

**From:**

*Shane Denson*

**Postnaturalism**

**Frankenstein, Film, and the Anthropotechnical Interface**  
(With a Foreword by Mark B. N. Hansen)

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»Postnaturalism« offers an original account of human-technological co-evolution and argues that film and media theory, in particular, needs to be re-evaluated from the perspective of our material interfaces with a constantly changing environment. Extrapolating from Frankenstein films and the resonances they establish between a hybrid monster and the spectator hooked into the machinery of the cinema, Shane Denson engages debates in science studies and philosophy of technology to rethink histories of cinema, media, technology, and ultimately of the affective channels of our own embodiment.

With a foreword by media theorist Mark B. N. Hansen.

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## Foreword: Logics of Transition

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MARK B. N. HANSEN

At one point in the complex and astute engagement with theories of media and technology that makes up the core of *Postnaturalism*, Shane Denson advances what appears on first glance to be an absolutely astounding claim concerning Niklas Luhmann's systems-theoretical account of media. "In contrast to the usual worries that systems theory's treatment of media is too abstract," Denson cool-headedly explains, "my concern is that it paradoxically *may not be abstract enough*"; Luhmann's theory may not be abstract enough, Denson clarifies, "to capture the dynamic processes concretely embodied by media" (311). In a sense, Denson's entire meditation in *Postnaturalism* is a massively concentrated effort to substantiate just this claim by way of a central thesis concerning the nature and operability of media. In its contemporary operations but also in its historical formations, media functions to empower the environment itself in ways that give rise to phenomena of the living but that also produce inanimate becomings of the material domain both for itself and as it interpenetrates with higher-order, living operations. Media in Denson's understanding, and here we discover the deep motivation for his appeal to Luhmann (and his insistence on the limitations of Luhmannian systems theory), operate less as agents *within* any given system, than as environmental forces conditioning the development of an autonomous material domain and informing the disparate becomings that compose such development.

### Anthropotechnical Interface

At the heart of Denson's argument is the figure of the "anthropotechnical interface." Denson introduces this concept to describe materiality as it operates before and beneath the human-nonhuman couplings that comprise the history of representations. To formulate this concept, Denson brings together two philosophical traditions that are normally held at a distance from one another. From naturalism,

Denson derives the crucial theme of matter's absolute resistance to linguistic or representational capture; and from phenomenology, the fundamental perspectival anchoring of any sensorimotor apprehension of materiality. By confronting each tradition with the other, Denson calls for their respective transformations: naturalism becomes postnaturalism; phenomenology, techno-phenomenology.

Naturalism, as Denson develops it, sheds any lingering connection to what we might call "negative" semiotic demonstrations, as well as to forms of constructivism that undergird such demonstrations. The result, however, is not a simple repudiation of linguistic-constructivist foundations, but their subsumption into a more encompassing, materialist ontology. This is precisely the subtle point of Denson's explication of the continuity from naturalism to postnaturalism when, for example, he writes: "the virtue of postnaturalism lies in its naturalist point of departure. Taking the material evolution of organic bodies for granted, methodologically speaking, means that we *begin* by assuming that our linguistically elusive interface with the unrepresentable material real is already, literally, *fleshed out*" (226). Far from taking place in some purified void, the linguistic-representational interface is itself part of the larger materiality at issue in any given moment of techno-material history, meaning that *both* its transparencies or "correlations," *and more importantly*, its opacities or "non-correlations," are deeply relevant to material process and to human (and extra-human) efforts to think that process.

In a similar way, Denson broadens the mandate of phenomenology to encompass not just human-centered intentional relations, but relations involving embodied agents of all sorts, nonhuman organisms to be sure, but technological entities as well. "Techno-phenomenology," Denson clarifies, "assumes that there is a plethora of embodied perspectives or standpoints that are no less real for the fact that phenomenology cannot countenance or occupy them, and between which standpoints occur inter-agential transactions and evolutionary transformations, defining a sub-phenomenological space of liminal matter and a sub-phenomenological time of transitionality" (283). What is involved here, once again, is not a simple repudiation of orthodox phenomenology, but rather, its far more complex embedding within a larger context where its endemic opacities—what phenomenological consciousness cannot intend—count as much, indeed much more, than the "contents" it secures through reduction.

Together, the postnatural operability of matter and the post-phenomenological operability of technics open up a "non-empirical stratum of materiality." Denson introduces this stratum as something like the "real condition" for experience as such, where the latter is not limited to the schematization of a manifold by the understanding, as it is on the Kantian account, but rather captures and names the impact of the sub-phenomenological force of matter on whatever entity or composi-

tion of entities, whether human mind or technical assemblage, serves to provide focal perspective on material process.

Again, Denson cuts to the heart of the stakes of his argument when he characterizes this non-empirical stratum as the very space of anthropotechnical embodiment: “from whichever direction we approach the impasse [between prioritizations of the human and the nonhuman], that of phenomenology or of naturalism, we arrive through this confrontation of perspectives at a non-empirical stratum of materiality that, in the evolutionary conjunction of organic and inorganic variation, constitutes the postnatural space of anthropotechnical embodiment. This material realm must be pre-empirical, as it concerns the very means of our access to the world: embodiment and technology, conceived not as organic or technical objects but as the bidirectional pathways through which experience and agency must pass” (257). From this clarification, we grasp how embodiment and technology are co-implicated at a level more fundamental or primitive than that of any integrated organic or inorganic “body,” the human included: as the twin operations of the anthropotechnical interface, embodiment and technology work together in a cosmic dance that continuously generates nature itself. “The hybrid materiality of the anthropotechnical interface conditions all access to objective reality and, in a postnatural sense, *actually undergirds nature itself*” (257).

## Non-Correlational Access

Denson’s elucidation of the logic of the anthropotechnical interface is a particularly welcome development when contextualized against the backdrop of recent developments in cultural theory that have sought to escape from various logics of the human. In marked contrast to the critique of “correlationism” at the heart of today’s various speculative realisms as well as to the over hasty enfranchisement of material processes and events at issue in the so-called “new materialisms,” Denson’s perspective forcefully asserts the necessity to proceed through and with the human in order to get to a position where the human need no longer function as a bottleneck on what can be presented to thought. To this end, Denson installs media in the role played by the “ancestral” (Quentin Meillassoux) or the “object” (Graham Harman). Proffering the materialist concept of “metabolism” as an alternative to the “realtime representational fluxes” central to Bernard Stiegler’s media philosophy, Denson invests media themselves—media understood as “distributed materiality” or “distributed embodiment”—as “originary correlators” that operate before and as the very basis of the dual evolutionary lineages of the human and the technical. “[B]esides further counteracting Stiegler’s all-too-cognitive view of technics,” the payoff of Denson’s approach “is that we reach a more robustly anti-correlationist

account of media *as the originary correlators*. By taking a wholly ahuman realm of non-organic metabolic materiality into account, we counteract the impression of anthropocentrism that adheres to the asymmetrical privileging of the human bodily synthesis of time and space as the primary determinant of empirical reality” (328).

