

approaches,” Riley states, “the more incomprehensible the forms become.” Yet, at a certain point, another shift in perspective occurs and things start to make sense once again, albeit in an entirely different way. Crucially, “the folds in the saint’s cowl” turn into a “vast, stretched out landscape.” As Herzog is so apt at reminding us, there are literal landscapes inside of the individual subject, ‘inner landscapes’ that only become sensible from a certain perspective, an aesthetic realm that lies buried within the politics of the face and even our means to obscure it.

In this manner the two key characters in the film, Sommerfeld and Riley, are emblematic of their own respective landscape: the salt flats of the Diablo Blanco in Sommerfeld’s case and the volcano Uturunku in Riley’s. What is vital to underscore, is that, for Herzog and his characters, both of these ecological disasters must be accounted for and dealt with – one actual disaster in the case of the Diablo Blanco, which is expanding at up to “800 square miles every year” and could one day “cover the entire continent one day,” or even, as Riley speculates, “all landmass on the planet;” and one virtual disaster in the case of Uturunku, a real threat of annihilation that exists in time, but is not actually present. What the film makes clear is that a dialogue between the two positions must at all costs be established, the dangers of each noted and acted upon where they can. Riley seems to know this and takes the drastic measure of stranding Sommerfeld out in the Diablo Blanco with two Inca children, long enough for delirium to set in for her, for Sommerfeld to quite literally hear the sounds of Uturunku and begin to come to terms with its awesome power. This changes her perspective. As she states in one of her video recordings in the Diablo Blanco, “My wish to have my scientific instruments with me is vanishing. The ocean of salt around me changes my way of seeing things...it’s like an alien planet, but this is not a foreign world.” It begins to dawn on Sommerfeld that in order

to properly address the actual threat of the Diablo Blanco, she must also come to terms with Uturunku, which she accomplishes through her aesthetic, ecstatic experiences of the landscape. In order to address impending ecological disaster, she must come to terms with her own subjectivity in a new way.

Riley's side is no different. While he has a greater awareness of the situation than Sommerfeld initially does and understands the importance of facing both salt and fire, he knows he cannot change Sommerfeld's mind without risking a part of himself. When Riley returns after many days to the Diablo Blanco to rescue Sommerfeld and the boys from their dire circumstances, it is revealed that the Inca boys are his own children. Raising his sons in his arms, Riley turns to Sommerfeld and croons, "You are part of the family now, so to speak." Knowing that he will eventually very likely find himself in prison, Riley also takes the opportunity to reveal to Sommerfeld that he abducted her so that the eventual report to the UN would contain "something more than scientific data, graphs, and lifeless statistics. A report with something different in it." Before leaving, point made, Riley also cannot resist the opportunity to reiterate the importance of perspective and landscape. In a series of humorous poses, Sommerfeld, Riley, and the two children utilize perspectival shifts to put themselves in ridiculous positions: held in each other's hands, standing in a spoon as if they were about to be eaten like breakfast cereal, and even fleeing for their lives from a tiny toy Godzilla placed near the camera in order to appear enormous. As a parting gift Riley gives Sommerfeld a first-class plane ticket to Rome, just to see the anamorphic hallway in the Santissima Trinità for herself, and in person.

Salt and Fire in the end proves itself to be a call for the burgeoning relationships between science and art, between politics and social subjectivity, between landscapes (in particular the volcano) and faces, to be rigorously developed. Through this process, parallels between functional scientism and immanent art become obvious. By juxtaposing the salt of Diablo Blanco with Uturunku's fire, Herzog seems to be arguing for a dialogue, or even a more passionate relationship as the sexually charged final scene alludes to, between science and art, as well as between transcendent and immanent modes of thought. Furthermore, it is not much of a stretch for one to see the director placing himself in Riley's shoes. As *Salt and Fire* shows, the task of a filmmaker like Herzog seems, just like Riley, to accept the responsibility – even at the cost of going to prison – of providing new percepts and landscapes to his viewers. While this might seem to some a romantic or even sanctimonious task, Riley's insistence on coming to terms with his own choices throughout the film hint toward some sort of confession, even if he never truly hopes to be forgiven.⁵³

In the end, volcanoes in Herzog serve not as a cinematic trope but as powerful percepts. Volcanoes are, empirically speaking, sites of both destruction and genesis, the potentiality for development and ruination for all life on the surface by supplying the a priori condition of firmament. The volcanic landscape has the *temporal qualities* of being both before and after the human; through volcanic landscapes we can both look into the past and predict the future. Volcanic landscapes also serve as monstrations for a subjectivity where "I is another." Throughout his oeuvre,

⁵³ Can one not but see a correlation here to Herzog's own life and work? Can one not see here a grounded pragmatism that still searches for a wider audience and effectuality? While it is fair to critique Herzog's attitude – which can at times seem paint him as an outsider or even martyr – one must also pay attention to the myriad details and divided characters of his protagonists. Riley of course does have a face – which he reveals to Sommerfeld – and a politics. In fact, he is directly engaged as CEO of the Consortium. But his entire role in the film is dedicated toward turning attention back to spirit, to fire.

Herzog invokes volcanoes as a diagram for the cultural mechanics of human thought: the myths, politics, arts, and sciences through which we ground our self-conceptions and daily lives. Volcanoes in Herzog are as a result shown to be part of the preconditions of subjectification and its antecedent faces – the varied political and mythic forms human cultures take on. But volcanoes also inevitably lead beyond those same faces; they force something “in addition” to appear and transform those faces continually, consuming the old and ushering in the new. Volcanoes unceasingly bring with them the threat and promise of apocalypse, whether dormant or active. Volcanoes form literal surface – as Herzog himself attests, they are what create the physical “crust” of the Earth. Volcanoes hit upon the deepest parts of the human psyche, directly engage with the human soul and spirit, by creating surfaces that demonstrate “there’s nothing deeper than skin”⁵⁴ for both the human and the Earth itself (*Negotiations* 87). Volcanoes reveal the surfaces of time.

I would therefore like to suggest that volcanic landscapes in Herzog can be seen to operate under a single conceptual umbrella: volcanic (sur)face. The prefix sur- is derived from both Old French and Latin, where it took on several uses. By and large, it conveys meanings of “over,” “above,” “beyond,” or “in addition” to something, much akin to the Latin prefix “super-”. Take, for example, a surcharge – an additional fee tacked onto a standard charge – or even to survive – to live “beyond” an event that places something in mortal danger. Given my discussion of film and its

⁵⁴ This quotation, taken from Valéry, is one Deleuze is very fond of. He describes it as “a wonderful saying. Dermatologists should inscribe it on their doors” and then goes on to describe philosophy as “a general dermatology or art of surfaces” (*Negotiations* 87). In terms of mathematics, Riemann could also be invoked as a means to explain the differential geometry of surfaces.

inherent engagement with the problematics of spacetime and “reality,” one could also think of surrealism, which was conceived of as an artistic attempt to transcend the boundaries of consciousness and rationality by engaging unconscious creativity and performing irrational juxtapositions. Yet, sur- can also have the opposing meaning of “before,” “below,” or “under.” Sur- is not merely derived from super- in Latin, but also sub-. Take here, for example, surrogate and its synonym subrogate. Alternatively, something done surreptitiously is the snatching or seizing (*rapere*) done “under” and/or “before” (*sub*) the awareness of another. Volcanic (sur)face takes on both of these senses. Volcanoes create and destroy; they form (sur)face through their magma and lava, through their inner fire⁵⁵ where the inner earth is “directly exposed” and threatens to break through, consuming what is and producing the preconditions for what will be.

By combining these seemingly paradoxical positions, volcanic (sur)face takes on a single, concise definition: *volcanoes are for Herzog the ur-landscape of thought*. Just as the “direct” experience of their physical reality set the preconditions for our emergence as human beings, volcanoes simultaneously remind us of our inevitable extinction as a species on Earth. If Herzog’s cinema is grounded first and foremost in a non-ironic “grammar of images” and the time-image in particular,

⁵⁵ In his *Psychoanalysis of Fire*, Gaston Bachelard presents an account of fire that fits by and large well with Herzog’s own use, especially in terms of volcanic (sur)face. First, Bachelard states that fire is “a privileged phenomenon which can explain anything...an ultra-living element” (7). Fire is “inanimate and it is universal. It lives in our heart. It lives in the sky. It rises from the depths of the substance and offers itself with the warmth of love. Or it can go back down into the substance and hide there, latent and pent-up, like hate and vengeance. Among all phenomena, it is really the only one to which there can be so definitely attributed the opposing values of good and evil. It shines in Paradise. It burns in Hell. It is gentleness and torture. It is cookery and it is apocalypse...it is well-being and it is respect. It is a tutelary and a terrible divinity, both good and bad. It can contradict itself; thus it is one of the principles of universal explanation” (ibid.). In his conclusion, Bachelard states that his goal was to show that fire is, “among the makers of images, the one that is most dialecticized. It alone is *subject and object* (italics in original. 111). Herzog, for his part, seems more indifferent to the “good” or “evil” of fire, but more keenly interested and aware of its capacities for creation and destruction. Volcanic fire seems to function as an inhuman and indifferent Alpha and Omega.

