Seeing is Believing

To say that something is obvious requires an assumption of origin, which is to say that the obvious implies the historical. Absent a beginning, there could be no succession of moments leading to either the assertion or the interrogation of beginning. "In the beginning," separate from its religious connotation, is in fact the most benign of phrases. However, it is often difficult to say anything more specific about origin besides merely asserting its existence as having passed. Indeed, the problem of origin—when it becomes a problem—results from a lack of the obvious typically associated with the passage of time. We ask, "how did this happen?" or "what happened?" or "why?" from a point of retrospection after an event has already transpired. One could thus say that the passage of time at once constitutes the possibility of historical narrative even as the movement of history creates the very disjuncture that separates us further and further from origin. For we rarely encounter origin when it occurs, or we fail to recognize its original appearance, and thus any claims that we might make for an obvious historical truth rely primarily on evidence extracted from debatable after-effects.

This perhaps explains why the continuing debate between evolutionists and creationists often appears less concerned with the question of origin as such, and more concerned with a determination of what constitutes proper scientific methodology. To posit, "In the beginning, God . . ." is not only an interpretation of origin; it is also a radical statement about the possibility of interpretation, precisely because the beginning is only accessible indirectly. Claims of origination—especially those concerning the emergence of the universe or the first appearance of complex life on Earth—can thus be said to require nothing less than the determination of how to see in the present tense. And in this sense, it is hardly surprising that the conflict between science and religion particularly in the persistent instance of the creationism/evolution debate—frequently boils down to accusations of bias. Ben Stein's recent pro-creationist documentary, Expelled: No Intelligence Allowed (2008), for instance, offers little in the way of arguments for intelligent design, and instead attempts to characterize the global scientific community as unwilling to allow for any form of inquiry that even mildly interrogates the tenets of Darwinian evolution. Creationists do not propose to combine science and religion, Stein assures us; they are merely a minority group wrongly persecuted by Darwinian fundamentalists for pursuing alternative lines of research.¹ Counter-attacks against creationism, best epitomized by Richard Dawkins, 2 likewise rely on claims of preserving science in the face of fanatical perversion. For Dawkins, creationist logic is structured by the willful pursuit of ignorance, the relishing of any question that current evolutionary research fails to answer sufficiently, and the positing God's existence as the answer to any as yet unexplained phenomenon. As Dawkins puts it, "Mystics exult in mystery and want it to stay mysterious. Scientists exult in mystery for a very different reason: it gives them something to do."3

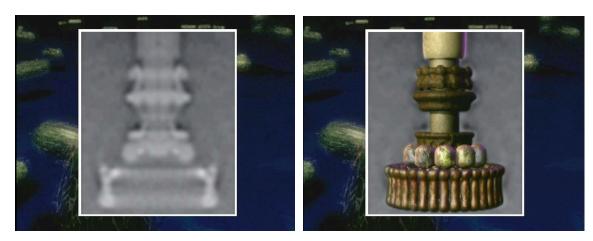
Despite the tensions between them, however, both camps share a common rhetorical line of attack: poor research methods are the direct and inevitable result of

fundamentalist presumptions—whether they hew to a religious or scientific source. Stein argues in the course of his film that an uncritical acceptance of Darwin's *Origin of the Species* necessarily results in poor science; he even goes so far as to explain the Holocaust as the direct result of the Nazis' uncritical acceptance of Darwinism. Dawkins likewise assumes that belief in a higher being contradicts a scientist's requisite response to mystery as the necessary precursor for further research. Interestingly enough, then, both approaches assume that a particular method is determined primarily by some manner of pre-existing, paradigmatic belief; both sides see in the other the obvious symptom of a hidden disease, which they then take upon themselves to diagnose. In so doing, creationists *and* evolutionists—even while appearing to center their debate on determining the proprieties of method—nevertheless treat methodology itself as the simple and transparent revelation of a pre-existent belief.

And yet, what if belief does not determine method but instead results from method? Such a question might imply a return to Pascal's advice—frequently referenced by Slavoj Žižek—for producing faith through action: "Kneel, move your lips in prayer, and you will believe." Because creationism concerns a melding of religion with science, though, the question of methodology here is not one concerning religious ritual as such. Unlike Pascal's devoted parishioner who enacts the outer performance of faith so as to instigate inner belief, creationism attempts to locate the production of faith beyond the institution of the church. Simply put, creationism conceives of science as a perfectly valid and entirely independent means to produce a spiritual awakening in non-believers. In fact, ironically enough creationists often claim the ability to locate signs of supernatural origin through the very same scientific visual devices that developed out of the Enlightenment's departure from religious paradigms of knowledge, imploring us to examine microscopic and telescopic images for signs of intelligent design. My purpose in this essay, then, is to take seriously the creationist appropriation of scientific technique, particularly the creationist employment of visual technologies and to consider how creationism's conflation of the visual, the scientific, and the spiritual, might prove to be a useful avenue for thinking about the visual and its relation to the production of ideology in a secular register. For creationists, after all, seeing truly is believing—that is, assuming we look in the proper way and with the proper technical prosthetics. Accordingly, the question here is to what extent scientific methodparticularly the deployment of visual images as empirical evidence—serves to complicate both creationist discourse and, in the process, our conception of the relation between belief and perception. More specifically, through an examination of several creationist documentaries—each of which draw fundamental connection between the socalled obviousness of the visual and the claim of supernatural origin—I take seriously the creationist intention to construct belief through visual media as a gesture that fulfills—rather than perverts—the logic of scientific discourse, and that perhaps even draws out the implicit and typically unexamined logic of the technologically produced image more generally.

The recent direct-to-DVD creationist documentary, *Unlocking the Mystery of Life*, provides an interesting example for such a consideration. The film includes interviews with creationists from several fields of science, but none are more energetic and self-assured than micro-biologist and popular creationist author, Michael Behe. Describing his first encounter with the bacterial flagellum—a cellular organism that sports a

powerful tail to propel it through space—Behe recounts his reaction to a textbook drawing of the flagellum's parts: "It had a propeller and a hook region and a drive shaft and the motor. I looked at that and I said, 'That's an outboard motor! That's designed. That's no chance assemblage of parts." For Behe, the fact that a living organism bears resemblances to a mechanically engineered motor carries metaphysical implications. And yet, the actual microscopic image accompanying Behe's description is entirely unconvincing; the gray and blurry enlargement indicates none of the parts that Behe claims to see so clearly. Only seconds later, though, a series of computer generated images appear superimposed over the microscopic picture, supplementing the microscope even to the extent of including rust on the "gears" of the flagellum, so as to properly align the image with Behe's mechanical analogy.



In my estimation, the central dilemma revealed by this presentation results directly from the representative capacities of the visual instruments. While the microscopic image is useless to the untrained eye, the computer generated image, in its obvious manipulation, forces Behe's conclusions onto the natural object and thereby discounts the very claim that the object so obviously exhibits verifiable marks of a creator. It would be fair to interpret the sequence as the misappropriation of science for religious ends, but such a criticism would miss how Behe's interpretation originates *in response* to the technical visualization itself. The deadlock between, on the one hand, the world of natural phenomena and, on the other hand, the religious framework that sees obvious evidence of a creator throughout this same world, occurs precisely where these two opposed discourses meet: in the technological means of production.