Like Whitehead (and unlike the speculative realists), Denson views the problem of correlationism less as an epistemological issue than a material-ontological one: the problem with Kant is not that he correlates what is with what can be thought, but rather, as Helmholtz already pointed out more than 100 years ago in his indictment of Kant’s commitment to Euclidean geometry, that he gives an account of nature far too fully tailored to human experience. To break this correlationist circle does not require us to hypostatize and then reject the role Kant accords thought. What is needed, rather, is a non-anthropocentric account of the production of space and time, as well as an expanded view of how humans, understood as elements within a larger “postnatural” process, are both encompassed within and permeated by the very forces that generate the spatiotemporal continuum. For Denson, this means theorizing how media operate as forces of “distributed embodiment”: “We then conceive the production of the empirical, the constitution and maintenance of its spatio-temporal foundations, as a matter of distributed embodiment—of the transduction of materially intersecting entities, each with their own form of embodiment, their own manner of marking the boundary, embodying the membrane, between material flux and the emergent realm of discrete objects” (328).

We might say that Denson’s effort to locate media beneath the evolutionary split between the human and the technical yields an account of “non-correlational access” in the place of a simple critique of correlationism. If Denson is right that the metabolic operability of media displaces the anthropocentrism of the human bodily synthesis of space and time, then what he proffers as the anthropotechnical interface holds forth the promise to access this metabolic materiality, this domain of distributed embodiment, without imposing on it the specific form of *human* embodiment. The result is an account of the power of distributed embodiment that does not need to sacrifice human participation but that can celebrate the more fundamental sensory and preperceptual “worldliness” of humans *as a crucial component in metabolic materiality*.

## Transitionality

The form of this argument concerning correlation and the question of the human exemplifies a critical maneuver that is characteristic of Denson’s various deployments of the vast theoretical archive he mobilizes in *Postnaturalism*. His procedure, here and at numerous points along the continuum he postulates from cinematic

“double materiality” to the anthropotechnical interface itself, is to think with, through, and beyond a given concept in order to resituate or reapply that concept in a larger field or context, where whatever limitations it had appeared to possess are resolved (in the sense of *aufgehoben*) and where the concept in question takes on renewed scope and urgency. The result is a mind-dazzling exfoliation of the technicity informing the living that proceeds through stages of theoretical expansion, punctuating the story of the anthropotechnical interface like spikes rising up from the noise of an fMRI readout.

While this “Hegelian style of thought” reflects Denson’s ruminative mode of dwelling with theory, and while it facilitates the impressively wide-ranging synthetic scope of his theoretical vision, it also directly implicates what I take to be the fundamental theoretical argument animating *Postnaturalism* as a whole, namely, the argument for the *generativity of the transitional*. Whether the focus in question be the historical transition between the so-called “primitive” mode of cinema and its later “classical” mode, or the material transition (flux) between environmental energy and embodied life, or the onto-epistemological transition between pre-perceptual, impersonal sensation and representational, conscious experience, Denson takes up residence in the space of process or relationality, and refuses to fall prey to any temptation to privilege one or another of the states, terms, or levels in correlation. By so doing, Denson puts himself in a position to discern and to track the “energies” driving the processes or relationalities that he puts into correlation prior to their solidification into terms: thus, in each of the cases mentioned above and in a series of other relationalities engaged in *Postnaturalism*, the movement is less that of a *from ... to* than a bidirectional and recursive *between*. Material transitionality replaces critical correlationalism as the mode of thinking connection.

## The Singularity of Frankenstein

Denson’s critical engagement with debates in early cinema perfectly exemplifies the power of transitionality. In a manner that typifies *Postnaturalism*’s theoretical excavations, Denson begins his account of early cinema with a pointed and helpfully explanatory reconstruction of arguments concerning the initial formation of a “primitive” mode of cinematic expression, characterized by the operation of “attraction” and the absence of narrative motivation, and its subsequent transformation into a “classical” mode that has—following the majority of extant film histories—remained relatively stable from the early 1930s until today. Drawing on arguments from film scholars like Tom Gunning and Miriam Hansen, Denson puts into question the notion of a straight-forward, linear and progressive transition from the primitive to the classical mode, and seeks to revalue the so-called “transitional period” as



something far less “transitional” than it in fact has historically been treated. Rather than a “mere transition” on the way to cinema’s maturity, the transitional period is here treated as a period of openness and heterogeneity, a period in which divergent potentialities of the cinematic medium came together, led in various directions, and seeded often impossible future potentialities for cinema.

What is striking about Denson’s critical engagement is his success in bringing new significance to a historical claim about early cinema’s “transitional” phase. He does this *precisely* by treating cinema as an element *within a larger technomaterial transitionality*: accordingly, the so-called period of transition of early cinema describes a power of transitionality possessing a scope greater than any particular trajectory in cinema’s history, and indeed, greater than that of the institution of cinema itself. In Denson’s reconstruction then, the so-called transitional period names nothing less than a historical-material configuration that arose when a host of divergent material energies—both intra- and extra-cinematic—came together to create unprecedented potentialities for emergence.

At a moment when scholars have been challenged to reinvent the scope and singularity of the cinematic institution itself, Denson’s broad and theoretically-driven approach might well inaugurate a new mode of expansion: as an alternative to arguments that further specify the materiality of cinema (e.g., arguments concerning the historical specificity of film as a celluloid support for cinema), Denson’s exfoliating approach reembeds the institution of cinema in a much larger, technomaterial history, in relation to which questions concerning the ontology of cinema and its role within the history of the anthropotechnical interface can become orienting points for analysis.

## **Mangling as History**

Denson engages in a formally similar analysis—and always one sensitive to the substantive matters at hand—in relation to a host of quite different moments of historical transition, including the reversal of the hierarchy between science and technology following the industrial revolution, and the complex material shifts ensuing from the proliferation of computational technologies that mark our contemporary historical moment. Denson also extends his account of the force of transitionality beyond the historical proper and into the domain of cultural theory and criticism: thus, a similar logic of what we might (following Denson following Pickering) call “mangling” informs Denson’s nuanced theoretical characterizations of the material flows between environment and embodiment and of the difficult correlation of material life and representation.

The point, in all of these divergent cases, is the same, though the means taken to make it are always different, i.e., technically and historically specific: an adequate account of the anthropotechnical condition that characterizes the human, or better, the cosmos in which humans are implicated, requires a mode of analysis that does not discover “answers” within itself and its own history, but “generates” knowledge on the basis of the complex relationalities of divergent forces and the emergences they yield. In relation to questions of historical methodology, the payoff of Denson’s focus on transitionality is the hard-to-come-by recognition that mangling precedes history: mangling describes the complex interpenetration and cross-fertilization of technomaterial energies that generate the very changes forming the raw material of the discipline of history.