the site where the virtual and the actual meet in the event of creation, volcanic (sur)face can be seen as the director's attempt to come to terms with their functioning in terms of genesis and annihilation. Volcanoes are the escape route from crystalline economy, those violent eruptions that inevitably bring about and mark change. Volcanic (sur)face is, simply put, a manner of charting out our history and projecting our future. From the position of the present, volcanoes allow Herzog to look back into the past and forward into the future. In the volcano's fire, one sees both beginning and end. The "direct" experiences of this inner landscape, of volcanic (sur)face as a percept in turn opens new avenues of subjectification. Herzog's work on volcanic landscapes therefore underscores the differences between individual identity and social subjectivity, between linear and nonlinear conceptions of time. This new subjectivity, taken not as historic metaphor but as empirical fact overturns many critiques of Herzog's aesthetic and political positions. Viewing Herzogian subjects as arising from nonlinear time does not free his films from the need of analysis and critique, but it does fundamentally alter their scope. By staring into the fire that moves beneath our feet and forms the preconditions of our cultural lives, Herzog's volcanic (sur)faces demands a rethinking of ourselves as collective entities, with all the positive and negative consequences such thinking will bring about.

CHAPTER IV

The Covenant of Connection: Informatics and Technological Theology in *Lo and Behold*

Poetic Formula: "You Must!"

As Western society has moved from a disciplinary model to a model of control,⁵⁶ protocol has become the primary paradigm of organization, not only within information technology, but our everyday lives. And this includes first and foremost the way we find, direct, and produce information: through the use of computers and computer networks, most centrally the Internet. I contend that it is precisely the confrontation between cinema and informatics – humankind’s most specialized system of information and protocol – which will determine the “life or afterlife” of cinema lies at the heart of Herzog’s recent documentary, *Lo and Behold*. Moreover, I would like to argue that Herzog’s film presents just such a question which “goes beyond” traditional notions of information and protocol to informatics and challenges the moral demand “you must!” with a humanist ethics that peers deeply into our increasingly connected and informatically protocoled world. “If the cinema is an ontology,” Galloway contends, “the computer is an ethic” (*Interface Effect*

⁵⁶ *Control* is the primary paradigm under which political power flows across most of the globe today, inevitably bound up with and even indebted to the manner in which information is collected, analyzed, and put to use. The crux of the dilemma is that in the information age, the future itself has become our most prized possession, economically and personally, and controlling the future is a matter of controlling the present with informatic predictions. This is not a sudden change, but has come about through the rapid but steady development of computing technology and informatic networks that has been taking place for more than fifty years. Late in his life Deleuze went so far as to define the contemporary Western world as a “society of control.” A society of control is both an important contention and an apt term, but I would argue that it is more specifically the controlling of information that makes the world go around today. Whereas the former, disciplinary societies of the 20th century were mobilized and managed biopolitically, today bodies themselves have waned in importance and it is now the measurable and recordable interactions – the information that bodies generate – that holds primary political currency. By collecting information *on* bodies rather than directly organizing bodies themselves, control is all the more easily and indirectly exerted, not merely over individual actions, but down into the deepest spaces of human thought. For following flows of information becomes a bodily issue, a way that control can be exerted from within the individual, rather than imposed on them from an external source of power. And this is increasingly easy through connective electronic platforms, most centrally the Internet.

10). And, as Herzog demonstrates with his film, it is to our computerized and protocologically determined society that we must turn our critical consciousness if we are to develop an ethic appropriate to the physical realities we now face.⁵⁷ Ethics and ethical behavior is no longer merely a

⁵⁷ Computer protocol has become such a prevalent, ubiquitous part of everyday life it now goes largely unnoticed. It is so prevalent, in fact, that Alexander Galloway refers to 21st Century Western society as an “algorithmic culture” predicated on drop down computer protocol. But protocol, just like information, has a definition and function that exceeds common conception. Computer protocol is not a simple command function as to the manner in which one must do something, but rather presents the path of least resistance as the most desirable option. Protocol does not present a specific command “you must do X,” but rather cries “you must!” and awaits compliance through personal choice. Protocol “controls” most efficiently by presenting the “freedom” of the easiest or seemingly best choice. And it does so by developing ever more homogenous and organized circuits. Protocol creates a decentralized system of control by unifying decision making and altering but also reinforcing the “good” of its own functioning through repetitions of a desirable goal. “You must!” because it is the easiest and therefore the best thing for you – not because it is what you want or even need.

Galloway provides an excellent example of protocol by utilizing the analogy of driving. For example, when looking at a given “highway system,” there are a number of routes one can take between a point of origin and a given destination. However, along the route there are various signs and symbols that compel certain behaviors along the route, forcing one to “stop at red lights, stay between the white lines, follow a reasonably direct path” etc. (*Protocol* 7). And it is all of these material rules and “suggestions” for behavior that are the definition of protocol. One could, of course, ignore the rules of the road, but then must suffer the consequences. Today, one can see this even more clearly in the example of Google Maps, which suggests the “best route” based primarily on time of arrival rather than any other factor. If one wanted, for example, to simply take back roads to their destination, Google Maps loses much of its charm, even though the program itself attempts to mitigate this by supplying options like “avoid highways” or “avoid tolls.” The computer protocols that present the various routes can then be more concisely defined as “a technique for achieving voluntary regulation within a contingent environment” (ibid.). They are presented as the paths that one *wants* to follow, disguising their controlling capacity.

What is key to highlight here is that these choices, controlled through protocol, correspond to human decisions within physical systems. As another example, Galloway speaks of a neighborhood where speeding has become a problem. Two options are presented for rectifying the situation: one is to decrease the speed limit and put up clearer signs that declare the speed limit enforceable by law, the other is to install speed bumps on the street. While one would commonly think of policing to be the protocological approach to the problem, they are so only in a very limited manner by merely being *symbolic*; it is in fact the speed bumps that are more efficiently protocological. As Galloway puts it, police compliance is at a fundamental level “nothing more than a polite request” and one could simply decide that the fines one might accrue were worth the experience of traveling at higher speed (*Protocol* 241). The speed bumps on the other hand are indeed fundamentally protocological because they “create a physical system of organization. They materially force the driver to acquiesce. Driving slower becomes advantageous. With bumps, the driver *wants* to drive more slowly. With bumps, it becomes a virtue to drive slowly” (ibid.). Protocol is always affective at the physical level; it is bodily affective and works directly on *thought and desire* by autocatalytically looping toward ever more homogenous definitions of the good, which flow directly out of the laws of a given protocological system. Protocol is, simply put, a physical system of decentralized control that functions by rerouting the *flow of information* in a given system. 21st Century ethics demand a deep understanding of protocol and its drastic effects on human society and individual desire.

covenant between the individual and a system of abstract law that they adhere to, but also involves a great number of physical practices centered most chiefly around the use of informatic devices.

Embedded within the film's full title, *Lo and Behold: Reveries of the Connected World*, one sees an allusion to the social subjectivity I have argued that Herzog maintains within his film semiotic: the world is immediately presented as a thoughtful, superjective entity, capable of reverie and perhaps even dreams.⁵⁸ In short, the world is presented as the brain that forms through Internet connection, through the "free" exchange of information. The film's main advertising poster and Blu-Ray cover attest to this, presenting a man in business attire whose entire head has been replaced by a globular mass of interconnected wires.⁵⁹ Furthermore, the film's title carries obvious biblical overtones, tying informatic science to religion and both to the function of reverie before the first frame.

The phrase "lo and behold" comes from the 15th chapter of Genesis, concerning God's covenant with Abraham [Abram], centered around the latter's confusion over who should inherit the fruits of his labor, seeing as he was childless:

⁵⁸ Perhaps the most complete and systematic examination of reverie as concept can be found in the work of Gaston Bachelard. Critiquing psychoanalysis, Bachelard juxtaposes reverie and dreams, making an important distinction between the two terms: "Reverie is entirely different from the dream by the very fact that there is always more or less centered upon one object. The dream proceeds on its way in linear fashion, forgetting its original path as it hastens along. The reverie works in a star pattern. It returns to its center to shoot out new beams" (*Psychoanalysis of Fire* 14). This sort of "return to the center" through a "star pattern" is a key component to understanding the role of reverie in Herzog's film and the form his investigations take, returning time and again to singular themes. Unfortunately, though Herzog chooses this term in his title, reverie is conflated with the dream at certain points in the film. When Herzog speaks of dreams, reverie, or imagination, he is essentially and perhaps unwittingly presenting varied forms of logic, which would have varied answers in terms of his singular object, the Internet.