Indeed, as we will see, the visual technologies employed by creationist documentaries—including such scientific apparatuses as the microscope, but also including the *cinematic* apparatus itself—severely complicates claims for the obviousness of supernatural origin, as the flagellum example should already suggest. However, I will argue that this technologically produced deadlock, rather than negating the creationist argument, instead serves as creationism's positive core. The arguments offered by Behe and others ultimately rely on producing a semblance of (supernatural) excess directly through the failure of the visual. Even as visual technology alters our perception by exceeding the limits of human vision, such a supplementation nevertheless fails to directly access anything approaching the concept of a creator. Turning this limitation on its head, creationist documentaries employ visual technologies to construct a world of difference,

positing the existence of God as a kind of transcendental signified to answer the impossibility that such difference reveals. The question of creationist aesthetics—particularly its appearance in documentary form—thus raises fundamental questions about the relation between the obvious and the visual beyond the limited conflict between science and religion. In this sense, looking more closely at how creationist media frames the relationship between partiality and limitation, on the one hand, and scientific self-evidence, on the other, promises to tease out a whole range of problems concerning visual media. As I will further argue, the appearance of creationist arguments in documentary form also raises important questions for film theory, particularly given the concerns expressed in recent years by neo-formalists who propose to eradicate fanatical and "grand theories" from media studies in exchange for more explicitly limited methodologies. Surprisingly enough, the logic of partial and limited research, offered by the likes of David Bordwell and Noël Carroll, bears striking parallels to creationist presentations, which likewise maintain partiality and limitation as guiding discursive devices.

Part 1: Techno-Origin

Dust or Destiny (1949) is the most directly anti-Darwin of the dozens of creationist films produced by the Moody Institute of Science (MIS) beginning in 1946, many of which were distributed directly to churches, public schools, and even to the armed forces. While the various "sermons from science" in the MIS library each seek to reconfigure our conception of the natural world according to a creationist paradigm, Dust or Destiny is particularly explicit in its attempt to conflate science with faith. From the very beginning, the film represents the natural world as an object deserving of special notice and study. The opening shots slowly scan past snow-capped mountains and a quiet river, while the voice-over by Dr. Irwin Moon provides a frame of reference for the viewer: "This is a wonderful world in which we live. A world crowded with beauty, grandeur, and mystery."

Representing the natural world as wondrous and beautiful, as Simon Locke has noted, is not a discourse peculiar to creationists; it is a common feature of modernity's conception of a world apart from the now global effects of industrialization.⁶ In the context of *Dust or Destiny*, though, the representation of nature as something marvelous does entail a specific ideological purpose. As Locke puts it, "Descriptions are not neutral; they intend a perspective," and the use of such terms as beauty, grandeur, and mystery serve to intentionally "modify the view of the complexity of nature." And the explicit purpose of *Dust or Destiny*, as with countless other written and visual creationist texts, is to portray the natural world—particularly the organisms living within the world—as a complex structure that reveals an intentional, creative, and supernatural designer. Indeed, the logic of creationism locates something in nature more than nature itself. That is, nature connotes more than to-be-looked-at-ness; it also entails, for the creationist, an implicit impetus for metaphysical contemplation.

Yet, in order to make the case for creationism, a case that Dr. Moon will later describe as self-evident, the film must nevertheless supply some means for connecting the natural to the supernatural. And in *Dust or Destiny*—as in several other instances I will

discuss—visual technology stands as the primary means to bridge the gap between earth and heaven, both at the level of such scientific prostheses as the microscope and telescope, and even more importantly, at the level of the documentary camera. The question of creationist documentary, then, is necessarily a question of the technological means of production specific to the documentary form. After all, to place a camera in front of a natural scene—or in front of any object, for that matter—tends to supply that scene with some manner of importance, if only because the visual image exists on the basis of a selection, of an inclusion and exclusion implicit to the camera frame. Like any text, film is a singular representation; regardless of its object of study, the representational scope is always-already limited. For every image displayed on screen, there is an almost infinite number of possible images that extend beyond the borders of the camera frame, which are thus excluded from the viewer's sight. That which appears before the frame, then, garners a sense of importance directly from the manner of (re)presentation.

For the most part, media theorists have treated this phenomenon as a matter of ideology. Jean-Louis Baudry, for instance, famously compared the scene of cinema spectatorship to Plato's cave dwellers who naively took the mere reflections of reality on a wall for reality itself, in a manner not unlike like a mindless audiences absorbing the latest Hollywood blockbuster.8 However, as Martin Heidegger has argued, modern technology itself produces a general vision of nature as an object for human consumption, to the extent that technology "enframes" the natural world in its entirety and "reveals the real as standing-reserve," as that which exists only in the service of production. Not coincidentally, *Dust or Destiny* also conceives of nature as providing a standing-reserve—not in the form of material goods, but in the guise of spiritual evidence. The delimitation of the image thus objectifies the natural scenes even before Moon's voice-over supplies a discursive label that could be described as an ideological positioning. The appearance of scenic vistas—enframed by the technical mediation of the camera—ascribes a quality of standing-reserve to the natural images; thus, both the image and the voice-over work in tandem, resulting in an overall presentation of nature as containing something for the human even before creationist ideology enters the equation.

The technological contribution to the sequence becomes even more layered and dense just seconds later in the film. As Moon describes the wonder and mystery of the world, a close-up shot of a blooming flower appears superimposed over the already established shot of a lake and mountain range. Before Moon finishes his next affirmative sentence—"Yes, this is a wonderful world"—the flower blooms at an impossible speed, revealing the use of time-lapse photography. The expanding petals provide a singular example for the assumed totality of similarly mysterious happenings in the natural world; that is to say, from the film's perspective, the flower is an exemplary





case of an artistic and thoughtful intention behind the functioning of nature. And yet, the mysterious quality inherent in the flower's visualization does not originate from the flower itself. From the start, the technical apparatus—and not the natural object—provides a means of defamiliarization, where the world itself appears to contain unexplainable qualities. A flower blooming in a matter of seconds does indeed effect a sense of mystery and wonder, but only to the extent that any such a virtual unfolding would be impossible for a human to witness without a technical prosthetic—in this case, a time lapse camera that gives the appearance of a quickened passage of time. Once again, then, the technical presentation and enframing of the image itself creates the something-more that it reveals. The flower is not mysterious because Moon says it is—or, at least not primarily. The image owes its excessive quality, instead, to its technical reproduction (and thus manipulation) on screen.