## Postnaturalism

Nowhere is the synthetic power of this logic of transitionality more clearly exemplified than in the striking correlation Denson forges between *Frankenstein* films and what he calls “postnaturalism.” This correlation begins from the outset of the book and is woven into its various structural levels as Denson moves from close-readings of scenes from particular films outward to synoptic characterizations of critical positions (e.g., feminist interpretations of Shelley’s *Frankenstein*), engagements with sociology of science/technology and science studies (the generalization of Pickering’s “mangle of practice”), and ultimately to the broad ontological arguments that inform his characterization of the postnatural condition of humanity (or again, of the cosmos implicating human life and phenomenality). Not only can we say that this correlation structures the argumentation here in general, but we can say that it institutes a certain critical-theoretical imperative: the imperative to think nonhuman, cosmological becoming together with human, phenomenal experience. As I see it, this is the fundamental function of the focus on the *Frankenstein* myth and its various cultural expressions: in addition to furnishing exemplary historical moments at which the thematic concern with technological exteriorization of human experience becomes most salient, most formally complicated, and also most pressing, the *Frankenstein* complex constitutes something like an *interface* that, on the one hand, facilitates and structures our (human) experiential contact with cosmological techno-material becoming, while on the other, insists on the importance of representation—or better, of self-reference—as an irreducible aspect of our cultural negotiation of what I might be tempted to call our human technogenesis (and what Denson might want to generalize into something like cosmological technogenesis).

## Cinematic Double Articulation

The significance of Denson's isolation of and focus on the cinematic legacy of the Frankenstein myth can be pinpointed in this context: with its own constitutive double articulation, cinema materializes, and thus perfectly exemplifies, the kernel of the Frankenstein narrative. As we have seen, cinema on Denson's account has from its origin functioned in a transitional space, or better, as an agent of transitionality between materiality and representation. Part of the story of cinema's maturation (even for a critic as critical of any progressive narrative as Tom Gunning) concerns the way that subjective focus gets introjected into the space of a filmic image that presents a wealth of worldly detail in excess of any subjective synthetic capacity. From the very beginning and by way of its technical "automatism" (Cavell), cinema presents a world that cannot be fully captured as representation, which means that it functions on a double register: it operates simultaneously at the level of embodiment and at the level of representation.

It is entirely to Denson's credit that he sees this double vision of cinema not simply as constitutive of cinema as a technomaterial institution but, crucially, as resistant to any kind of correlationism, meaning that what cinema does capture representationally *cannot be equated with* a representation of what it presents to embodied experience, but is a qualitatively different material experience altogether. Indeed, it is central to Denson's argument concerning cinema's "internal Frankenstein complex" that the two levels of "experience" differentiated here *not* correlate: their tension is itself implicated in the larger logic of (human and cosmological) technogenesis, and it is thus requisite upon us, as critics, to avoid the reciprocal temptations either to totalize representation, following the trajectory of Derridean deconstruction, or simply to abandon it as mere ideology, whether that be conceptualized as de Man's "phenomenality" or Kittler's "eyewash."

Perhaps more than the very impressive feats of synthesis and the daunting scope that mark the highpoints of *Postnaturalism*, for me it may well be this sensitivity to the irreducible double operation of the anthropotechnical interface that best demonstrates the maturity of Denson's meditation: this well-nigh ethical refusal to give up the category of phenomenality, and with it the "non-optionality" of the human, is, in my opinion, responsible for the degree of complexity and nuance that Denson is able to bring to his consideration of postnaturalism. Not only is it what takes him, in the impressive series of broadenings (as well as correlative contractions) I have already mentioned, *directly* and *obligatorily* from individual Frankenstein films to the overarching onto-logic of contemporary postnaturalism, but it is also—perhaps paradoxically—what allows Denson to indict the lingering anthropocentrism of many of his sourcepoints (my own work included) and to rethink the human not as the ontological, epistemological, or ethical center point of the analy-

sis, but as a contingently or “in-certain-circumstances” privileged component of a greater cosmological onto-logic. Put in more simple terms: in the wake of Denson’s account, the phenomenal is not irreducible because it furnishes the necessary perspective for the human to be implicated in techno-material cosmogenesis; the phenomenal is, rather, a *necessary element* of such cosmogenesis and one that, at least in our cosmos, implicates the human as its “agent.” Denson puts this difference into operation at several points in the analysis, most notably (for me) when he engages the event of “digital convergence” and takes a critical distance from arguments that see something entirely unprecedented in the microtemporal, subrepresentational operability of digital computation. On Denson’s account, this is simply the latest in a long history of phases in technogenesis that are differentially structured by the double articulation of—and constitutive tension between—embodiment and representation.

### Whither the Postnatural?

In a development that resonates with Walter Benjamin’s brilliant account of cinema as a psycho-physiological training ground for life in modern times, Denson effectively presents cinematic double vision as a training ground for life in postnatural times. “Would it be possible,” he asks, “on the basis of a cinematic double vision, to imaginatively feel our way into profoundly different, non-anthropomorphic filmic bodies and to describe their difference from our own being, that is, their specific positions between objective framings and subjective framers of material experience? If something like this is possible—and this of course remains to be seen—then the task of cinematic double vision could be understood as a sort of anthropotechnical ethnography, one that would offer, by means of its break with correlationism, a hope not unlike that promised (though certainly not always fulfilled) by traditional ethnography: that we may become more tolerant, open, and just with respect to difference and variation—in both the human *and the nonhuman* realm of agency” (298).

Denson’s profound insight here—which carries forward Benjamin’s conviction that cinema both impacts us tactilely and mediates the tactile energies of the technomaterial domain—is that humans are connected to the material domain through a host of avenues, most of which do not find their way into any cognitive channels of correlation. But what Denson proposes, by way of his conception of an anthropotechnical ethnography, is a form of practice that could exploit the “double articulation” of cinema, and beyond it of technical objects and processes generally, as the very vehicle for a broadened appreciation of the complex interpermeation of human life and material world. If cinema is exemplary in such an ethnography, that is

because cinema does not simply represent the operability of material forces that evade capture by Kantian *Vorstellungen*, but itself operates, as an expressive form but also as a technomaterial agent, at a host of levels, many of which evade representational capture.

Cinema, in other words, performs what it shows: indeed, it *cannot but perform what it shows*. This, I think, is the very kernel of Denson's argument (discussed above) for media as "originary correlators": to the extent that technical media are imbricated deep within the material fluxes at the heart of cosmological process, they are agents of a very general and multi-faceted correlation that, in marked contrast to the correlation criticized by Meillassoux and company, does not link the human and the world in a one-to-one correspondence, but describes the complexity and multi-dimensionality of the human's implication within the technomaterial world. Fortunately for us, and this is the crux of Denson's specification of the cinema as functionally privileged form of mediation, the technogenetic history of media has created anthropotechnical interfaces—like cinema itself—that give us noncorrelational, yet in some sense representational access to the extra-representational domain of material forces and operations subtending not just our existence in and as part of the world, but the cosmological genesis of the world itself. Beyond the narratives and images it presents, what cinema mediates is, ultimately, nothing other than our belonging to such a broader technomaterial, cosmological process.

Shane Denson's *Postnaturalism* develops this ambitious, wide-ranging, and deeply compelling argument concerning the originary operation of media in a way that sketches out a much-needed alternative to destructive developments which, expanding the darker strains of poststructuralist anti-humanism, have pitted the human against the material in some kind of cosmological endgame. *Postnaturalism* will provide a very powerful and timely addition to the literature on posthuman, cosmological technogenesis. Perhaps more clearly than any other account, it reconciles the irreducibility of phenomenality and the imperative to move beyond anthropocentrism as we seek to fathom the *postnatural* techno-material "revolutions" that have repeatedly remade—and that will no doubt continue to remake—the environments from which we emerge and to which "we" belong before we become and as a condition of becoming human subjects.