⁵⁹ In order to see this image:

https://www.google.com/url?sa=i&source=images&cd=&cad=rja&uact=8&ved=2ahUKEwiBp6eI_vzgAhURd98KHVjXD_AQjRx6BAgBEAU&url=https%3A%2F%2Fwww.indiewire.com%2F2016%2F12%2Fflo-and-behold-werner-herzog-movie-poster-1201757439%2F&psig=AOvVawIcar-KnRJxkR5N2JITPMFz&ust=1552493187485892

- 1) After these things the word of the Lord came unto Abram in a vision, saying, Fear not, Abram: I am thy shield, and thy exceeding great reward.
- 2) And Abram said, Lord God, what wilt thou give me, seeing I go childless, and the steward of my house is this Eliezer of Damascus?
- 3) And Abram said, Behold, to me thou hast given no seed: and, lo, one born in my house is mine heir.
- 4) And, behold, the word of the Lord came unto him, saying, This shall not be thine heir; but he that shall come forth out of thine own bowels shall be thine heir.
- 5) And he brought him forth abroad, and said, Look now toward heaven, and tell the stars, if thou be able to number them: and he said unto him, So shall thy seed be.
- 6) And he believed in the Lord; and he counted it to him for righteousness.

This Covenant is, of course, the foundation upon which the Judeo-Christian and Islamic faiths are grounded: the children of Abraham prospered and spread out, creating the cultures and histories of Europe and the Middle East, essentially founding the West itself. From its very first scene, *Lo and Behold* makes it clear that its subject is just such a revolutionary event, a true genesis on par with the Abrahamic Covenant in terms of potential impact – the Internet. Over a shot of students milling about on a sun-drenched California quad, Herzog narrates:

This is the campus of the University of California in Los Angeles. Today, no one of the students is aware that this is Ground Zero of one of the biggest revolutions we as humans are experiencing. One of the science buildings here is considered the birthplace of the Internet...The corridors here look repulsive, and yet this one leads to some sort of a shrine, reconstructed years later, when its importance had sunk in.

This “revolution” of information technology and the Internet serves as a Covenant, upon which a new world can be founded. And it is quickly underscored that it is not simply one of Herzog’s stylizations that paints the creation of the Internet as a religious event. In the film’s initial interview, Leonard Kleinrock, a computer scientist at UCLA, relates the story of the birth of the Internet, utilizing similar language, charged with religious fervor: “We’re now entering a sacred location. It’s

the location where the Internet began. It's a holy place." Speaking of, and physically demonstrating the "military hardened" machine that sent the first message on the Internet, Kleinrock relates why Herzog chose his religiously inspired film title:

This particular machine is so ugly on the inside, it is beautiful. It has a unique odor, a delicious old odor from all the old parts. It consists of modems, CPU logic units, memory, power supply: all the things you need to make an efficient computer work...It was from here that the first message was sent. A revolution began...and what was that first message? The first message ever on the internet was LO⁶⁰, as in Lo and Behold. We couldn't have asked for a more succinct, more powerful, and more prophetic message than 'LO.'"

Only now, that our world is so drastically affected by the Internet, so irrevocably entangled within the worldwide exchange of information, can we begin to come to terms with the new world the Internet has ushered in. Both in terms of philosophical reflection and the simple scale of how it has altered the everyday, the Internet has challenged the very conception of what it means to be human. As Herzog relates through graphic example, the daily data flow over the Internet is so vast it can truly be said to be astronomical: "No one at that time [early stages of Internet] had a clue about the explosion of information technology. Today, if we would burn CDs of the world wide data flow for one single day and stack them up in a pile, this pile would reach up to Mars and back. The Internet is already permeating everything." And, of course, with the number of Internet users and connected devices rising daily, this is just the tip of the iceberg.

⁶⁰ Kleinrock explains that this occurred by attempting to make the first server to server communication. The computer that sent the message required on computer to type LOG, with the computer finishing by typing an IN, to complete the login. The first two characters were properly sent, but then the computer crashed when attempting the type G, making the first message ever received over the Internet LO.

That the Internet has become a core part of our everyday lives is, of course, no exaggeration. Much of *Lo and Behold* focuses on just a few of the myriad ways that the Internet has been and continues to be utilized, leading to a massive range of innovations, many of which will further alter everyday life and make it more comfortable, but the film also explores the undesirable effects on society those innovations bring in tow. Herzog presents potentially positive examples such as a video game created by a team of computer scientists to aid molecular chemists and molecular biologists in data collection and problems with “molecular folding,”⁶¹ self-driving cars,⁶² and a team of soccer playing robots at Carnegie Mellon University that one day hope to challenge the FIFA World Champions and win by 2050.⁶³ But he also demonstrates digital threats such as hackers and cyber

⁶¹ Adrien Treuille, a computer scientist at Carnegie Mellon, explains how the video game community came together to solve issues involving molecular “folding” that holds back contemporary research in medical areas like cancer and AIDS, a game “created by science but scored by nature.” This is because the virtual molecules created within the game are actually synthesized in the Carnegie Mellon lab. Furthermore, there is the rather interesting system of “harmony” for a successfully assembled molecule in the video game and a “dissonance” for one with a compromised or impossible structure. This, perhaps oddly or perhaps tellingly, parallels in the Leibnizian problematics of folding and harmony, as presented in Deleuze’s conclusion to *The Fold: Leibniz and the Baroque*, and giving modern computer science and molecular chemistry a neo-baroque form for their own subjects and links them to music. In the face of such a problem, tens of thousands of people played the game and, though the film provides no detail as to how, solved the issue with folding the scientists had encountered. Herzog claims that “Within days the world responded. And it was beautiful.”

⁶² Self-driving cars are addressed chiefly through the lenses of a virtual world that machine intelligence can “see,” as well as the increasing obsolescence of human labor. Sebastian Thrun, for example, believes education is the key as machine intelligence will make it all the more difficult to make a “contribution” in the future and people want to contribute to the world and their fellow humans as a fundamental drive. Thrun believes that the Internet makes possible open-sourced collaboration and provides a powerful platform for human innovation, even as that field continues to shrink. For his online course at Stanford, Thrun had 160,000 students. However, “The top 412 students, they weren’t at Stanford...the best performing Stanford student was number 413...that kind of opened my eyes. For every great Stanford student, there is 412 amazingly great or even better students in the world that don’t make it to Stanford.” Moreover, Thrun attests that cars have the ability through social networking to learn from each other in an unprecedented way when compared to humans. They quite literally learn from every mistake that any one of them on a shared network makes. The question for Herzog concerning self-driving cars, however, quickly becomes one of ethics. If a given car “literally sees a virtual world” by emitting light lasers and receiving input from their reflections, who takes responsibility for such vision. Herzog narrates: “The big question is does it understand an ethics of the human? Does it understand the values of human society?” The question for Herzog is “who is going to be liable for an accident? The onboard computer? Its designer? The GPS system? The Internet? Or the driver, who eats his breakfast?” These questions are not directly addressed in the film, but are left hanging for the viewer to ponder.

⁶³ These researchers are particularly fond of an individual robot that scores a great deal of goals, known as “Robot 8.” Herzog takes the opportunity within this scene to problematize human and machine relationships, asking a young

warfare⁶⁴ and problematizes the issue of addiction to virtual worlds, as evinced in the shocking case of Tom, a young man that attempted suicide by drinking himself to death after he had gotten to the point of playing video games “16 hours a day, often drunk” and had lost his “will to live...[was] just waiting for the timer to run out” or in the scenes from South Korea where young people wear diapers while playing video games so as to not “miss points by going to the bathroom.” In typical Herzogian fashion, catastrophic events are also imagined in terms of the Internet and Herzog claims that in the event of massive solar flares – which have been scientifically determined to happen in cycles “every few hundred years” – much of digital technology would become useless and the loss of the Internet would likely cause a societal collapse.⁶⁵ However, rather than dwell on these issues at

researcher if he “loves” Robot 8 and finds, indeed, the young man does. But the scene is also utilized to demonstrate a live example of artificial intelligence in action, thinking computers “playing” and literally “seeing” a virtual world. Additionally, this scene likely serves as a good example of one reason Herzog maintains such an active interest in soccer and speaks often of it in his interviews. As Gregg Lambert notes, “the ‘goal’ in soccer is a perfect illustration of the nature of the cinematographic event. Although the various components and elements that come together as its condition (the ball, the players, the grid or field of play, the rules of the game, etc.), they do not take on the form of a direct causality, because the scoring shot is an *effect* that surpasses all of the former even though it presupposes their free and indeterminate coordination” (IST, 157). This scene, too, presents a cinematographic event driven through artificial intelligence.

⁶⁴ Herzog especially focuses on human error in these two areas, through interviews Kevin Mitnick “a demigod among the community of hackers” and security analyst Shawn Carpenter, who speaks cautiously about the large cyber attack known as ‘Titan Rain.’ Mitnick claims his easiest way into corporate security was his “good gift of gab” rather than his considerable hacking skills and that rather than personal monetary gain, he was essentially always after a “trophy.” Likewise, Carpenter compares his own security work to a game and places security issues fully on human shoulders: “It’s very rewarding. It’s like a puzzle: finding patterns within Chaos that shouldn’t be there. Humans are the weak link, not cybersecurity.”