This examination of the film's opening sequence suggests that the technical apparatus is productive of meaning in a manner equivalent to language, and thus calls into question the origin of agency while also suggesting the value of thinking more carefully about the precise role that visual technology play in productions of self-evidence. Heidegger's notion of enframing provides the crucial first steps of such an endeavor, for it already troubles the distinction between the rational human and the inanimate tool, lending technology a certain level of independence and priority in the production of ideological perceptions of the world, and particularly of the natural world. In *Technics and Time*, Bernard Stiegler takes the matter much further, partly through a reconsideration of Heidegger, and argues that technics—or the emergence of technics—not only enframes nature but further constitutes the very possibility of the human *as* human. Just as Heidegger conceived of being-toward-death, Stiegler grounds his ontology in the human capacity to anticipate the future, but in a manner that ties anticipation directly to technical objects:

Because it is affected with anticipation, because it is nothing but anticipation, a gesture is a gesture; and there can be no gesture without tools and artificial memory, prosthetic, outside of the body, and constitutive of its world. There is no anticipation, no time outside of this passage outside, of this putting-outside-of-self and of this alienation of the human and its memory that "exteriorization is." ¹⁰

Although Stiegler certainly emphasizes the physical tool in this passage, he will broaden his definition of *tekhne* to include language; both *tekhne* and *gramme*, Stiegler asserts, owe their foundation to the possibility of symbolic difference. The technical object, in its particular mode of temporal differentiation, makes possible the present by maintaining a material record of the past and preparing for the onset of the future. Stiegler thus lays the groundwork for a techno-ontology that places *teckne* at the origin—as *the* origin—of human experience, even as he attempts to avoid the semblance of technological determinism. However, the relation between being and technics is not a problem of technological determinism, but rather, a problem of difference—that is, as that which produces the possibility of difference—originating with the technological framing of the world. Stiegler thus attributes this framing most fundamentally to the technical objects used to track the passage of time. Indeed, for Stiegler the correlation between technics and temporality is fundamental. As he puts it, "To think time in terms of time is to think it *first* in terms of the clock."¹¹

Stiegler's discussion of the clock—particularly the mode in which the clock sets about fixing time—provides the most direct path back to the present analysis of creationist films. For in these films too the anticipation of the future is likewise central, precisely because the very conception of the future, particularly the afterlife, motivates the discussion of origin in the first place. Contextualizing the stakes directly in terms of eternal salvation, Moon will later conclude—with phrasing that would have been quite suggestive for the religious audiences who originally viewed the film—that a correct understanding of "where you come from" will fundamentally determine "where you are going." For Stiegler, quite to the contrary, the connection between beginning and end is a connection established through the technological enframing of the world that actually obfuscates the reality of an end, of mortality. Drawing on Derrida's notion of différance, Stiegler posits that the emergence of the human by way of the technical fixing of time also results in a forgetting of time, and thus a forgetting of death. We might say something similar, for example, about a man who checks the weather report online or on television but who never actually steps outside his home or looks out a window: in the act of calculation he exchanges the referent for a signifier. Indeed, Stiegler pessimistically finds that contemporary Western culture, in its systematic embrace and utilization of technics, "loses itself in the clock."12

Similarly, in *Dust or Destiny*—and specifically in the scene presenting the time-lapse photography of the blooming flower—the technical representation of the "natural" world is nothing if not a representation of time. Even more importantly, the temporal representation serves its purpose—to render the world mysterious—only by structuring its positive representation around a significant absence—around, that is to say, a mode of forgetting: while the speed of the time-lapse image shows the flower bloom at an unnatural rate, the effect only maintains the semblance of beauty by cutting to a different shot prior to the inevitable withering of the flower's petals. For indeed, creationist appeals to complexity in nature almost uniformly overlook and even conceal the extent to which complexity could be fear-inducing rather than awe-inspiring. As Locke puts it in his critique of creationist rhetoric:

Something that is complex (to the point of unknowability) might for that very reason be considered profoundly frightening, [but in] presenting

nature as wonderful, however, the complexity becomes less frightening and more reassuring, something that can be regarded contemplatively—a marvel rather than a monster. 13

Locke appropriately identifies the selective process necessary to maintain the creationist aesthetic, but the surprising fact is that an account of creationism's techno-logic produces a similar conclusion. Adding Stiegler's technological ontology to the equation, I suggest that the key element to avoiding the monstrous in creationist arguments lies in the absence of death implicit to technical calculation. In the case of the flower, the technological representation serves to enframe the flower only to the extent that the image connotes positive wonderment and appreciation; that is, the representation stops short of the flower's inevitable decline. The film's romantic description of the flower, the natural world, and later the human, thus necessarily relies on a refusal of decay. However, this refusal does not strictly arise from creationist ideology or from an intentional choice on the part of the filmmakers; it is already inherent to the reliance on calculability embodied in the technologically produced image. In only the first few seconds of *Dust or Destiny*, then, the technical representation of nature serves to fix time in such a way that the world appears marvelous, but only by excising the reality of decay.

This mode of fixing a singular object, separate from the wider system of cause and effect, and separate from the cycle of birth and death, continues in the film's construction of an opposition between man and machine—an opposition that we can already consider questionable. After the opening shots already mentioned, the voice-over provides the following transition: "Perhaps the greatest wonder of all is man himself. His body is a marvel of mechanical efficiency and adaptability." Following Moon's transitional statement we see several close-ups of mechanical gears, fiery furnaces, and chemical plants, all juxtaposed with shots of athletes performing activities that Moon likens to mechanical processes, where the juxtaposition produces a loaded parallelism, each case demonstrating the superiority of the human "machine."







Technical machines, we learn, require lubrication from an outside source, whereas the body produces its own lubrication for joints and ligaments; the body is like a chemical plant but "more complex than any man has ever built"; other comparisons mention our bodily "thermostat" and our "camera-like" eye.

The first of several problems with the supposed distinction here between man and machine lies in the representation of machines and humans as independent objects. Between the technical and the human, the film presents, on the one hand, a collection of close-ups of technical objects; on the other hand, it presents equivalent close-ups of humans performing similar "superior" functions. The montage thus provides the viewer with an index of various forms and figures but without any account for the system in which these objects interact, neither the system of machines working with other machines, of humans with humans, nor, most importantly, of the systematic interaction between machines and humans. Indeed, a quick shot of factory workers stoking an enormous furnace—meant to indicate the reliance of the furnace on an outside human force—only further obfuscates modern civilization's reliance on technology, and even more pointedly, the interconnected system of technics that keeps the now global "machine" running. As Stiegler puts it:

The technical system, the universal tendency that it carries, are no longer the partners of the 'other systems'; the technical object lays down the law that is its own, it affirms an auto-nomy with regard to which, in the industrial age, the other layers of society must regulate themselves, with an actual possibility of negotiation.¹⁴

At bottom, Stiegler conceives of invention here as that which is located in a logic independent of human intention or control—a claim that deeply troubles the implicit premise of creationist uses of visual technology. Indeed, the frequent creationist claim reiterated in *Dust or Destiny*—that the human body is a perfect machine and indicative of a designer—fails entirely if we accept that invention does not necessarily originate with an intelligent agent. Accordingly, when the film presents the furnace as an example of technical limitation due to the furnace's inability to regulate itself, it thereby overlooks quite drastically and quite obviously—if we turn the representation on its head—the manner in which the factory workers serve the machine and serve the wider technoimperative of perpetual production.