Denson's thought is permeated by a generosity that effectively places him in a similar relation to his sources as the human is to its cosmological envelope. By living the complexity and multi-dimensionality of his own anthropotechnical inheritance, Denson is able—and here his thinking stands in marked contrast to much of contemporary theoretical discourse—to synthesize where others can only divide. He is thus able to achieve a singular feat: to engage constructively, indeed, compositionally, with an impressively vast archive of ideational and worldly materials. His accomplishment in *Postnaturalism* shows convincingly that such wide-ranging

synthesis is the key to derailing overly formalistic conceptions of correlation in favor of the broad correlation linking humans to postnatural materiality through a relational texture of mutual implication that confounds any and all efforts at purification.

# 1. Introduction:

## Monster Movies and Metaphysics

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Unnatural participations or nuptials are the true  
Nature spanning the kingdoms of nature.

GILLES DELEUZE AND FÉLIX GUATTARI<sup>1</sup>

What is postnaturalism? One might say, as a first approach, that it is post-postmodernism in a very basic, literal form: not so much the “return of the real” after having worked through all the intricate deconstructive constructivisms and paradoxically ornate aesthetic levelings that dominated an era of not-quite-late-enough capital. No, though it might have a touch of that too, postnaturalism is “after postmodernism” in a much more basic sense, in the same way that Aristotle’s metaphysics was after physics, that is, arranged canonically after his *Physics*: likewise, postnaturalism comes after postmodernism in the banal sense of situating itself on alphabetically ordered bookshelves (and in corresponding databanks) right after all those books with “postmodernism” in their titles. But apart from playfully justifying a strategically useful position on the bookshelf, the comparison with Aristotle’s *Metaphysics* is not entirely spurious. For just as the posthumous arrangement of his treatises gave rise to the mistaken notion that Aristotle was concerned to delineate a field of study that is categorically *beyond* physics, my notion of postnaturalism runs the risk that it will be understood as an attempt to move categorically *beyond* nature and/or naturalism. The relations amongst these terms is, however, more complex, and I will not be able fully to specify them until much later in this work. For the time being—I might as well come right out with it—let it be known that postnaturalism is in fact an emphatically *metaphysical* position: metaphysical in the sense of the philosophical discipline to which Aristotle’s librarians so innocently but so momentously gave rise, i.e. the speculative study of the fundamental nature of being, whose very enterprise has been so demonized in large segments of recent thought.

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1 *A Thousand Plateaus: Capitalism and Schizophrenia* 241.

By returning to metaphysics—and admitting it, no less—postnaturalism is therefore “after postmodernism” in another, more substantial sense than mere alphabetical order. But just as postmodernism maintained relations to modernism in its various senses, postnaturalism remains indebted to postmodernism’s achievements, most centrally its deconstructive critique of essentialism. And this is where postnaturalism defines its basic opposition to naturalism: that is, it is a refusal of nature as essence (human nature, the natural order of things, benevolent nature as opposed to malignant culture or the evil of technical artificiality), as well as a refusal of naturalism *qua* reductivism (the dogma that empirical science is the sole yardstick of being, the surreptitious metaphysics that establishes the successors of “natural philosophy” as first philosophy). Thus, postnaturalism is largely continuous with that aspect of postmodern thought that taught us the significance of supplements and that gave us cyborg manifestoes. At the same time, though, postnaturalism is also in a sense continuous with scientific naturalism—sharing with it a belief in the primacy of the material world over the constructions of human thought—and this emphasis on materiality marks a break with the focus on discourse that dominates broadly postmodern thinking. Finally, like postmodernism, postnaturalism encompasses a historical dimension—defined by its attention to the historicity of technological changes, conceived as qualitative transitions of a genuinely ontological order—but the “post” in postnaturalism is not meant to indicate that we are living *after* or *beyond* nature, whatever that might mean. For the basic idea behind postnaturalism might be summed up, to adapt a phrase from Bruno Latour, thus: *We have never been natural*.<sup>2</sup> (And neither has nature, for that matter.)

If that is the philosophical import of postnaturalism, it is important to note that this will not be a conventional work of philosophy. Instead, I begin and I end with filmic adaptations and variations on Mary Shelley’s *Frankenstein*, which for a full century now (since Thomas Edison’s one-reeler *Frankenstein* appeared in 1910) have been reflecting, commenting upon, and treating in the most diverse of fashions the uneasy relations that obtain between modern humans and their technologies. So-called Frankenstein films also engage social and cultural constructions of human normalcy and deviance, along with their consequences for bodies and identities marked as unnatural, anomalous, freakish, or queer. These films thus offer a particularly rich index of the historical transformations to which normative conceptions and images of humanity have been subject in the twentieth century: they document anxieties about the technological alienation of human beings, and they combine these with (often propagandizing) representations of social processes of exclusion

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2 The inspiration, of course, is Bruno Latour’s *We Have Never Been Modern*, the influence of which on my line of thinking will become clear later, in the theory-dominated Part Two of this book.



through which privileged forms of subjectivity negatively derive their shape—and power—from abnormal or monstrous Others. On a narrative or thematic level, that is, cinematic adaptations of the Frankenstein story depict “human nature” as threatened by both the technical/artificial and the non-normative. Upon this basis, Frankenstein films can be investigated in terms of semiotic correlations between processes of oppression and their historically specific sociocultural contexts; one may ask how these correlations inform the filmic texts and, more generally, our thinking about ourselves and our technologies as filtered through those texts.<sup>3</sup>

Beyond this rather traditional, representationalist focus, however, I aim to situate my analyses in a robustly material realm of human-technological interaction, a realm of lived relations underlying and largely unperceived in human thinking about, and cultural images of, technology.<sup>4</sup> Not just an arena for the production, reproduction, and circulation of images and ideas, it is important to conceive the cinema also as a site of material interchange between human bodies and technologies. Frankenstein films’ thematic contents are presented by means of constantly

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- 3 Esther Schor, in her chapter “Frankenstein and Film” in *The Cambridge Companion to Mary Shelley*, characterizes this type of approach thus: “In the history of Frankenstein films, we can trace a Rohrschach—a psychologist’s inkblot—of our collective fears. Critics have explored the implication of racism and lynching in the 1931 *Frankenstein*; of eugenics and the threat of a ‘master race’ in Whale’s 1935 *Bride of Frankenstein*; of nuclear danger in the 1957 *Curse of Frankenstein* (dir. Terence Fisher) and the Hammer Studios sequels of the 1950s and 1960s; of organ transplants in various films of the 1960s and 70s; of sexual perversity in *Andy Warhol’s Frankenstein* (dir. Antonio Margheriti and Paul Morrissey, 1974); and of replicants, cyborgs, and artificial intelligence in such films as Ridley Scott’s *Blade Runner* (1982) and Steven Spielberg’s *Artificial Intelligence: AI* (2001 [...])” (64). Schor sets this type of perspective aside in her text, but she remains in a representationalist framework by asking what filmic depictions of animation have to say about, or how they might influence our readings of, the monster as depicted in Shelley’s novel. That is, the focus is framed by an intertextual relation between films and the novel, and both relata are queried as to what animation *means* or *signifies*. In what follows, I break with both of these framing choices by dissociating the films from Shelley’s novel (though a reading of the novel, in Chapter 4, will be essential to my argument about what the films materially do) and by subordinating the question of discursive meaning to questions of embodiment, materiality, and interfacing.
- 4 Here I follow Mark Hansen, who defines representationalism thus: “By representationalist approach I mean any approach that legitimizes representation as its frame of reference, whether for ends either affirmative or critical, positivist or deconstructive” (*Embodying Technesis* 265). The expression “robust *materiality* of technology,” to which he opposes representationalist approaches, also stems from Hansen (4).