⁶⁵ Lawrence Krauss, the cosmologist from Arizona State University that also appeared in Herzog’s *Salt and Fire* as Krauss/Aristides states: “If there is a solar flare, if you destroyed the information fabric of the world right now, modern civilization would collapse. Hundreds of millions of people will die, billions of people will die. The world will become for people like you and me - unimaginably ugly...I suspect, however, that some individuals would survive.” Jonathan Zittrain, an internet scholar at Harvard Law, invokes “Maslow’s Hierarchy of Needs” and claims that “civilization is about 4 square meals away from utter ruin.” Lucianne Walkowicz of the Adler Planetarium in Chicago uses her screen time within *Lo and Behold* claims it is a matter of “when” and not “if” a significant solar flare will interfere with contemporary technology. The point of these doomsday imaginings seems to be the important, but old refrain for Herzog of keeping at least some ties to the Earth that supports human life and not becoming over-reliant on the Internet to organize our basic needs.

length, Herzog continually circles back to religious associations. In a small number of important scenes, Herzog focuses directly on the field of informatics and its ties to religiosity. And it is in these scenes that one uncovers hints at Herzog's thoughts on cinema's "life or afterlife."

The first important contention concerning these correlations comes by examining the death of Nikki Catsouras. Nikki, who had psychotic issues as a result of a brain tumor when she was young, had a car accident and was partially decapitated. Herzog relates the more problematic side of being "connected" via the Internet to utter strangers when such tragedies occur: "An early responder took photos of the nearly decapitated girl and emailed it to some friends. Almost instantly the pictures were out on the Internet and hundreds of thousands, possibly millions, of people clicked on them." Interviewing the grief-stricken family, Herzog first turns to Nikki's father to relate the aftermath of her death. Visibly shaken, Nikki's dad begins to slowly speak:

The only thing the coroner told us was that a portion of her thumb had been severed in the accident and that she had head trauma, but they never gave us any detail. So I was focused on the thumb...I received emails with the pictures attached. It was a short time after the accident. It was disguised; I didn't know who the email came from...The bad ones [emails] were very hateful...it said 'Dead girl walking, woohoo daddy, I'm still alive...We were told that nothing could be done because there was no law in place for pictures of deceased people. When they pass away, their privacy rights go with them.

One can easily empathize with such a difficult position and can only imagine how gut-wrenching it might be to receive such an email. Herzog, while aiming at being "respectful" of the family's loss, refuses to even show a picture of Nikki within the film. Nonetheless, in an interview with Nikki's mother, Herzog presents a position that he, through his semiotic, is obviously critical of:

I didn't know such depravity existed in humans. Dogs treat their kind better than humans treat their kind. It's just, there is no dignity or respect on the Internet because we're not held accountable. Nobody is there to tell us not to. I have always believed that the Internet is a manifestation of the Antichrist. Of Evil itself. It is the spirit of evil. And I feel like it's running through everybody on earth and it's claiming its victories in those people that are also evil.

This staging of the Internet as Antichrist loops back into the film's title, problematizing the Covenant formed through the creation of the Internet. Does the Internet have an evil side? Is the new world it ushers in the apocalyptic world of the Antichrist? Is the Internet the first step toward "the end of time?" While Herzog lets such questions hang in the air for dramatic effect, he remains a director "indifferent" to the problem of Good and Evil, as subsequent scenes in *Lo and Behold* bear out (*Cinema 1* 185). The problem and dangers of the Internet are, for Herzog, not a moral issue of Good and Evil, but rather *an ethical issue of use* that has the potential to undermine humanist cultural, political, and religious organizations, as well as the notion of the human itself.

Herzog addresses this humanist tendency within the film through an analogical juxtaposition of religious transcendence with leaving the Earth to colonize other planets. Some of these efforts are quite literal, as his interviews with SpaceX founder Elon Musk demonstrate.⁶⁶ But perhaps the most telling scenario comes from a sci-fi-esque imagining. While in Chicago to interview Lucianne Walkowicz at the Adler Planetarium for the aforementioned scenes centered on solar flares, Herzog,

⁶⁶ Elon Musk takes a pessimistic view of Earth's future and his efforts with SpaceX often seem to have the air of a last-ditch effort about them. After reflecting for a long time, Musk says, "I don't think I have good dreams. I'm sure I have good dreams sometimes, but I don't seem to remember the good dreams. The ones that I remember are the nightmares." While it is not explicitly stated within the film, Herzog seems to be doubtful of Musk's or other's extraterrestrial endeavors. This is not because Herzog resists the effort - he often claims he would take a one-way ticket into space just to provide truly new images to humankind. But, at the present state of science, Herzog does not believe such missions will come to fruition until a number of terrestrial concerns, including climate change and the ethical use of technology, are properly addressed.

tongue pressed firmly in cheek, claims to encounter a strange scene and relates it to just this sort of transcendence:

The skyline of Chicago. It looks devoid of its inhabitants. We have to assume that nearly everyone has left for a colony out there. The planetarium is the only point of contact. Inside, a monument for those who have levitated and left. [The camera hovers on the monument: an astronaut, giving a thumbs up] Yes! Things must be real good out there. [The camera switches back out to the shores of Lake Michigan, where monks in orange garb amble about looking at cell phones.] But then we met some stragglers left behind. They're all on their smartphones. Have the monks stopped meditating? Have they stopped praying? They all seem to be tweeting.

These monks, left behind and pining for a better life amongst the stars, have seemingly forgone even meditation and prayer – the very activities that defined them – in favor of the direct connection provided by their technology. They have ceased to be monks in all but the outer trappings of their robes. The essential point that Herzog appears to be making is not to condemn or shame the monks, but to highlight the need to remain Earthly, too, even as we potentially move out among the stars, that some level of religiosity is required to maintain a conception of humanness as we know it. This, perhaps, goes some way in explaining Herzog's dubious and critical stance toward the efforts of companies like SpaceX and falls in line with the interview with Walkowicz that he tellingly shoots *inside the planetarium* – the “only point of contact.” In that interview, Walkowicz claims that “the idea that Mars [or any other planet] will somehow save us from the decisions we've made here is a false one. And it's a little like saying you're going to go live in the lifeboat, when, you know, even lifeboats need somewhere to land.” Once again, Herzog's refrain is that we can never take our focus entirely off the land beneath our feet. Moreover, this is especially true if we do not wish to regress to the binary of Good/Evil in the human use of technology, to foresee only disaster

scenarios in which an artificial intelligence erases the need, or even existence of a human intelligence. Antithetically, Herzog never fetishizes scientific discoveries or sees in them the possibility of salvation, never sees in science the path to heaven. In the end, though he might be indifferent to Good and Evil, but much like Nietzsche, Herzog is certainly not turning a blind eye toward the differences of good and bad choices.

Lo and Behold presents the ethical quandary that the Internet and information technology have recently produced mainly through the question of artificial intelligence. Artificial intelligence is seen as a component in early interviews focusing on self-driving cars and soccer-playing robots, but only as the film develops does Herzog lead viewers to imagine a world where the human may or may not play a role. Herzog presents artificial intelligence as an open-ended problem with catastrophic potential, just like the solar flares that might unhinge modern technological society. But the progression of its development is not as straightforward as a cosmically inspired apocalypse and has a larger margin for preparation or even prevention. In section VIII of *Lo and Behold*, entitled “Artificial Intelligence,” Herzog shows the current limitations of AI, unfavorably comparing a “state of the art” robot operating through artificial intelligence to a “vastly superior” cockroach. Additionally, while science-fiction often paints disaster scenarios of AI rising up and superseding or even killing their creators, Elon Musk, CEO of SpaceX, on the contrary believes that the real threat of AI does not come from the AI themselves, so much as the clash between the relentless efficiency of AI and the imperfection of human desires, claiming:

The greatest risk of AI is not that it will develop a will of its own, but that it will follow the will of people that establish its utility function, or its optimization function...even if its intent is benign it could have quite a bad outcome. For example, if you were a hedge fund or private equity fund and you said “Well, what I want my AI

to do is maximize the value of my portfolio,” then the AI could decide, “well, the best way to do that is to short consumer stocks, go long defense stocks, and start a war.”⁶⁷

Herzog, perhaps for dramatic effect, does toy with the more sci-fi notion of AI developing a will of its own.⁶⁸ However, following Musk, it is the “utility function” or “optimization function” that Herzog’s humanism rallies against. Returning late in the film to a section of his interview with Sebastian Thrun, Herzog attempts to push back against informatics’ thrust toward ever-increasing utility and optimization:

Sebastian: If you ask the question of whether there will ever be an Artificial Intelligent Machine that makes movies - absolutely yes⁶⁹...I think almost everything we do we find machines doing better. And the reason why that’s the case is because machines just learn faster than people do.