In much the same vein, while the film seeks to draw a metaphorical dichotomy between machines and humans, it is worth noting that the possibility of this comparison relies on a fundamental calculation. In the above example, for instance, the film literally counts up the qualities of the technical objects and finds those qualities lacking in relation to the superior human body. The move from a quantitative analysis to a qualitative judgment, however, relies on a calculation that, much like the time-lapsed flower, refuses to think the possibility of death. Indeed, the supposed superiority of the human machine is only tenable absent the acknowledgment of human mortality. When Moon refers to the complexity of the human-machine as superior to the technical-machine, he does so only by failing to acknowledge that, like technical machines, the body does indeed break down, requires repair, and eventually becomes inoperable. The repeated failure to account for death—Moon will later refer to the "heart's endless capacity for work"—is not simply a linguistic trick; instead, the discourse itself follows the logic of calculation, the logic of the count, which by its very structure can only index positive numbers. In other words, the creationist emphasis on the perfection of the human body succeeds too well, to the point of immortalizing the body in a manner that implicitly and ironically negates the need for salvation. But within the discursive logic of the film regardless of the problems we might identify with this logic—the rhetorical thrust of the creationist visual argument relies simply on the location of excess in the natural world. This analysis reveals, then, that the creationist attempt to find something in nature more than nature itself achieves its positive result directly from the logic of the count. While it is quite typical to criticize creationism in general for employing scientific technique only to the extent that such technique proves useful for a religious conception of origin, this discussion of *Dust or Destiny* demonstrates that the film achieves its religious end not by perverting science but rather by extending the calculative impulse of scientific research to its logical end. Moreover, the film's emphasis on indexing the natural and physical world according the logic of calculability requires a further consideration of the technologically produced image. The creationist reliance on the documentary form—on the camera as a recording device and on the subjective connotations produced through montage—thus reveals an implicit connection between the logic of calculability and technologies of the visual.

Dust or Destiny concludes neither in a natural setting nor in a scientific laboratory, but in the office of the film's narrator, Dr. Moon, who offers the audience one final analogy for

intelligent design. Holding a pocket-watch in his hand, Moon asks us to consider whether the "intricate workings of that mechanism" could have come into existence without some guiding and intentional hand. An extreme close-up shot reveals both the inner gears of the watch, with its back plate removed, and, even more importantly, the shot reveals an open Bible sitting on Moon's desk, to which Moon makes no reference. On its own, the pocket-watch analogy demonstrates the ultimate limit point of





creationist logic: since creationism is not in fact concerned with scientific research, argument-by-analogy is all it truly offers. The pocket-watch metaphor, then, is not one more display in addition to the other, more "scientific" examples earlier in the film; instead, the metaphor is merely the culminating iterative repetition of everything else already represented in *Dust or Destiny*. Indeed, one could say that the void of death, which Stiegler identifies as the inevitable outcome of positive calculation—and which Dust or Destiny disavows quite blatantly in the guise of the immortalized human body serves as the very locus for what might best be described as the scientific demonstration of unintelligibility. In effect, the creationist appropriation of scientific discourse produces a central unanswerable question of origin, which in turn creates the possible space to posit the existence of God. The presence of the Christian Bible sitting on Moon's desk, then, serves as Moon's answer to the remainder produced by the creationist logic of the obviously unintelligible. That is to say, the Bible—and the teleological narrative for which the religious text stands—is nothing less than the creationist's name for this remainder, for what this obvious excess should signify. 15 Simply put, the possibility of positing the existence of a creator results directly from creationism's reliance on the calculative ground of science.

Another way of characterizing this *mise-en-scene* and the logic from which it originates would be to say that creationists are more Kantian than Kant. Whereas Kant refused the possibility of empirically validating the existence of an infinite and necessary being through the application of finite evidence, ¹⁶ the creationist argument exemplified by *Dust or Destiny* demonstrates that the case for a creator actually relies entirely on the fact that the evidence itself is lacking. Seen this way, the fact that each "case study" merely reproduces the same guiding analogy of mechanical parallelism is not a failure of creationism, but rather the necessary core of its discursive logic—an appropriation of failure itself. In this manner, *Dust or Destiny* visually reproduces Žižek's analysis of Kant's transcendental imagination:

[T]he unity the subject endeavors to impose on the sensuous multitude via its synthetic activity is always erratic, eccentric, unbalanced, 'unsound,' something that is externally and violently imposed on to the multitude, never a simple impassive act of discerning the inherent subterranean connections between the *membra disjecta*. In this precise sense, every synthetic unity is based on an act of 'repression', and therefore generates some indivisible remainder: it imposes as [a] unifying feature some 'unilateral' moment that 'breaches the symmetry.¹⁷

In this passage, Žižek conceives of subjective experience as constituted by an interpretive activity that ultimately fails to account for the entirety of experience, thus producing an unavoidable remainder not unlike the unacknowledged Bible sitting on Moon's desk at *Dust or Destiny*'s conclusion. But what this discussion of Stiegler should indicate, if nothing else, is that the reliance on technical calculability likewise requires such a remainder. Any subjective engagement with the world, and particularly the formal interpretation of the world that relies on technical prostheses, inevitably fails to fully account for the world in its entirety. This failure, however, is not merely a problem of the subject's reliance on language—as Žižek maintains—but can also be considered as a problem of subjective reliance on technics itself. Of course, the centrality of visual technology in the creationist case for intelligent design should also cue us to another sort of question: whether this structural remainder can be attributed to the broad technological imperative of creationist discourse in general, or whether we should consider the particular issue of scientific calculability in terms of visual media technology. That is to say, apart from the calculative imperative that grounds the entire construction of the intelligent design argument, to what extent can we attribute this problem to the specific form of documentary, and to the specific medium of the filmic camera?

Part 2: The Obviously Unintelligible

Creationists claim that common sense, applied to the sciences, will reveal a universe rife with convincing signs of intelligent design. If any natural process or organism appears to "work," the argument goes, then there must be a rational and intentional being who made it work. Michael Behe offers a typical analogy: "A man from a primitive culture who sees an automobile might guess that it was powered by the wind or by an antelope hidden under the car, but when he opens up the hood and sees the engine he immediately realizes that it was designed."18 In the same manner, Behe argues, when biologists stumble across a living organism that displays a complex structure, the most obvious and logical conclusion is to posit the existence of a creator. What is most interesting about Behe's claim here, however, is the extent to which it displays the ultimately ambivalent relationship that creationist discourse maintains with the obvious. This ambivalence lies most properly in the fundamental discontinuity between, on the one hand, the story of a "primitive" person's discovery of industrialized society, in which logical deduction holds, and, on the other hand, the conception of a necessary, allpowerful, and intelligent being, who exceeds human understanding. The case for intelligent design, indeed, rests on a fundamental paradox: if God does in fact exist and

if he (or she) did create the universe, there nevertheless can be no *logical* reason to explain the deity's intentional purpose behind the act of creation.

Marsha Orgeron and Skip Elsheimer find a comparable problem in their study of several MIS documentaries. Orgeron and Elsheimer argue that the films do not produce concrete knowledge of the natural world, but instead "dramatize the wonder of nature only to lead their viewers to a point of incomprehension, literally using science and technology to awe their spectators into believing in a divine creator." ¹⁹ The combination of religion and science, the authors conclude, produces a result where the former directly perverts the propriety of the latter. Avoiding robust and substantial lines of research, the various case studies sprinkled throughout the documentaries merely "use scientific concepts—a kind of semiscience—to support an evangelical agenda." ²⁰ While Orgeron and Elsheimer offer a convincing critique of the MIS films, I would argue that we can learn more about the problem at hand by pushing it even further to the domain of media theory. After all, creationist documentary certainly presents nature "filtered through the lens of Christianity." But in light of the preceding discussion, we might also consider how the *filmic lens* itself provides an implicit support for such totalizing gestures.