changing cinematic technologies; indeed, the films often highlight their own technical foundations as much as—and often by means of—their displays of the technological creation of the diegetic monster. Discursive analyses, though indispensable, cannot therefore be sufficient for understanding the reflexive feedback loops that exist here between spectator, technological milieu, and the thematic representations on the screen. The material conditions of the cinema and the embodied constitution of historically situated spectators must also be accounted for if we are to grasp Frankenstein films’ assertions of a doubly articulated anthropotechnical interface: as these movies intimate—though they often work to repress their own recognition—not only the filmic monster but also *we* as spectators are “bio-technical” hybrids, and our imbrication in technical networks (cinematic and otherwise) presents an additional complication in the cultural-political negotiation of “the human.”

Hybridity, though, has a history. *Frankenstein* is not a timeless tale, nor do its filmic progenies act in a historical vacuum. Indeed, Frankenstein films confront us with precisely the *historicity of human-technological interfaces*—at least, that is, if we confront the films in a vigorously historicizing manner. Seen in the context of the historical connections that obtain amongst their narrative contents, their social settings, and contemporaneous cultural conflicts; set in relation to media-technical infrastructures, innovations, and transitions; and located squarely in the material and experiential parameters of historically situated spectatorship, Frankenstein films reveal specific, changing configurations of human-technological interaction: patterns, tendencies, and deviations that mark moments in a richly variable history that is at once a history of cinema, of media, of technology, and of the affective channels of our own embodiment. Clearly, there is nothing obvious about this claim, which would seem to aggrandize a rather trivial cinematic phenomenon and invest Frankenstein films with a function that they cannot possibly fulfill. It shall take some work, then, to demonstrate the reverse, and I undertake this task by situating the films within a history of phenomenological patterns of cinematic reception, of changing relations amongst spectatorial subjects, filmic objects, and mediating technologies. Seen in this light, as I hope to demonstrate, we find Frankenstein films making certain demands on their human users, at times altogether *unreasonable* demands that challenge the very coherence and stability of viewing subjects and pressure them to submit to a disorienting affective experience. As the material locus of this experience, human embodiment is opened to the direct, non-cognitive and pre-personal, impact of cinematic technology. In this way, viewers are brought into contact with a realm of diffuse materiality—that of the anthropotechnical interface itself, the relational substrate which underlies the socially, psychically, and otherwise subjectively or discursively organized relations that humans maintain with technologies. Though typically only a momentary, fleeting

experience, viewers are exposed to a domain of radically alterior agencies in flux, into which subjectivities are plunged and out of which emerge new configurations of human-nonhuman relationality. This is the realm of postnatural transitionality, in which occur historical movements that outstrip the scope of any empirical or discursive historiography. In this realm is grounded a history of material agency itself, as it is shaped and bent, expanded and attenuated, formed and deformed in concert with our technological environments.

The link, then, that my project forges between monster movies and metaphysics is one that attempts to answer the call issued by Frankenstein films themselves, to live up to the demands that they make upon viewers by developing a framework capable of countenancing those demands and the affective experiences to which they give rise. Postnaturalism, as a metaphysics of anthropotechnical change, thus acknowledges these films' provocations, to which it offers in response a theory that promises a sort of rapprochement between over-challenged humans and misunderstood technical agencies. My project, in accordance with these relations and goals, is organized into three main parts: Part One locates the experiential challenges posed by Frankenstein films; Part Two theorizes embodiment, transitionality, and mediality in an attempt to articulate a framework—postnaturalism—that will meet those challenges; and Part Three returns to Frankenstein films, now with postnatural theory in hand, to demonstrate the films' special relations to the historicity of the anthropotechnical interface. But before I go any further, I need to address two topics, which will occupy the remainder of this introduction—namely: What do I mean by Frankenstein film? And what is an anthropotechnical interface?

## **MONSTER MOVIES: ADAPTATION, MYTH, GENRE, AND BEYOND**

What is a Frankenstein film? The answer to this question may seem obvious at first glance. Surely we know one when we see one. And yet, when pressed to give a definition capable of drawing clear lines of inclusion and exclusion, we may find ourselves unable to respond. We can name a few clear-cut cases, for example James Whale's *Frankenstein* (1931) and *Bride of Frankenstein* (1935)—the very paradigms of the Frankenstein film, with Boris Karloff as the iconic embodiment of the monster—along with the rest of the Universal cycle and the Hammer series that began with *The Curse of Frankenstein* (1957).<sup>5</sup> Surely we would include Kenneth

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5 Production histories for all of the Universal Frankenstein films are contained in Gregory William Mank's *It's Alive! The Classic Cinema Saga of Frankenstein*. Each of the individual films is covered, and the original scripts reproduced, in the books of the Magi-

Branagh's *Mary Shelley's Frankenstein* (1994, starring Robert de Niro as the creature<sup>6</sup>), as well as *Flesh for Frankenstein* (1973, better known as *Andy Warhol's Frankenstein*). And then there's a slew of other films with "Frankenstein" in their titles: *I Was a Teenage Frankenstein* (1957), *Frankenstein's Daughter* (1958), *Frankenstein 1970* (1958), *Dracula Vs. Frankenstein* (1971), *Lady Frankenstein* (1971), *The Erotic Adventures of Frankenstein* (1971), *Frankenstein's Castle of Freaks* (1974).<sup>7</sup> But a titular mention of "Frankenstein" might not be a reliable indicator: *Frankenstein Meets the Spaceman* (1965) is iffy—Martians land on Earth, damage a NASA-built android, which then goes haywire and terrorizes bikini-clad girls—while *Frankenstein Conquers the World* (also 1965, from the Toho Company of Godzilla fame) is perhaps even more questionable, with its story of a heart, stolen from the Nazis during WWII and exposed to radiation during the bombing of Hiroshima, which then sprouts into a giant boy who eventually faces a showdown with a giant reptile. What about spoofs such as *Abbott and Costello Meet Frankenstein* (1948) and Mel Brooks's *Young Frankenstein* (1974)? Or how about films with a clearly *Frankenstein*-inspired story of creation, such as *Rocky Horror Picture Show* (1975) or *Edward Scissorhands* (1990)? But if we take these on board, should we also include such films as *Hulk* (2003), *Robocop* (1987), or even *Blade Runner* (1982)? Do we still know a Frankenstein film when we see one?