⁶⁷ These potential dangers and innovations are covered in the recent popular book by Max Tegmark, a physicist at MIT, *Life 3.0*. Musk, who has a short review of the book and is quoted on the back of the dust jacket, seems to dismiss the autonomous development of an AI will and perhaps this is reasonable as such an event would be immediately and quite possibly irredeemably out of human control. However, Tegmark argues that this indeed could take place - and perhaps without even our knowledge. In his “Tale of the Omega Team,” Tegmark imagines how a small group of researchers might one day build an AI that utilizes control of cinema and the entertainment industry to gain a globally effective power over the world economy and world politics. (*Life 3.0* 3-22) For Elon Musk’s part, he takes this threat so seriously that he, along with Sam Altman, founded OpenAI – a (until recently) completely non-profit organization whose “mission is to ensure that artificial general intelligence benefits all of humanity.” Their recent developments, such as GPT-2, carry potential threats and have been withheld from public circulation. This AI, for example, has the ability to generate “coherent continuations” to textual responses. That is, the AI is already able to produce text in response to a human generated prompt, but is able to do so well enough to pass as human communication. If this was widely and publicly released, the authenticity of human text on the Internet would by and large become impossible to determine. See: <https://openai.com/blog/better-language-models/>

⁶⁸ In an Interview with Danny Hills, the renowned computer scientist informs Herzog’s viewers “I cannot only imagine artificial intelligence evolving spontaneously on the Internet, but I can’t tell you it hasn’t happened already. It wouldn’t necessarily reveal itself to us.” Similarly, In an interview with Lawrence Krauss the cosmologist muses: “The Internet is nothing but connections. Will it have its own consciousness? Will it have its own set of rules? And, perhaps, in an even more scary realm, a science-fiction realm, will the Internet therefore make its own decisions? Will the decisions about how communication happens go out of human hands? That’s certainly a possibility. But since we don’t even understand consciousness, I’m hesitant to make any predictions. And I think anyone who claims they know what’s going to happen with the Internet is not worth listening to.”

⁶⁹ This idea is fleshed out in Ari Folman’s 2013, *The Congress*. This beautiful and well-executed film is based around the character Robin Wright, played by the eponymous actress, who signs a contract with “Miramount Studios.” This contract allows for the studio to make a complete digital scan of her body and mannerisms, which in turn allows them to program her in as a leading actress in studio film productions. On Wright’s end, she is agreeing to never act again as the studio does not want her to be in competition with her digital avatar. She does so to secure enough money to support

Herzog: But they cannot fall in love, as we can.

Sebastian: And will it be useful for machines to fall in love? Would we want to have machines that are just like people? I would say no. Honestly, if my dishwasher came to me and said ‘I’ve fallen in love with the refrigerator’ and as a result I have no time to wash the dishes, I wouldn’t like that dishwasher.

Thrun seems to treat the question as idle or unimportant. For Herzog, however, the question of staging some resistance to the pure positivism of machine functioning through something like love, something that has illogical and unpredictable elements at its core, is a key problematic of the problematic present and uncertain future. Utility and optimization in informatics therefore not only apply to the coded protocol of informatics and artificial intelligence themselves, but also the problem of human logic through their steady encroachment into our daily lives and identities, into the very way we think and into the human as concept. While Herzog asks what differentiates human and artificial intelligence by using the trope of love, *Lo and Behold* doesn’t linger on love as a core topic. Instead, if Herzog provides anything resembling an answer to this problematic, it comes yet again from another interview, and yet again under the guise of religion. As Sam Curry, a security analyst, relates:

We’re going to have a revolution not only in our technology, but in our theology. We don’t even have a name for it, but it’s around the Internet, it’s around building machines that think for us. And I think we’re due for another shift in our morals and our definition of what it means to be human. We’re right just at the beginning

herself and her ill son, Aaron, who is suffering from “Usher syndrome” and is slowly losing his sight and his hearing. One parallel with Herzog is that Usher syndrome is the leading cause for deafblindness, a topic he explored in the 1971 documentary *Land des Schweigens und der Dunkelheit*; The other parallel with *Lo and Behold* is that the very logic of such an Artificial Intelligent Machine that could make movies would force upon the human viewer a logic that was only capable of auto-reinforcement of its own strategy and would eliminate the human need for things like “love.” This is addressed in detail throughout the remainder of *The Congress* and demonstrates the probable progression of filmmaking if the fundamental protocols of Artificial Intelligence cannot be given or develop the human ability to act out against the unified, linear logic of utility and optimization functions.

of that. And so you can see us just trying to kind of feel out and invent this new society and invent these new ideas of what's right and wrong. What can we depend on each other for? And what can we expect from each other?...I think it's an incredibly creative time in human history, not just technologically but also morally and culturally.

Given the tone and placement of this scene, one can fairly assume that Herzog agrees with Curry's assessment. What this new theology might look like, what the morals and ethics of a future that is so heavily bound up with the Internet might be, however, is not directly given within *Lo and Behold*. Direct political commentary, too, seems to be more of a leaning toward fundamental questions concerning information technology rather than any explicit stance we should take. Nonetheless, Herzog does underscore that a new theology has been born along with the Internet, a new Covenant has been made, and though he leaves his viewers to contemplate this idea for themselves, he also explores two avenues of thought that might gesture in the right direction.

The first manner through which Herzog addresses a new theology of technology is, perhaps unsurprisingly, through reverie and dreams. Near the end of *Lo and Behold* and set with a backdrop that includes computer images of brain scans and an MRi machine, Herzog speaks with Marcel Just, an expert in the psychology of the brain and neuroimaging, and Tom Mitchell, a computer scientist specializing in machine learning, or as their title within the film states "Brain Researchers" at Carnegie Mellon. This interview introduces two new aspects of our discussion of informatics and the Covenant created through the birth of the Internet:

Herzog: The Prussian war theoretician, Clausewitz⁷⁰ – Napoleonic times – once famously said ‘sometimes war dreams of itself.’ Could it be that the internet starts to dream of itself?

Tom Mitchell: Great question...to think about dreaming, there may be two aspects. One is what I’ll call awareness - when you wake up and you say, ‘oh, I was just dreaming this’ and you know it. Another aspect is just some kind of pattern of activity that emerges, not because of some external stimuli, but just because of something going on in unpredictable patterns. I think already the Internet has the second of those, has unpredictable patterns all the time. They cause things like Flash Crashes on the financial markets. Um, so we have plenty of kinds of currents running around in the Internet that are unpredictable, in some cases unstoppable.

Herzog: Imaginative?

Tom Mitchell: Now it comes to: what do we mean by imaginative?... We call a person imaginative if they come up with ideas that we didn’t think of and that we nevertheless admire. Usually, admiration is part of it. So, for the Internet, so far, it’s mostly just unpredictable. I haven’t seen anything the Internet did on its own that I admire yet.

That is to say that for Herzog and Mitchell, the Internet might have the stirrings of dreams, but no self-reflective apparatus through which they might be interpreted. The Internet and its “currents” of unpredictable data flow create unforeseen events, but the Internet cannot dream. The Internet is at present statistically and creatively unpredictable, but, as of yet, it has not spontaneously produced the self-reflective awareness that allows for human dreams and *the aspects of time that awareness and dreams entail*. Furthermore, the Internet’s creativity lies solely in modulations to its *functions*;

⁷⁰ Carl von Clausewitz developed a “philosophy of war” in his major work, *Vom Kriege*, that is still relevant and utilized today. In fact, in a different section of his interview, Sam Curry, quotes Clausewitz’s most popular aphorism “war is the continuation of politics by other means.” By utilizing dialectical methodology, Clausewitz was able to unpack the psychological mechanisms at play within war, many of which have seen little change since Napoleonic times. The parallel with Herzog seems to stem chiefly from Clausewitz’s penchant to view and describe war almost as if it were an entity or organism unto itself, much akin to Herzog’s view of the Internet, the brain for Deleuze, or Whitehead’s superject.

operating through a plane of reference, the Internet lacks an *interval*, a negative space within itself that, as far as we now, is necessary for what Mitchell calls “awareness” and the processes of subjectification that define each of us as individuals. But the central point is that through its connections, which are ever increasing, one day this might well occur, either spontaneously or as the result of human ingenuity. As Lawrence Krauss notes in the closing scenes of the film:

That’s one of the wonderful things about the future: you don’t know where it’s gonna go. And the Internet is - like most results in science - out of control...Becoming your own filter will be the challenge of the future. Because the filter isn’t provided to you. There’s no controls on the Internet. No matter what governments do, no matter what industries do, the Internet is gonna propagate out of control. And people will have to be their own controls. This unpredictable future of the Internet could be good or bad, but it is not Good or Evil.⁷¹

What Herzog ultimately stresses in terms of the Internet are ethics and personal control, because the Internet is going to follow its own path – and potentially even pursue its own dreams – no matter what humans do. But there are concerns and courses of action concerning human interaction with and on the Internet that can be concisely formulated and precisely stated. Herzog utilizes the commentary of Kleinrock to relate the problem:

I deeply regret the fact that deep, critical thinking – an imaginative thinking, a creative thinking – is lost. In my opinion, computers – and in some sense the Internet – are the worst enemy of deep, critical thinking. Our youth of today are using machines to basically replace their examination of the things they’re observing. [cupping his hands together] They don’t understand what they’re looking at, what they’re hearing, and what

⁷¹ Interestingly, one finds most of the pessimistic views of the future of the Internet within the efforts of those who are trying to “escape” Earthly problems through space exploration. At one point, Herzog turns back to Elon Musk: “[reflects for a long time] I don’t think I have good dreams. I’m sure I have good dreams sometimes, but I don’t seem to remember the good dreams. The ones that I remember are the nightmares.”

they're learning. They depend upon the Internet to tell them and decipher it. They look at numbers instead of ideas. They fail to understand concepts and this is a problem.