Time and Eternity (1955), another MIS-produced film offers an especially useful example for this consideration, for it explicitly addresses its reliance on the documentary camera. Dr. Moon once again hosts the proceedings here, but in this instance he attempts to demonstrate to the audience that the human experience of temporality is severely limited. Through the technical apparatus, as Moon demonstrates is several ways, we learn that the eye fails to recognize a range of sights because they happen too slow or too quickly. Examples include a high-speed shot of an arrow shooting through an egg, and a time-lapse recording of an entire football game. Stretching the analogy to its effective limit, the film then goes on to imply that any conception of time different from that of normal human perception and experience implies the existence of God's eternal realm. In the opening sequence for instance, Dr. Moon stands in the Moody Institute "laboratory" and speaks directly to camera: "The world about us is alive with action and movement that we miss because it's too slow. There's a veritable symphony of movement that we never see because we're locked up in our own little time compartment." In order to escape our temporal prison, Moon offers several sequences of images captured by a high-speed camera, as well as images from a time-lapse camera that he terms a "time compressor."

The use of metaphor here is demonstrative, at least at first glance, of the critique made by Orgeron and Elsheimer, since the repeated references to temporality as a discreet and objective entity separate from human experiences would appear to privilege mystification rather than productive knowledge. But whereas Orgereron and Elsheimer follow a Dawksian mode of criticism—which identifies the unscientific methods of creationism as the ultimate evidence for creationism's dismissal—Moon's discussion and employment of the camera raises an issue more properly understood as a question of visual technology rather than science. The first sequence employs a high-speed camera to represent movement that occurs too quickly for the naked eye to perceive, such as the splashes produced by drops of milk in a bowl and the physical effects of an automobile wreck on crash-test dummies. Prior to the demonstrations, Moon also converses with

his assistant in a manner that maintains mystification while also drawing attention to the physical presence of the camera:

Moon: Pete, do you suppose you could tell us a little about the equipment that you use?

Pete: I'd be glad to. The most important piece of equipment is right here: it's a super high-speed camera. I like to call it a "time-microscope." It does to time what the microscope does to physical dimension. It enlarges a bit of time instead of a bit of matter.

Moon: How fast will the camera be running on this take, Pete?

Pete: About 3,000 frames per second.

Moon: Uh, let's see. That'll stretch one second into about two

minutes, won't it?

Pete: Yes, two minutes and five seconds to be exact.

This exchange between Moon and Pete includes both a careful explanation of the technical means of representation, while simultaneously maintaining a place for metaphor, as when Pete refers to the camera as a "time-microscope." And as Moon's presentation continues he maintains the temporal metaphor, referring to the subsequent images as a shift in our "time reference." And yet, the very maintenance of this metaphor raises an important question about it: if we are to understand the camera as a magical machine producing visions of an alternative dimension, on the one hand, and on the other as a technological apparatus that could be explained with a simple user-manual-style explanation, how can we reconcile these two seemingly contradictory accounts of the relationship between visual technology and mystery?

One possible answer might reiterate the scientific critique in terms of film theory. Just as the relation between science and creationism appears to many as ultimately untenable and even contradictory, so too is the camera unable—at least without the aid of visual effects—to provide access to anything but the empirical world. Moon here invokes one of the original impulses for producing motion pictures: Muybridge's much storied desire to document movement otherwise inaccessible to the human eye.²¹ Understood this way, the mechanically produced image, though providing viewers access to an excessive display of movement, seems to have no relevance to the supernatural excess that Moon hopes to demonstrate. Yet the goal of these films is nothing more or less than to make a case for "intelligent design," to show a world that is otherworldly. Accordingly, even as Moon refers to the image as evidence of some alternative dimension, his comments not only ask us to see through the camera, but do so in a way that assures our awareness of the camera as a visual prosthetic, where the excessive otherness of the image is explicitly attributed to the camera itself. This seemingly paradoxical combination of metaphorical and scientific explanation—where the description includes a mystifying term like "time compressor" alongside careful explanation of the recording frame rate necessary to produce the apparent compression—reveals an attempt to imply more by showing less. The so-called otherworldliness of the image, coupled with direct reference to camera's modified and modifying capacity, assures us that the strange is entirely common—that is, assuming we look in the "proper" way. In this sense, Moon's case for faith relies not on the claim of an obvious encounter with evidence of intelligent design but rather relies merely on a presentation of temporality that differs from normal

experience. This difference that *the camera* produces in its high-speed and time-lapse images, then, is meant to stand as a sufficient means to stimulate a change in our moral or spiritual register. Simply put, Moon conceives of the camera itself as an effective agent for changing an audience's conception of the world and their place in it.

The most direct precursor to Moon's theoretical conception of the documentary camera as a means for producing faith, strangely enough, can be found in Dziga Vertov's attempt to use the documentary camera as a means for producing a perfected body politic. Indeed, despite the seemingly antithetical purposes of these two projects, the metaphor of creation is just as central to Vertov's "The Council of Three" (1923). In this piece, Vertov conceives of the kino-eye as a technological means of visual capture previously impossible for human vision; the representational capacities of the camera even raise the possibility of what he describes as a new Adam.²² The idea of a perfected body compiled piecemeal in the editing room is, of course, emblematic of Vertov's desire, as well as that of his fellow Soviet filmmakers, to construct out of the masses a perfected and ideologically self-conscious people. Vertov himself identifies the work of the kinoeye as following a clearly defined program. As he writes, "I create thousands of different people in accordance with preliminary blueprints and diagrams of different kinds."23 As Vertov knows very well, this imagined utopia would certainly require creative imagination, but would by no means constitute creation ex nihilo. The question, then much as in the case of creationist documentary—concerns the proper method necessary to produce a different vision of the world, beginning through a visual re-conception and re-ordering of the world as it already exists.

Along these lines, while Vertov was particularly interested in conception of the new both at the level of politics and the cinematic technology used in service of politics—we should not overlook the ways in which he considered the new as something to be produced not simply by perfection as such, but, more fundamentally, by a clear establishment of difference. Indeed, while Malcolm Turvey interprets Vertov's consideration of the cinematic apparatus as one that fetishizes the camera as a superhuman viewing device,²⁴ the latter's description of the kino-eye in fact relies very heavily on statements of simple differentiation. For instance, Vertov describes the camera as refusing the established parameters and limitations of human vision, and argues that it engages, instead, in temporal and spatial experimentation by "distending time, dissecting movement" and "schematizing processes of long duration inaccessible to the normal eye."25 The camera's simple production of difference entails the possibility of constructing an alternative vision of the world. The superhuman—or the more-thanhuman—is precisely the intended *product* of the camera, rather than an innate quality of the camera. And it is precisely the semblance of the more-than-human that creationist documentary, like Vertov, seeks to locate in the camera's capacity for producing visual difference.