Now I do not have any definitive answers to these questions, and I am inclined to concede that such precision here may not, ultimately, be all that important; however, we do need a general idea of what kind of objects we're after here, and taking the question of definition seriously provides an opportunity for me both to outline these objects and to explore what it is that makes Frankenstein films so attractive for my larger project. First of all, it seems unreasonable to maintain that the category of Frankenstein films is limited in any strict sense to *adaptations* of Mary Shelley's novel, for this would rule out almost all of the films that we commonly accept under the rubric, including such paradigmatic examples as *Bride of Frankenstein*, which imagines the consummation of a project never completed in the novel: the

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cimage Filmbooks Universal Filmscripts Series, all edited by Philip J. Riley. The Hammer series is covered in Marcus Hearn and Alan Barnes, *The Hammer Story*; David Pirie, *A New Heritage of Horror*; and Wayne Kinsey, *Hammer Films: The Bray Studios Years* and *Hammer Films: The Elstree Studios Years*.

6 Background and screenplay are included in Diana Landau, ed., *Mary Shelley's Frankenstein: The Classic Tale of Terror Reborn on Film*.

7 Compendia of film facts, primary materials, and secondary sources for Frankenstein films include Donald Glut's *The Frankenstein Catalog* and Caroline Picart's more recent *The Frankenstein Film Sourcebook*.

creation of a female monster.<sup>8</sup> As this example demonstrates, any definition in terms of “adaptation” will have to take that concept in a very loose sense, one which allows both for lines of derivation but also major deviations from Shelley’s narrative. It is questionable, though, whether a notion of adaptation stretched far enough to include even the core films of the Universal and Hammer series would still be a useful concept.<sup>9</sup> It would have to accommodate the monster’s resurrection

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8 Of course, the traditional reply would be to say that the film is faithful to the “spirit” rather than the details of Shelley’s plot. But this form of reply, itself questionable enough in its vagueness, will not be able to accommodate all of the various filmic deviations from Shelley’s narrative. A number of more recent theoretical approaches to adaptation might be better suited to deal with such cases. Critics such as Brian McFarlane, Robert Stam, Thomas Leitch, Julie Sanders, and Linda Hutcheon have criticized the so-called “fidelity discourse” that is operative in my counterexample. (See, for example, McFarlane’s *Novel to Film*, Stam’s “Beyond Fidelity,” Hutcheon’s *A Theory of Adaptation*, Leitch’s *Film Adaptation and its Discontents*, and Sanders’s *Adaptation and Appropriation*.) It is the notion of fidelity to an original (in this case Mary Shelley’s novel) that defines the “strict sense” of adaptation that I refer to above. I turn to “looser senses” of adaptation in a moment. For clarity’s sake, though, at issue in my denial of the reasonableness of a strict sense is not so much whether we can conceive the films as “*adaptations of Shelley’s novel*” as whether we can or should conceive them as “*adaptations of Shelley’s novel*,” with emphasis on the narrow relation between adaptation and “original,” whether that relation be evaluated in terms of the spirit or the letter of the alleged source.

9 To be more precise about this, it is less a question of *whether* such a loose conception would be useful as it is a question of *what it would be useful for*. Thus, Linda Hutcheon’s evolutionary theory, which puts aside the hierarchical relation of an adaptation to the “original” and the related focus on fidelity and instead envisions a network of dialogical adaptation relations amongst a whole ecosphere of texts, is better suited to a macroscopic view of cultural practices, but less well suited, in my opinion, to a detailed study of a particular line of development. (An explicit “homology between biological and cultural adaptation” has been proposed in a jointly authored article by Gary R. Bortolotti and Linda Hutcheon: “On the Origin of Adaptations.”) To be sure, this type of theory is a major advance over the older binarizing fidelity model, in that it allows us to understand our own and past “remix cultures” better, giving us a means to trace broad cultural mutations, but the light it sheds on the particular formation of *Frankenstein* films, for example, is one that tends not so much to explain their unity as to *dissolve* it into a number of sub-populations constituted by the relations of adaptations to other adaptations. And indeed, this can be a useful perspective if we are primarily interested in *what culture does to Frankenstein films* (as the diversifying action of an environment on groups of organisms)

first by one son of Frankenstein (in *Son of Frankenstein*, 1939) and then another (*Ghost of Frankenstein*, 1942); it would have to suffer the creature's encounters with the Wolf Man (*Frankenstein Meets the Wolf Man*, 1943), and again with the Wolf Man and Dracula (in both *House of Frankenstein*, 1944, and *House of Dracula*, 1945). The situation is similar when we turn to Hammer, where Baron Frankenstein takes the spotlight: he first constructs a creature (*The Curse of Frankenstein*, 1957), then builds a new body for his hunchback assistant (*The Revenge of Frankenstein*, 1958), employs the services of a mesmerist for the act of animation (*The Evil of Frankenstein*, 1964), installs the soul of a man in the corpse of a woman (*Frankenstein Created Woman*, 1967), performs the first ever brain transplantation (*Frankenstein Must Be Destroyed*, 1969), repeats his first act of creation (*The Horror of Frankenstein*, 1970), and finally, himself completely mad, pairs up with a lunatic to stitch together a homicidal hairy ape-like monster (*Frankenstein and the Monster from Hell*, 1974). What do all of these films have in common with Mary Shelley's Gothic novel? At the end of the day, not much—certainly not a particular set of narrative events; at most, there is a shared focus on acts of creation and the consequences of such acts, along with a very general thematic exploration of human-technology relations and attendant socio-cultural conflicts.<sup>10</sup>

Starting from this thematic basis, there is a temptation to cast the net wide, to include any film that shares the focus on the technological animation of artificial creatures. Thus, for example, in his introduction to the collection *We Belong Dead*:

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rather than a focus on *how Frankenstein films act as a group* (where it should be understood that there is no immutable essence common to them all, but that their constitution as a group is possible by means of an observational selection, which does not involve any backsliding into the fidelity model). The “myth” approach that I consider in a moment can be seen as one such observational selection, but one that is too vague and ahistorical to be of much use. The notion that Frankenstein films constitute a genre or quasi-genre, which I consider thereafter, is another, more promising but ultimately limited, observational selection. In Chapter 6, I return briefly to this question and propose that Frankenstein films constitute, in fact, a type of *series*.

- 10 Thomas Leitch discusses Frankenstein films as examples of “secondary, tertiary, or quaternary imitations” which give fidelity models trouble, but which can be conceived as “adaptations not of an earlier story but of an earlier character, setting, or concept” (120). My problem with this suggestion, however, is that it gives the impression of describing a more or less well-defined class of objects while it in fact trades on a vacillation between, on the one hand, an endless subdivision amongst “secondary, tertiary, or quaternary” formations without an overarching unity and, on the other hand, an open unity based on vague notions such as the “adaptation of a concept” that make it difficult to exclude anything. The latter tendency opens onto the “myth” approach that I discuss presently.