In addition to these strong statements by Kleinrock, Herzog himself seems to take the point of view that immersive technologies are detrimental to the development of truly critical thought. As an interview with Lawrence Krauss points out, it is these conceptual and critical tools that will become ever more important in the future, and Herzog appears to agree.⁷² In a world where the access to information is as simple as a Google search, creative thought – in the guise of new concepts in philosophy, new affects and percepts in art, and new functions in science – waxes in importance and impact; creative thinking becomes an ever more important measure to engender any sort of resistance, any critical stance, to the overwhelming and self-reinforcing power of numbers. Yet at the same time, creative thought becomes all the more difficult to produce. The reign of numbers in corporate and economic life continually force such creative capacities to the margins of society and undercut efforts that do not adhere to the self-reinforcing market strategies that hold sway today.

One might then ask how or even if such a confrontation between informatics and cinema can be fought, how creative thinking in and for the future might be fostered. In simple terms, in its confrontation with informatics, a cinema like Herzog's answers this challenge of informatics with *a metaphysics*.⁷³ If cinema hopes to continue to have a "life" rather than simply an "afterlife" as a

⁷² "Whether we use science or Ancient Greek or philosophy, it's those tools that are important. Those are the things that people are going to be able to use in the future. The actual information they learned in school won't be important. Because, it will be dwarfed by the information that's coming out on the Internet every single day." – Lawrence Krauss

⁷³ It is no coincidence here that Deleuze thought of Herzog as "a metaphysician. He [Herzog] is the most metaphysical of cinema directors (although German Expressionism had already been imbued with metaphysics, this was within the confines of a problem of Good and Evil to which Herzog is indifferent)" (*Cinema I* 185). As we will demonstrate below in our analysis of *Lo and Behold*, Herzog is to this day continuing to challenge science with a metaphysics and an appeal for a new logic, largely through the collaborative efforts of art, science, and philosophy.

reanimated corpse devoid of thought, enslaved to industry, and operating under the logic of informatic positivism, such a metaphysics will need to be built, step by step, always taking into account the findings of scientific fields – including informatics – yet ceaselessly staging questions that go beyond such findings. *Lo and Behold* poignantly demonstrates this need by carefully probing a great number of ways in which information technologies affect our lives today and might fundamentally alter them in the near future.

The challenge to form sites of resistance to the unifying, binary logic of informatics can therefore be seen as a way to “reformulate science according to the rules of metaphysics” and is “as an act of resistance to the unifying logic of scientific thought with respect to a single historically specific point of view” (Gaffney 8). That is, the metaphysics of cinema fights back against the fossilization of a future which “becomes alienated from its ontological root in the virtual” by including the virtual field itself as a necessary component for the formation of time (Gaffney 14). This in turn means that one must construct *a superjective metaphysics*, a metaphysics which includes time-images, where one thinks of “subjectivity *as process*, that is, as a ‘machinic’ production of thought and matter that takes place behind the scenes of the actual” (ibid.). One must devise a means to address the world as it now is with the realities of informatics and the Internet: connected, multiple, transnational, controlling.

The concern of such a metaphysics would not be to paint philosophy, or cinema for that matter, in a better light than science or to undercut science’s importance or effectuality. Science, including informatics, of course, “really does work,” largely because it is “goal oriented,” but it too cannot do so without virtual elements, even if it prescind them from its plane of reference to form

functions (Gaffney 23). But to push this line of thinking further, it is also important to note that informatics – spurred on by cinema’s metaphysical insistence – *must do this to itself* by continually seeking to create new functions that invalidate or challenge the preexisting knowledge of the actual, material universe and our ability to implement that knowledge within the field. Science, including informatics, “in its bifurcations...undergoes many catastrophes, ruptures, and reconnections” that can radically alter even fundamental axioms⁷⁴ (*What is Philosophy?* 127-128). Copernican Revolutions happen and the ultimate concern of cinema’s confrontation with informatics in particular, cinema’s future “life or afterlife,” will lie in its ability to forge a metaphysics and a structural semiotic that takes account of the virtual and remains empirical. Only in this manner might it aid in the fight against informatic positivism and hierarchical control that we see appearing in every stratum of society.

In *Lo and Behold*, Herzog suggests at least one area for possible resistance to such homogenizing force. An early scene with Ted Nelson, labeled an “Internet Pioneer” by Herzog, provides the hope that rearranging the links on the networks of the Internet might have profound and potentially beneficial consequences. Interviewing Nelson in his houseboat home, Herzog states:

Back to the very early times, times of speculative concepts of a connected world. In the early 60s, many years before the first Apple personal computer, a young thinker, Ted Nelson, had his own ideas about creating a computer network. The Web as we know it took a different route. But Nelson’s ideas are still dormant.

⁷⁴ One must only think of the Copernican Revolution, the founding of Newtonian physics, or the discoveries of relativity and quantum mechanics to underline this point.

This acknowledgement of the dormancy of Nelson's ideas are the closest one gets in *Lo and Behold* to Herzog voicing full-fledged support for his interviewee's thoughts.⁷⁵ Herzog is aware that Nelson's visions of intertextual links never materialized on the internet and that "by some he was labelled insane for clinging on." Yet for a semiotic philosophy of cinema like the one Herzog has employed throughout his career, Nelson vision shows great promise. Despite Nelson's detractors labelling him "insane,"⁷⁶ Herzog declares that "to us, you appear to be the only one around who is clinically sane." Nelson's "sanity" stems from his system of links that allow computer users to trace textual quotes back to their original sources, taking an almost philological approach to information. But, by tracing these informational lines multi-directionally, Nelson's horizontal linking also allows for unforeseen connections to different works to emerge, creating new and unanticipated encounters. Therefore, Nelson's idea for the web can be envisioned as something in spirit more like a "tapestry" than the current Web's hierarchical chain of connections. Links would open up to an ever-branching relation of textual sources, rather than forming a unidirectional chain. In his own words, Nelson explains:

⁷⁵ Ted Nelson is perhaps best known for his work on Project Xanadu, a computer network with a very simple user interface that utilizes hypertext to link writings to their source. Yet, perhaps more importantly for our topic of the philosophy of cinema, he is also the creator of several often-utilized neologisms within computer science, including hypertext, hypermedia, and transclusions. Nelson's core idea is that links should be two-directional, rather than one as they are in the current Internet. As Nelson said, "HTML is precisely what we were trying to PREVENT— ever-breaking links, links going outward only, quotes you can't follow to their origins, no version management, no rights management "Ted Nelson's Computer Paradigm Expressed as One-Liners". 1999. Retrieved July 3, 2011). Or, put in more general terms by one of the creators of VR technology, Jaron Lanier, "A core technical difference between a Nelsonian network and what we have become familiar with online is that [Nelson's] network links were two-way instead of one-way. In a network with two-way links, each node knows what other nodes are linked to it...Two-way linking would preserve context. It's a small simple change in how online information should be stored that couldn't have vaster implications for culture and the economy. (*Who Owns the Future*, New York: Simon & Schuster, 2013. p. 227).

⁷⁶ Nelson seems firm in his convictions and states "there are two contradictory slogans: one is that 'continuing to do the same thing and expecting a different result is the definition of insanity.' On the other hand, you say, 'if at first you don't succeed, try, try again.' I prefer the latter, because I don't want to be remembered as 'the guy who didn't.'"