Whereas Vertov sought to employ the camera's alternative mode of seeing so as to produce a totalized image of a perfected society, creationism's approach is much more simplistic. Creationism is concerned with the depiction of system, to be sure, but its concern is never with the actual identification of the systematic in a global sense; rather, as the time lapse and high speed images in *Time and Eternity* suggest, it is concerned instead with producing a semblance of the systematic and the complex through a

distended presentation of difference. Simply put, for creationism, the presentation of difference is not a means but an end. Rather than appropriating the kino-eye to exceed the status quo, creationism employs the differential vision of the camera merely to imply excess without pretending to access it directly, thereby maintaining and even carving out the space of the unintelligible, a space in which the supplement of an evangelical narrative—or in this more literal instance, a Bible—can in turn be snugly fit.

This use of the camera as a technical device for the production of meaning through difference poses a significant problem for recent film theory—particularly the more recent tendency of film theorists to locate difference solely on the side of cinematic spectatorship while nevertheless refusing the necessity of a totalizing theory of spectatorship. For example, in *Projecting a Camera: Language Games in Film Theory*, Edward Branigan examines the multitude of differing and often contradictory ways in which film theorists and critics discuss narrative film, particularly the ways in which the term camera, as it has been employed by a range of critics from early to contemporary film studies, serves as a locus for meaning that almost never intends a reference to an actual camera. For Branigan, such descriptions as "the camera sees" or "the camera avoids," and even seemingly more technical and specific descriptions like "the camera pans left," are examples that demonstrate a critic's assumption of how a narrative film produces meaning in a receptive audience. "What is expressed" in a critic's reference to a camera "is not due to an Author or Camera, but is the result of a person speaking about his or her knowledge and feelings on an occasion of reading or seeing."26 Branigan goes on to draw our attention to the term "camera" as metaphorical rather than literal:

What really is our idea of a "camera"? When we choose to speak, for example, of the *movement* of a camera as an explanation for a motion we sense on the screen, what is meant? Does a spectator, for example, think of a *specific* camera leased by a studio, having a certain weight and serial number that was in movement during the making of a shot. It seems unlikely that a spectator would even know which actual camera to think of.²⁷

Branigan's primary concern here is with the way in which reference to a camera entails a number of radial meanings referring not to the technical recording object itself, but rather, to the subsequent production of meaning experienced by a viewer in front of a screen. We might even go further to say that the absence of the camera—the fact that we do not directly perceive the productive apparatus—aids in the suspension of disbelief typically sought by the kinds of narrative films Branigan discusses.

However, in the case of documentary film, particularly those like MIS that seek to convey transcendental truth, the intent is to draw our attention directly to the mode of production so as to avoid any semblance of trickery. In fact, Moon tells us, in effect, that the camera does not and cannot lie.²⁸ Rather than projecting a metaphorical camera, then, Moon emphasizes the literal camera. Indeed, his description of the camera as a "time-compressor," rather than an instance of mystifying the technological apparatus, more simply points to the technical recording device *as* a prosthetic. That is to say, Moon intends to show us the world differently from our usual experience of it, and then he does *just* that: he shows us events that are literally un-seeable to the human eye,

while drawing attention, repeatedly, to the fact that the camera does the seeing for us. While the camera cannot provide access to the thing-in-itself that exceeds all possible experience or representation, then, Moon is content to employ the technical apparatus in service of representing a different perspective, perhaps even difference as such. The early creationist film thus functions by projecting the most literal of cameras, drawing our attention to the singular object of mechanical reproduction so as provide us with a clear presentation of where the image originates, and to therefore validate the image as an object produced mechanically and independently of any ideological intention. And so, while Dawkins and other commentators criticize creationism for supplementing science—in particular, for adding the figure of God where such a being does not belong—creationist documentary would seem to add nothing whatsoever to what the camera records on its own. Or rather, the film maintains the camera as an object that merely records a limited, and thus lacking perspective. It does not add meaning to the image, but rather takes solace in the image's lack of meaning, and makes effective use of the absent plenitude that such a lack implies. The film thus achieves its presentation of an arche narrative—a story beginning with genesis ex nihilo and ending with a subject's eventual declaration of faithful belief—precisely because it adds nothing to the documentary form—nothing, anyway, besides more images.

In this respect, we might say that the relation between Dr. Moon's literal camera and Branigan's metaphorical camera suggests, even in the difference between the two, a fundamental similarity. While Moon overemphasizes the camera in its literal presence within the space of the film's setting, Branigan's conception of radial meaning, even as it discounts reference to a literal camera, nevertheless requires a totalizing conception of the cinematic apparatus. While no two individuals may respond in equivalent ways to a single visual image, to posit even a limited continuum of possible responses nevertheless retains some semblance of origin, of a discreet locus to which multiple spectators will similarly respond. Simply put, in the discourse of visual technology and evidence both creationists and neo-formalist film theorists rely on the figure of the camera as a literal origin. More importantly, both creationism and formalism rely on scientific discourse as a means for producing totalizing theories, even if creationism is the only one to admit such an intention.

From Apparatus to Prosthesis

In his much discussed and often criticized essay on the cinematic apparatus, Jean Louis-Baudry claims that cinematic spectatorship bears a striking parallel to the existential experience of subjectivity. As Baudry puts it, "The cinematographic apparatus is unique in that it offers the subject perceptions of a reality' whose status seems similar to that of representations experienced as perception." The close connection between the cinematic viewing experience and the Freudian unconscious, for Baudry, raises concerns over exactly how cinematic content might serve to impact viewers ideologically. Since, as he claims, the cinematic apparatus is "a simulation of a condition of the subject, a position of the subject, a subject and not reality," there is then a significant prospect that film—and we could no doubt include other visual media—may be used as to interpellate individuals according to the constraints of ruling ideology.

Baudry is certainly right to take seriously the relation between technology and subjectivity. However, if nothing else the preceding pages should offer an entirely different view of this relation than the symbiotic one that one finds between the apparatus and the spectator. As a prosthetic device employed to calculate and re-present the world according to creationist claims, the camera shows itself to be a problematic means of visual capture. Yet it is precisely the appropriation of what the camera misses—of what it inevitably fails to represent, or to represent accurately—that proves so useful for creationist documentaries. In other words, creationist documentary relies on the failure of technology, particularly the camera, to represent the world in its entirety, and deploys this limitation to imply an excessive and supernatural agent behind the world's existence. Furthermore, the wide range of visual technologies that can be deployed under the auspices of documentary representation (time-lapse photography, montage, digital animation) all raise singularly different issues for considering the role between technology and belief. While critics of Baudry contend that spectatorship is multiple and diffuse, and that as such we cannot assume a universal viewing subject constrained by the cinematic apparatus,³¹ a consideration of Stiegler's techno-ontology suggests that technology itself, in its various forms, is likewise multiple and thus should prompt our reconsideration of the technical means of mediated production.³² Indeed, while Branigan and others maintain an emphasis on the multiplicity of potential spectatorial responses to the camera, there is no reason to assume that a definition of the "apparatus/object" entails the kind of restriction that he attributes to it.33 To be sure, I agree by and large with Branigan's conception of the spectator and the broad continuum of interpretations attendant to spectatorship; I would just add that such multiplicity co-originates at the level of technological prostheses themselves.