*Frankenstein on Film*, which itself treats more or less non-controversial candidates for inclusion in the Frankenstein film category, editor Gary Svehla describes how a tendency to generalize once took shape in himself: “Growing up in the 1950s and 1960s, we saw the recreation of the Frankenstein myth rewritten first by England’s Hammer Film Productions and later recast in science fiction terms, where even *The Thing* and *It! The Terror from Beyond Space* became variations on a theme: Frankenstein Monsters from outer space” (9). Similarly seeing the Frankenstein story as a “myth,” the theme of which is taken to be “*parthenogenesis* or male self-birthing” (3), Caroline Picart restricts herself, for the most part, in *The Cinematic Rebirths of Frankenstein: Universal, Hammer, and Beyond* to the canonical films of the Universal and Hammer series, and plays it safe with the “beyond,” treating only *Frankenstein 1970* and *Mary Shelley’s Frankenstein*; but she suggests that this is a more or less arbitrary limitation, and that not only “comedic or parodic versions” such as *Abbott and Costello Meet Frankenstein*, *Young Frankenstein*, and *The Rocky Horror Picture Show*, but also science fiction films such as *Blade Runner* and *Alien* (1979) “effectively rewrite the Frankenstein narrative” and could therefore be treated as Frankenstein films proper (200). And this she does in her follow-up book, *Remaking the Frankenstein Myth on Film*, where Picart looks at the theme of “parthenogenetic births” and the “tensions regarding gender, power, and technology” (2) that it encodes in a broader range of films, including both the complete *Alien* quadrilogy and the *Terminator* series, which for her are an integral part of the “Frankensteinian cinemyth” (1). But while I can certainly understand Svehla’s youthful experience, and while I grant that there may be good reasons for *comparing* the films that Picart treats to Frankenstein films, I question the usefulness of *identifying* them as Frankenstein films. This inflationary approach, based on a very broad thematic foundation, stretches the category beyond recognition. Moreover, the (widespread) generalization of the Frankenstein story into a “myth” is itself a sort of mythical approach, one that tends to reduce the tale’s historicity to a general relation it has to modern technology while neutralizing any significant changes in that relation or in technology itself.<sup>11</sup>

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11 A recent incarnation of the myth approach is Susan Tyler Hitchcock’s *Frankenstein: A Cultural History*. Identifying the tale as “a myth of claiming long-forbidden knowledge and facing the consequences,” and relating it to Joseph Campbell’s Jungian take on an archetypal “myth of the search for meaning in human life” that pervades geographically and historically disparate cultures (4), Hitchcock sees the Frankenstein story’s “crucial, haunting, modern twist” as consisting in the secularization of the myth, raising the “dark possibility of a godless world” (6). The pop-Nietzschean-existentialism-cum-Jungian-essentialism notwithstanding, Hitchcock’s anecdotal study offers a highly readable overview of the pervasion of Shelley’s tale across popular culture. Other examples of the

Thus, Picart in particular stretches the category of Frankenstein films too far for my taste, and my uneasiness with this move is based ultimately in my belief that one of the salient characteristics of Frankenstein films is their ability to invoke an experience of the postnatural historicity of anthropotechnical relations. It would, of course, be question-begging for me to *define* the films in this way, and that is not what I wish to suggest; indeed, not all Frankenstein films manage to call forth this experience, and that's far from being all that they do. But, as we shall see later, when Frankenstein films do in fact pull it off, they do so only as a function of their own historicity and their relation to a historically contingent juncture of spectating subjects, mediating technologies, and material settings—and it is precisely this rich historicity of the films that a “mythical” approach underemphasizes. On the other hand, though, what Svehla and Picart demonstrate by stretching the category as they do is that the category is itself inherently flexible, and that a set of family resemblances unites the films as a group more than any common lineage that might be traced back to Shelley's novel. This I take to be an important insight, but one that does not compel us to expand the category of Frankenstein films to the status of “cinemyth.” (*Alien* and *Terminator*, for me, are perhaps distant relatives, hardly next of kin.) Typically—and typicality all that we can hope for when considering “family resemblance”-type groupings—Frankenstein films have the thematic focus that we have been considering (artificial creation, human-technological conflict, etc.), but beyond that they are staged according to one of a limited repertoire of

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“Frankenstein myth” approach include Chris Baldick's *In Frankenstein's Shadow: Myth, Monstrosity, and Nineteenth-Century Writing*, Christopher Small's *Mary Shelley's Frankenstein: Tracing the Myth*, and Martin Tropp's *Images of Fear*. Finally, an interesting variation is Pedro Javier Pardo García's article “Beyond Adaptation: Frankenstein's Postmodern Progeny,” which reasons: “it is not just the literary source that has been ceaselessly reproduced: most film versions do not take Mary Shelley's text as a point of departure, but previous film versions. In fact, what different versions have in common is not so much the book as the myth created by its dramatic and cinematic reproduction, to the extent that the book has become one more version of that myth—the founding, but not necessarily the most influential one. The mediation of myth in the transference from page to screen must be taken into account in any study of the film adaptations of *Frankenstein*” (224). For García, this translates into the following: “The story of Shelley's *Frankenstein* on film is therefore one of distortion, of omissions, and additions, simplification and elaboration, or simply, one in which the myth has supplanted the novel” (226). What we see here is how the overly narrow view of adaptation on the “fidelity” model gives way to the overly broad view of the “myth” model. In my opinion, we need to steer a course between the two if we are to have a useful but non-reductive view of Frankenstein films as a group formation.



narrative patterns, visualized according to a conventional iconography, enacted according to standard patterns of characterization, and generally connected to other Frankenstein films by means of allusion, quotation, and other intertextual means of signaling a nodding awareness of one another.

Repetition of a basic thematic conflict and variation on the theme, narrowed according to factors of conventional resemblance and interconnection—this suggests that we are dealing with something like a genre. I would like to pursue this suggestion a bit further, but let me state up front that I do not ultimately believe that the requisite generic coherence obtains to warrant the strong label of genre or even the weaker one of sub-genre (of what?); for though all but a handful of Frankenstein films are uncontroversially “genre films,” they are dispersed across a range of film genres. Most of them share the broader characteristics of horror and/or science fiction, but it is not at all obvious why we should rule out comedy versions like *Young Frankenstein*, exploitation pictures such as *Blackenstein* (1973), or action-adventure movies like *Van Helsing* (2004). Do we not, however, miss this cross-generic nature of the category when we seek to identify the films as a generic unit? Besides, and more importantly, if we take the genre designation over-seriously we run the risk again of over-generalizing and thereby de-historicizing the films, and thus of overlooking the significant intra- and inter-generic transformations marked by Frankenstein films. James Whale’s *Frankenstein*, for instance, was instrumental in defining the emerging genre of horror, which in turn effectively died before Hammer revived it with *The Curse of Frankenstein*; but theirs was a new type of horror, which in some ways anticipated splatter films but was hardly comparable to the graphic displays of disembowelment that we find (presented in 3D, no less) in *Andy Warhol’s Frankenstein* or the recent over-the-top body-gore-fest *Vampire Girl Vs. Frankenstein Girl* (2009). Moreover, if it is now common to classify even the classic Frankenstein films of the 1930s as horror/sci-fi hybrids, the science fiction genre was not solidified as such until after World War II; other films—such as *Frankenstein 1970*, starring an aged Boris Karloff as Dr. Frankenstein’s descendant seeking to clone himself with an atomic reactor, or the much later time-travel tale *Frankenstein Unbound* (1990)—can more plausibly be treated as hybrids, where this hybridity marks a historically determinate act of probing genre boundaries. Nor is horror/sci-fi the only type of hybridity—fittingly enough for films centered around a hybrid monster—that we find among Frankenstein films. There is horror/comedy (such as *The Monster Squad*, 1987), horror/porn or horror/sexploitation (*Lust for Frankenstein*, 1998; *Mistress Frankenstein*, 2000; *Bikini Frankenstein*, 2010), and even a horror/sci-fi-Western mix-up (*Jesse James Meets Frankenstein’s Daughter*, 1966). In short, there are just too many trans-generic hybridities, cross-overs, and spin-offs, and too much heterogeneous trash and treasure to be reduced to a genre.