It was an experience of water and interconnection. I was with my grandparents in a rowboat in Chicago, so I must have been five years old, and, I was trailing my hand in the water. And I thought about how the water was moving around my fingers and opening on one side and closing on the other. And that changing system of relationships, where everything was kind of similar, kind of the same, and yet different...that was so difficult to visualize and express. And just generalizing that to the entire universe – the world as a system of ever-changing relationships and structures – struck me as a vast truth. Which it is! So, interconnection and expressing that interconnection has been at the center of all my thinking and all my computer work has been about expressing and representing and showing interconnection among writings especially. Writing is the process of reducing a tapestry of interconnection to a narrow sequence. And this is in a sense illicit...this is a wrongful compression of what should spread out. In today's computers they've betrayed that because there is no system for decent cut and paste and they've changed the meaning of the words cut and paste and pretended it was the same thing. So, a guy named Larry Tesler, whom I consider to be a good friend, nevertheless changed those words and I considered that to be a crime against humanity and he doesn't understand why because humanity has no decent writing tools. In any case, this is the problem of interconnection and representation and sequentialization, all similar to the issue of water. [Now demonstrating his technique to Herzog on his computer, inside] So here we have a parallel presentation that shows a quotation connected to its original context. 'In the beginning God created the heaven and the earth.' What where is that from? That's from the King James Bible. We can step down to the next quotation... 'Adam and Lilith immediately began to fight.' And that is from The Alphabet of Ben Sira. And so, as we pull back, we can see successive pages coming up to connect with their sources or with their linked content.

That the hypertextual examples are drawn from first the book of Genesis and second from an apocryphal text that alters the typical story of human creation within the Christian tradition are most likely one of Herzog's stylizations. Keeping Nelson's commentary in line with his inspection of a possible technological theology, Herzog demonstrates how Nelson's hypertext – even or perhaps especially to a non-canonical source – both gives context and performs hermeneutic reevaluation by

linking back to the original text, but also leads outward toward the developing a nonlinear approach to accessing information. Information accessed in this way, and even the unpredictable patterns of information flow on the Internet itself, would be a fundamental way to fight against the “illicit” nature of teleological linkage and protocol, those “wrongful compression[s] of what should spread out.” That is, this new system of linkage to source material also performs a re-linkage. It actively encourages bifurcations that always lead back toward origins and simultaneously builds toward an indiscernible or unpredictable line of information by always having another “and” beyond the current link; *it introduces a divergent aspect of temporality that resists the self-reinforced “present” of contemporary informatics that claims ownership of the future within itself through its slogan of “the future is now.”*

What Nelson is succinctly describing is a realist and material ontology functioning through nonlinear dynamics and applying it to computer science, more specifically to the Internet. Yet, we must always keep in mind that the application of this new methodology cannot be supported indefinitely. If a technological theology is indeed being created currently, it would of course be vital not to simply map the pitfalls of Christian conceptualization onto a technological or technocratic future. Nelson’s hyperlinks would offer some sort of resistance to the current model, but they are not inherently “better” or, when examined over the long-term, more ethical.⁷⁷ While it is difficult to

⁷⁷ DeLanda’s *A Thousand Years of Nonlinear History* provides an excellent introduction to nonlinear dynamics. Furthermore, this work has a key passage that parallels our commentary here. While DeLanda is focusing on historiographic commentary, his essential point on the *ethical value* of the nonlinear model and meshworks is exactly that which we are supporting here. Nelson’s hyperlinks and other approaches to modern informatics are susceptible to being read in an ethically ambiguous light. An extended passage DeLanda highlights the need for a more moderate approach to the underlying ethics of any reading of informatics and its importance within cinema: “If this book displays a clear bias against large, centralized hierarchies, it is only because the last three hundred years have witnessed an excessive accumulation of stratified systems at the expense of meshworks. The degree of homogeneity in the world has greatly increased, while heterogeneity has come to be seen as almost pathological, or at least as a problem that must be

know whether Nelson would agree, a new conception of informatics based on his links would not be non-teleological *tout court*; this is not merely an impossibility at present, but an ethical disaster that utterly undermines human choice and ignores the importance of good and bad decisions of Internet usage that *Lo and Behold* explores. To have an ethics necessitates resistances; additionally, having an ethics demands a conceptualization of and inherent value in the human itself. As a nonlinear model Nelson's hyperlinks resist hierarchical protocol through their stratigraphic temporalities and his new system of linkage and re-linkage finds its greatest strength; yet it must be added to and reconciled with the former system and not replace it wholesale. Just as Deleuze's concept of the time-image has not invalidated the movement-image or changed its effectuality, but rather provoked a crisis within it through its direct exposures of time, so too do Nelson's hyperlinks merely supply an important challenge to systemic protocols rather than override them as a revolutionary event.

This horizontal rather than vertical model of links in turn has serious implications for cinema. Applying this model to *montage and cinematic morphology*, we come to realize that a new system of linkage and re-linkage is formed through non-hierarchical hyperlinks. "A whole new system of rhythm, and a serial or atonal cinema, a new conception of montage" would emerge as a practical necessity from the application of the conceptual apparatus of Nelson's hypertext to the

eliminated. Under the circumstances, a call for a more decentralized way of organizing human societies seems to recommend itself. However, it is crucial to avoid the facile conclusion that meshworks are *intrinsically better* than hierarchies (in some transcendental sense)...It is crucial to avoid the temptation of cooking up a narrative of human history in which meshworks appear as heroes and hierarchies as villains. Not only do meshworks have dynamical properties that do not necessarily benefit humanity (for example, they grow and develop by drift, and that drift need not follow a direction consistent with a society's values), but they may contain heterogeneous components that are themselves inconsistent with a society's values (for example, certain meshworks of hierarchies). Assuming that humanity could one day agree on a set of values (or rather on a way of meshing a heterogeneous collection of partially divergent values), further ethical judgements could be made about specific mixtures of centralized and decentralized components in specific contexts, but never about the two pure cases in isolation" (*Nonlinear History* 69).

concept of montage (*Cinema 2* 214). And, indeed, what is most striking is that upon reflection this is precisely the type of linkage and montage that Herzog employs throughout *Lo and Behold*.

Continually circling back to interviews, linking and relinking them to other interviews and his own narration, tracing back to theological undercurrents and linking images serially, Herzog's film performs a tracing of cinematic thinking rather than a declarative utterance. In short, Herzog's film performs a sort of reverie on its object, the Internet, allowing for some elements of its *becoming to be shown* rather than to make declarative statements about the Internet's *being*.

In the end, *Lo and Behold* performs a final confrontation for Herzog with his core problematic of "a new grammar of images." By encountering informatics cinema faces the possibility of its life or afterlife. The afterlife of the cinema lies in its incorporation and acceptance of informatic logic, reducing the cinematic experience to an autocatalytic reinforcement of market strategy with profound *biological, aesthetic, and political* consequences. The life of cinema, if it is to have one, lies in producing a corresponding morphology and syntax to the grammatical changes it has undergone in its development. Cinema today, much like theory itself, is tasked with aiding in the creation of a new logic that can account for the networked reality of the individual within a global economic system. Serial or atonal montage must be theorized and a new taxonomy of rhythm must be developed if cinema is to live. At the juncture of information and protocol, the future of cinema emerges. And it will be a human or an inhuman future.

CONCLUSIONS

Kantian Formula: “a disorder of all the senses”

If the possibility for a human ethics lies within the purview of the cinema it appears to be an utterly foreign one from a classical perspective. *Instead, I would like to conclude that cinematic ethics must be distilled from the circuitous repetitions of spacetime, from spacetime’s form, function, and definition, those nonlinear times and nonmetric spaces that humankind now envisions in both theory and experiment.* A cinema like Werner Herzog’s, tasking itself with working on a new grammar of images, aids this endeavor by utilizing the cinema as a way to think and to autocatalytically change the way we think.

Throughout this dissertation, I have sought to supply physical examples – chiefly from the field of physics – to lend support to the realist ontological views that Herzog’s cinema maintains. Herzog is, of course, neither philosopher or physicist, and, to reiterate from my introduction, it is important to note that it is not a matter of Herzog “doing” some theory. Instead, looking at both *Salt and Fire*, Herzogian cinema utilizes empirical facts to always attempt to reach beyond what is currently known. Herzogian cinema strains to the largest and smallest realms of human thought, always on the lookout for dignified spaces for human beings to inhabit, for modes of being, acting, and changing in the world that hold some sliver of hope for an ethical stance. And he does so most forcefully by creating spacetime formations that reflect empirical reality so far as he is able to perceive it, by forging time-images in the film sequence and revealing its complicated political nature through his characters and their choices.

Space and time are, empirically speaking, a unified field, and in the end we must always think them together. Yet, while we know this fact, we have yet to effectively or rigorously think it and philosophers, including Deleuze, have long favored *time* over *space* in their meditations. The Bergsonian temporalities that Deleuze bases his taxonomy on helped to provide general relativity with the metaphysics it lacked; Deleuze's own contribution beyond Bergson comes chiefly through theorizing time-images, which, as I have demonstrated, provides quantum mechanics a metaphysical conceptualization in turn. In Herzog's cinema, however, the *spatial* takes precedence over the temporal, without forgetting the latter's lessons. From "inner landscapes" to the volcanic (sur)faces I have sought to explicate, Herzog's focus remains on the land beneath our feet, our place in the world, our world in vast space of the cosmos. Herzogian spaces are not merely two-dimensional figures, but rather multi-dimensional surfaces, and, much like Deleuze's temporal taxonomy of cinematic images, Herzog's grammar of images utilizes surfaces to pose questions into the nature of space itself and its ethics. Herzog's work demonstrates the pressing need for an advancement in the theorizations of cinematic space and underscores its ethical potential.