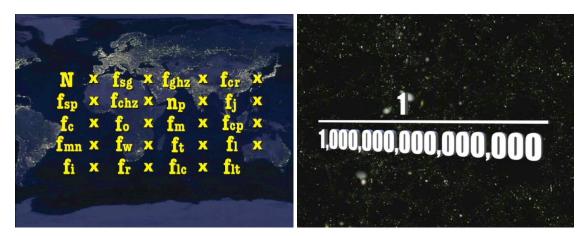
The trouble with the movement toward partiality in film theory as I see it, then, lies less with the kind of analysis offered in *Projecting a Camera*—which merely considers one side of the cinematic equation—and lies more with the theorists who have argued directly against totalizing theories of either the apparatus or the spectator. ³⁴In a manner directly reminiscent of those arguments found in Ben Stein's creationist documentary, for instance, David Bordwell's essay "Contemporary Film Studies and the Vicissitudes of Grand Theory," asks us to exchange the prevailing "Grand Theories" established in the 1970s for research methods that maintain partiality as a guiding method. A "middle-level" research approach, Bordwell offers, follows a "more modest trend which tackles more localized film-based problems without making such overarching theoretical commitments."35 Noel Caroll has similarly argued that film studies should be characterized by a continuum of research programs that ask different questions and produce a diverse range of answers.³⁶ With so many scenes from the repertoire of creationist documentary close in mind, we should no doubt detect here the same kind of complaints lobbed against the evolutionary "establishment" by evangelicals who likewise describe their research in the same "modest" terms. Indeed, we could say that the correlation between formalist film theory and creationism serves as a more explicit way of understanding Žižek's rebuke of Bordwell, Carroll, and others:

[T]he only proper way to counter such statements is to take them more literally than they were meant: 'Actually, what you're saying is just a modest contribution!', or, to paraphrase Freud, 'Why are you saying that

you're only giving a modest opinion, when what you're giving is only a modest opinion?⁷³⁷

The key to Žižek's rhetorical question in this passage is that it unmasks what the so-called "middle-level" research claims to avoid: a totalizing theory. Indeed, the demand for modesty could easily be described as a demand for the unintelligible, for that which refuses totalizing gestures. But as we have already seen in the instance of creationist documentary, the maintenance of a limited perspective is nothing other than a convenient route to implying excess as such. And as the discussion of Branigan already suggests, *any* discussion of film studies requires an underlying and totalizing conception of origin, even if this conception is never explicitly acknowledged.

Along these same lines, we could say that acknowledging the necessity of origin is a fundamental step in constructing any productive response to the question of the obvious. This is, after all, no doubt what creationism does exceedingly well, even if we refuse the theological conclusions at which it arrives. It is difficult to imagine a more succinct expression of this point than a recent creationist home video called *The* Privileged Planet (2004). As a whole, the film relies heavily on the idea of pursuing partial lines of research in response to what it considers to be the inappropriate assumptions of atheistic science. Against the likes of Carl Sagan, who asserted that human civilization is entirely insignificant, inhabiting a planet that amounts to nothing more than a speck of dust in the "enveloping darkness of space" 38 The Privileged Planet, as its title already suggests, attempts to demonstrate that Earth is entirely unique—so unique that a supernatural design provides the only reasonable explanation for its existence. Continuing the line of argument already perfected by Dr. Irwin Moon in the MIS documentaries, *Planet* once again draws a close correlation between the obvious and the unintelligible. Pointing to a dozen or so factors specific to Earth and necessary for sustaining complex life, the film compiles a mathematic equation to predict the chance that each factor might coalesce simultaneously on another planet in the universe, an equation whose resulting fractional expression—not unlike the examples we have already seen—exceeds the possibility of understanding, even as the film presents the fraction as logical proof of the intelligent design.



Like Bordwell and Carroll, the creationists who appear in interviews throughout *Planet* maintain that our spectatorial position in relation to the natural world fails to produce

any form of absolute knowledge. The impossibly large fraction, rather than providing a better understanding of the universe or our planet, creates a cognitive gap based on the unintelligible. At the same time, though, the video carries forward the logic of unintelligibility to make the rather remarkable claim—if an unoriginal one, given our discussion of *Dust or Destiny* and *Time and Eternity*— that our lack of knowledge is nothing other than a sign of God's existence as creator. While the film maintains statistics as the guarantor of Earth's special peculiarity, it subsequently adds that the universe is constructed by God in such a way as to ensure our encounter with scientific lack.³⁹ Thus, the natural world does not merely bear signs of a creator, the film argues; the world was also constructed in such a way as to allow for the emergence of science itself. That is to say, *Planet* conceives of the created world as constructed in such a manner as to ensure the *scientific discovery of creation*, even while this "discover" only ever appears in the guise of that which exceeds understanding.

Perhaps not so coincidentally, while Bordwell and Carroll support limited research as a necessary counter to the "Grand Theories" characterized by film studies in the 1970s, creationist documentaries allow us to see that the choice is not as clear as the posttheorists suppose. Surprisingly enough, creationist documentaries rely on an underlying theory of the relation between representation and origin that is much better suited to the concerns of film theory than any of those authors whose work appears in Post-Theory. For indeed, modest theories are ultimately not modest in practice, but rather, produce results akin to what Lacan found in scientific discourse: a knowledge that "denies anything that could be considered as a recourse to the supreme Being [...] taking refuge elsewhere—to end up doing the very same thing \(\text{fas the religious} \) faithful, prostrating oneself."40 Marc de Kesel arrives at a similar conclusion when he proposes that religion "has a more accurate truth value" than science: "At the very least," he writes, "it does not simply deny the unknowable kernel toward which human desire points. Placing an unknowable God at the locus of this kernel, religion keeps desire consciously unfulfilled and thus ongoing."41 When seen from this perspective, formalist film theory exhibits all the characteristics of *creationist film theory*, even if the formalists deny the kind of totality on which their modest theories rest. Even if we take creationism to be an entirely vacuous position on the question of origin, the structure of creationist discourse—unlike formalist arguments—at least explicitly acknowledges its reliance on a conception of totality.

In my estimation, the preceding consideration of visual technology offers one way of thinking about how we might redirect the path of film theory on a more productive route—one that does not inevitably lead down the same road toward an assumption of origin that simultaneously denies that necessity of considering origin in any direct way. Indeed, to reconsider the technological components of the cinematic as a question of prosthesis rather than apparatus is an approach that acknowledges the necessity of origin, even as it likewise acknowledges that origin itself is never obvious and that origin is ultimately inaccessible in any totalizing way. Film theory, then, should not claim to rely *entirely* on the factual and empirically verifiable, if only because such a methodology already necessitates some manner of paradigmatic belief. The key, instead, is to acknowledge that theory itself is grounded in an impossible bind that it must nevertheless engage *directly*. Indeed, the knowledge sought by film theory should allow

for that difficult leap of faith, accepting "a knowledge that knows it begins from, and is based upon, that which is impossible to know." 42

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Notes

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¹ The first several sequences of the film interview scientists who allege to have been fired from their positions or refused tenure for pursuing creationist related research.

² For a recent example of Dawkins ongoing assault on creationism and monotheism more generally, see *The God Delusion* (New York: Houghton Mifflin, 2006).

³ Dawkins, "Creationism: God's Gift to the Ignorant." http://entertainment.timesonline.co.uk/tol/ arts and entertainment/article1079838.ece

⁴ Slavoj Žižek, *The Sublime Object of Ideology* (New York: Verso, 1989), 36-38.

⁵ For a brief history of the Moody Institute of Science, as well as analyses of individual films produced by the Institute, see James Gilbert, *Redeeming Culture: American Religion in the Age of Science* (Chicago: University of Chicago Press, 1997), chapter 5, "A Magnificent Laboratory, A Magnificent Control Room," and Heather Hendershot, *Shaking the World for Jesus: Media and Conservative Evangelical Culture* (Chicago: University of Chicago Press, 2004), chapter 5, "Putting God under the Microscope: The Moody Institute of Science's Cinema of Devotion."

⁶ Simon Locke, Constructing "the Beginning": Discourses of Creation Science (Mahwah: Lawrence Erlbauhm Associates, Inc., 1999), 120.

⁷ Ibid.

⁸ Jean-Louis Baudry, "The Apparatus: Metapsychological to the Impression of Reality in Cinema" in *Film Theory and Criticism*, eds. Leo Braudy and Marhall Cohen (New York: Oxford University Press, 2004).

⁹ Martin Heidegger, *The Question Concerning Technology and Other Essays*, trans. William Lovitt (New York: Harper and Row, 1977), 21.

¹⁰ Bernard Stiegler, *Technics and Time, 1: The Fault of Epimetheus*, trans. Richard Beardsworth and George Collins (Stanford: Stanford University Press, 1998), 152.

¹¹ Ibid, 212.

¹² Ibid, 220.

¹³ Locke, 120.

¹⁴ Stiegler, 73.

¹⁵ My thinking here is heavily influenced by Ernesto Laclau's conception of the *empty signifier*, particularly in his essay, "On the Names of God." In *Political Theologies: Public Religions in a Post-Secular World*, eds. Hent de Vries and Lawrence Eugene Sullivan (New York: Fordham University Press, 2006).

¹⁶ As Kant puts it, rather convincingly, "The transcendental idea of a necessary and all-sufficient original being is so overwhelmingly great [. . .] that it leaves us at a loss, partly because we can never find in experience material sufficient to satisfy such a concept, and partly because it is always in the sphere of the conditioned that we carry out our search, seeking there ever vainly for the unconditioned." Immanuel Kant, *The Critique of Pure Reason*, trans. Norman Kemp Smith (New York: Palgrave Macmillan, 2003), 518.

¹⁷ Slavoj Žižek, *The Ticklish Subject: The Absent Centre of Political Ontology* (New York: Verso, 1999),

¹⁸ Quoted in Thomas Dubay, *The Evidential Power of Beauty: Science and Theology Meet* (San Francisco: Ignatius Press, 1999), 189.

¹⁹ Marsha Orgeron and Skip Elsheimer, "Something Different in Science Films: The Moody Institute of Science and the Canned Missionary Movement" *The Moving Image*, Vol. 1 (Spring 2007), 14. ²⁰ Ihid 4

²¹ David A. Cook, A History of Narrative Film (New York: W.W. Norton, 2004).

²² Dziga Vertov, *Kino Eye: The Writings of Dziga Vertov*, edited and introduction by Annette Michelson, trans. Kevin O'Brien (Berkley: University of California Press, 1984), 17. Vertov's description should undoubtedly remind us of the montage in *Dust or Destiny* comparing the machinic to the body. Rather than

forming a new body from the earth, as in the Genesis account, Vertov's project more closely resembles Dr. Frankenstein's attempted bricollage: "From one person I take the hands, the strongest and most dexterous; from another I take the legs, the swiftest and most shapely; from a third, the most beautiful and expressive head—and through montage I create a new, perfect man." Brian Price offers a similar reading of this passage, and likewise connects Vertov's conception of the camera to Heidegger's conception of technology and the image. See Price's essay, "Heidegger and Cinema" in European Film Theory, ed. Temenuga Trifonova (New York: Routledge, 2008).

²³ Vertov, 1.

²⁴ Malcom Turvey, "Can the Camera See? Mimeses in Man with a Movie Camera", October, Vol. 89 (Summer 1999), 33. ²⁵ Ibid, 19.

²⁶ Edward Branigan, *Projecting a Camera: Language Games in Film Theory* (New York: Routledge, 2006), 5.

²⁷ Ibid, 166.

²⁸ I would reiterate that Branigan's discussion concerns *fiction* film, whereas my discussion concerns documentary film. However, as my argument in the Conclusion will suggest, the term "camera" is as difficult to accurately pinpoint in both fiction and non-fiction film, as a result of the multiplicity inherent to technology, rather than simply as a result of distinctions made by the spectator as Branigan argues.

²⁹ Baudry, 220.

³⁰ Ibid, 222.

³¹ For an exemplary case, see Vance Kepley, Jr., "Whose Apparatus? Problems of Film Exhibition and History" in Post-Theory: Reconstructing Film Studies, eds. David Bordwell and Noël Carroll (Madison: University of Wisconsin Press, 1996).

³² As several references to psychoanalysis in this essay should indicate (Žižek, Lacan, Kesel), my concern is not merely with the philosophical question of technology but also with the manner in which technology contributes to subjective experience, even to the extent of impacting subjectivity at the level of the unconscious. This is an approach, though influenced by Stiegler, that nevertheless draws more directly from psychoanalysis in a manner that would conflicts in some manner with Stiegler's own reliance on deconstruction.

³³ "[When we try to confine the definition of a camera to its physical manifestation as an apparatus/object or try to confine a text to its physical manifestation, the many kinds of movement we wish to talk about [... .] will begin to undermine such restrictive definitions." Branigan, 57.

For an insightful history of the debates over film theory that likewise concerns the role of technology, particularly questions of medium specificity, see Brian Price's "The Latest Laocoon: Medium Specificity and the History of Film Theory" in Handbook of Film and Media Studies, ed. Robert Philip Kolker (New York: Oxford University Press, 2008).

³⁵ Bordwell and Carroll, 3.

³⁶ Bordwell and Carroll, 41.

³⁷ Slavoj Žižek, The Fright of Real Tears: Krzystof Kieslowski Between Theory and Post-theory (New York: BFI Publishing, 2001), 15.

³⁸ Ouoted in *The Privilegd Planet*

³⁹ Planet points to the "perfect" size and placement of the Moon in relation to the Sun and the Earth so as to produce total eclipses, which in turn allowed for scientific research into the outer layer of the Sun. Here, seeing and believing are directly correlated with scientific research, as the film claims that most of modern astronomy can be attributed to the knowledge gained through solar eclipses.

⁴⁰ Jacques Lacan, The Seminar of Jacques Lacan: Book II: The Ego in Freud's Theory and in the Technique of Psychoanalysis 1954-1955, ed. Jacques Alain Miller, trans. Sylvana Tomaselli (New York: W.W. Norton and Co., 1991) 48.

⁴¹ Marc de Kesel, "Religion as Critique, Critique as Religion: Some Reflections on the Monotheistic Weaknesses of Contemporary Criticism" in *Umbr(a): The Dark God* (August 2005), 133. ⁴² Ibid, 134.