In a brilliant, succinct essay that focuses on the intensive nature of Deleuzian space, including cinematic space, Thomas Kelso makes an important contention that paves the way for this process to begin in earnest. Kelso writes, "A Deleuzian formula: Absent God = empty space = the virtual. The virtual, in turn, equals what Deleuze calls 'the spatium,' and paradoxically, but necessarily, it is *not* empty at all, but 'full of intensive ordinates' like the univocal being of Spinoza" (121). That is, the virtual field – which I have linked directly to the quantum field – is not merely the site where time is produced, where we can view it "in the pure state" of its emergence, but also

“where” space too is produced. And, it is important to mention, this sort of intensive space “in itself” as opposed to the extensive space we can more easily see and measure is not wild philosophical speculation but rather mathematical fact: it merely exists at the quantum level. By studying Leibnizian differential calculus, for example, the mathematician Carl Gauss “realized that the calculus, focusing as it does on infinitesimal points on the [curved, two-dimensional] surface itself, allowed the study of the surface *without any reference to a global embeddingspace*,” that is, without an a priori actual space to be embedded in (*Virtual Science and Intensive Philosophy* 4-5). This mathematics laid the groundwork for future theories that would become in the hands of Planck, Einstein and Bohr, among others, general relativity and quantum mechanics. That is, it was the mathematical study of multidimensional *surfaces* that led to modern theorizations of space. Gaussian mathematics advances “the totally new concept that surface is a space in itself” and that surfaces can therefore be virtual and even must be virtual before space becomes actual (*ibid.*). According to DeLanda, while introducing the notion of “virtual space” in this manner may seem “like an inflationary ontological move...when seen as a replacement for laws and essences it actually becomes deflationary, leading to an ultimately leaner ontology” (*Virtual Science and Intensive Philosophy* 35). Such a “lean ontology” sees the actual spaces of Firstness, of quality, emerging from the probabilistic, virtual realm of Zeroness, the underlying quantum field that gives rise to the material universe. The virtual field then becomes for DeLanda a “picture of a relatively undifferentiated and continuous topological space undergoing discontinuous transitions and progressively acquiring detail until it condenses into the measurable and divisible metric space which we inhabit,” which is in turn “a powerful metaphor for the cosmic genesis of spatial structure” (*Virtual Science and Intensive*

Philosophy 49). Ultimately, this leads DeLanda to conclude that the virtual continuum, or as I have argued, quantum field, “cannot be conceived as a single, homogeneous topological space, but rather as a heterogenous space made out of a population of multiplicities, each which is a topological space on its own. The virtual continuum would be, as it were, *a space of spaces*, with each of its component spaces having the capacity of progressive differentiation” (*Virtual Science and Intensive Philosophy* 72). The virtual, too, therefore, must have its own geometry. That means, even though direct representation of such a space is not possible, indirect analysis of each level, each topography, is indeed possible.

The potential geometry of a “space of spaces” is precisely the point to which Herzog’s cinema leads us.⁷⁸ Today, the philosophy of cinema has as its chief aim a spatial theorization that aligns with contemporary empirical understandings of spacetime. Furthermore, Herzog’s transcendental problematics – stemming from the fact that “time is out of joint” in his cinema – have great social influence by informing our notions of identity and its creation, the particular way in which each of us takes form through a finite but seemingly innumerable number of interactions. Herzog asks us to question all of those surfaces that make us up, both individually and socially and what role the

⁷⁸ I would argue that Herzog’s cinematic work should be most closely associated with the emergent field of quantum gravity. Quantum gravity is an attempt to theorize the as of yet unknown but underlying relationship between the macrophysics of general relativity and the microphysics of quantum mechanics, the biggest and smallest scales of human thought. Strikingly, many of the scientists working in this field relate their findings, just as I have throughout this dissertation, just as Herzog does in his cinematic efforts, back to *grammar*. Carlo Rovelli writes, “Nature...is what it is...if our grammar and our intuition do not readily adapt to what we discover, well, too bad: we must seek to adapt them... We must not allow ourselves to be confused by an inadequate grammar” (*Order of Time* 98-99). And quantum gravity can be seen to be precisely that: an adaptation of our understanding of grammar in the face of evidence garnered through general relativity and quantum mechanics. Furthermore, by continuing scientific research and – as I am arguing Herzog seeks to do in his films – by monstrating these findings through the cinema, as well as creating a philosophy appropriate to those findings that offers a pointed metaphysical critique, the space for an ethical politics perhaps emerges.

cinema plays in creating those forms. Herzog's work demonstrates that, for each of us, our identity is essentially a point of view that interacts with the physical world in a limited way, therefore "the world is reflected in each one of us through a rich spectrum of correlations" which in turn "elaborates the *information* we receive in a way that is strictly integrated" (italics mine. *Order of Time* 151). While it risks stating the obvious, films like Herzog's reveal that our identities are quite literally in-formed by physical processes within and outside of ourselves, the *interactions* of which we are integral to. Yet, secondly and more importantly, Herzog's work shows that this is achieved by breaking the information we receive into smaller and more manageable pieces, by making our human selves the measure of things. This process, too, has a physical, specifically biological, basis and lies behind all semiotic function, for it is "the structure of our nervous system" wherein "networks of neurons...form dynamic systems that continually modify themselves, seeking to predict – as far as possible – the flow of information intake" (ibid.). That is to say, the particular informatic makeup of the individual is distilled and reinforced through discrete interactions with other sources of information: quite literally, the I is an effect of others, the I is an *affect* in the Spinozist sense. But this realization inevitably comes with an ethical choice. Herzog's films remind us that a given identity is not just a sum of information *determined* by another, but rather an autocatalytic conglomerate of all of the interactions with the others that make it up: the trillions upon trillions of "in-forming" processes that trace and transform the identity through neural stimulus.⁷⁹ And it is our

⁷⁹ This process can and should be seen as a direct parallel to Herzog's notion of the man at the end of *Herz aus Glas*, "the first who doubts," and sets out to discover new land. Physically speaking, there is a *dubito ergo cogito* that precedes *cogito ergo sum*. As Rovelli writes, "the starting point" of identity formation "is not a hypothetical *a priori* that is immediate to the experience of existing as a subject. It's a rationalistic *a posteriori* reflection on the first state of the process in which Descartes had articulated a state of doubt: logic dictates that, if someone doubts something, they must have thought about it. And that, if they can think, then they must exist. It is substantially a consideration made in the third person,

responsibility to not simply move blindly forward where the whims of these processes might take us, but to take an active and selective role in them, to be our own filter of information.

Herzog performs this task most directly by working on a new grammar of images: his own highly idiosyncratic, but unapologetically non-ironic way of looking at what he considers to be an indifferent Nature and conceptualizing a space for the human within it. From early films such as *Herz aus Glas* on up to his volcanic and informatic meditations in recent work, Werner Herzog asks of his viewers to think deeply about the world around them, the worlds within them. In Herzog's view, as I have shown, inner landscapes emerge from outer realities, but paint them a different hue in the process. Thinking large and thinking small, deeply problematizing time and intensely contemplating space, Herzog's films forcefully demonstrate that one cannot only think with the cinema, but that one might even hold out the hope of thinking differently with it.

Herzog and his films are, of course, not answers to much of anything, but they do pose valid questions. One is unlikely to ever discover much of a political thrust in his oeuvre, but one does find within it a grand analysis of political machinery. Likewise, though the director offers few suggestions of how he believes one should live, Herzog continually traces the possibility of a human ethics that emerges to challenge the overwhelming forces of Nature, those physical systems that we confront and at times control and perpetuate. And, in the end, this is why Herzog – and why the entire cinema of time-images – strives so hard to monstrate and repeat spatiotemporal perspectives. In order to address the superjective problems that our century faces, the problems of a connected world

not in the first, however private the process.” For Rovelli, “thinking of oneself as a subject is not a primary experience: it is a complex cultural deduction made on the basis of many other thoughts...we are the reflection of ourselves that.” In Kantian terms, “I is another” before, through the mechanism of doubt, it is capable of becoming a separated “I.” The I is created by autocatalytic neural stimulation, from “in-formed” interpersonal interactions (*Order of Time* 153-154).

where each of us is ethically beholden to billions we will never meet, perhaps – just perhaps – a new grammar of images and the new image of thought it entails might aid in our collective struggling. Steadfastly refusing to ignore the unceasing change of empirical reality, working on the grammar of images amounts – like any creative work, be it art, science, or philosophy – to testing the limits of human knowledge and exceeding them.

We know not what we must think, but only that we must.

And our understanding of the grammar of images grows.

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