However, if we bear in mind the caveat that it is merely a heuristic fiction, it will nevertheless be instructive as a preliminary exercise to tentatively treat the films as a quasi-generic formation. In this way, we can begin to approach those aspects that I find most interesting about them, and which effectively take us beyond genre. We have seen that Frankenstein films share a thematic focus on human-technological interactions and attendant conflicts of various sorts. Consider now this statement from Thomas Schatz's classic book *Hollywood Genres*: "In addressing basic cultural conflicts and celebrating the values and attitudes whereby these conflicts might be resolved, all film genres represent the filmmakers' and audience's cooperative efforts to 'tame' those beasts, both actual and imaginary, which threaten the stability of our everyday lives" (29). Now there might or might not be better ones, but there are certainly a lot worse starting points for thinking the unity of Frankenstein films (as opposed to the disparity that I have largely emphasized up to now). The interesting thing about Schatz's statement, in this connection, is that Frankenstein films typically represent a very *literal* interpretation of the "cooperative efforts" he describes: these films embody the threats to stability of which Schatz speaks in an actual monster, a material "beast" that must be physically "tamed" or, more commonly, destroyed to restore order. Now for Schatz, who has in mind a more figurative enactment of this scenario, the repeated staging of more or less the same conflicts in highly conventionalized manners indicates that genres are a matter of "*cultural ritual*" (12)—ritualized means of confronting, which is not to say solving, a society's contradictions. Whatever we might think about the *function* of such ritual (whether we think it serves psychological, sociological, or even metaphysical purposes), the ritualistic aspect is clearly present in Frankenstein films, where a basic pattern can be identified that, though not universal, is repeatedly rehearsed not only in the paradigmatic horror and horror/sci-fi versions but also in the comedy and other, more marginal hybrid productions.

Thus, Frankenstein films largely conform to the basic "plot structure of a genre film" that Schatz describes as involving the following four stages (30):

*establishment* (via various narrative and iconographic cues) of the generic community with its inherent dramatic conflicts;

*animation* of those conflicts through the actions and attitudes of the genre's constellation of characters;

*intensification* of the conflict by means of conventional situations and dramatic confrontations until the conflict reaches crisis proportions;

*resolution* of the crisis in a fashion which eliminates the physical and/or ideological threat and thereby celebrates the (temporarily) well-ordered community. (30)

In your typical Frankenstein film, just about everything leading up to the act of creation is *establishment* in Schatz's sense; narrative cues (such as Frankenstein's increasing neglect of his fiancée, his undertaking of illegitimate studies, cruelties to humans or animals, desecrations of hallowed ground, etc.) and iconographic cues (Gothic architecture, tower labs or their modern-day equivalents, weird machinery, graveyards by night, etc.) establish the community's inherent conflict between renegade science and traditional community, between the seductions of forbidden knowledge and the sanctioned appeals of romantic love, family, *Heimat*, and nature. The next step, *animation*, is particularly literal in the Frankenstein film's typically central event: the act of creation, the animation of the monster, which brings the latent conflict (i.e. the monster) to life. The conflict then *intensifies* when the monster fails to submit, when it kills innocent victims, when it escapes, resulting in the community's alarm and panic. The *resolution* of the crisis is just as literal as its animation: the community "eliminates the physical and/or ideological threat" by banding together, hunting down the creature, torches in hand, and (apparently) killing it; but the community, as Schatz indicates, is only "(temporarily) well-ordered" as a result, for the restoration of order is unmasked as illusory when the next film reveals that the creature is not in fact dead, or that Dr. Frankenstein or some relative or former student is about to resurrect it.

As Schatz points out, a genre's success over time depends on both the continued "thematic appeal and significance" accorded its central conflicts and a certain "flexibility" in its treatment of them (31). In the case of Frankenstein films, motivation for the basic plot structure's ceaseless repetition is surely sustained, at least in part, by the apparently unresolvable conflicts generated by technological innovation, which is the source both of hopes and of fears, intimately tied and yet irreconcilably opposed to one another. And Frankenstein films are sufficiently flexible in their trips to this inexhaustible well, ever adapting the tale to the most ambivalently promising and threatening technologies of the day: filmic Frankensteins utilize atomic energy, perform organ transplants, pursue bioethically dubious eugenic or genetic research, become experts in AI and robotics; and so can the monster be made to stand for just about any potential technological menace we can think of. Frankenstein films' human-technology conflicts (meaning, typically, conflicts of the type technology-out-of-control and/or technology-in-the-wrong-hands) are, in Schatz's terms, the "static nucleus" of the (quasi-)genre, while the various forms this conflict takes are its "dynamic surface structure" (31). However, if generic variation were restricted to the choice of technologies employed to frame the basic conflict, the genre view would again not yield much in the way of a historicizing

perspective. Or, conversely, no plausible theory of genre can maintain that the basic patterns are static and unchanging over the course of a genre's history. Variation—and not just surface variation but historical transformation of the generic core—is essential to the utility of the notion of “genre” itself, which in the actual practice of generic formations is always susceptible to decline, always has some “golden age” or high point (either in qualitative or quantitative terms), can always subdivide into new formations, or be transformed through contact with other genres. A genre, in short, always has a history; without it, we would not have a generic category but instead an immutable essence, the same film over and over again rather than a collection of films of more or less the same type.<sup>12</sup>

In his own take on historical variation, which draws on suggestions made by Christian Metz and Henri Focillon, Schatz develops a model of the “evolution” of genres (36-41). He argues that,

at the earliest stages of its life span, a genre tends to exploit the cinematic medium *as a medium*. If a genre is a society collectively speaking to itself, then any stylistic flourishes or formal self-consciousness will only impede the transmission of the message. At this stage, genre films transmit a certain idealized cultural self-image with as little “formal interference” as possible. Once a genre has passed through its experimental stage where its conventions have been established, it enters into its classical stage. We might consider this stage as one of *formal transparency*. Both the narrative formula and the film medium work together to transmit and reinforce that genre's social message—its ideology or problem-solving strategy—as directly as possible to the audience. (38)

This message, of course, must be renegotiated in each new incarnation, varied to the extent—but no further—that it succeeds in communicating the central message in a compelling, yet conventional, but nevertheless non-redundant way. There is a subtle give and take in the so-called classical stage, but at some point something's got to give:

Thus, the end of a genre's classic stage can be viewed as that point at which the genre's straightforward message has “saturated” the audience. With its growing awareness of the formal and thematic structures, the genre evolves into what Focillon termed the age of re-

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12 Indeed, without this qualification, the genre designation would collapse back into the myth view: the co-presence of hope and fear occasioned by technological innovation is the basis for the archetypal view taken, for example, by Susan Tyler Hitchcock (see previous footnote above), while the “dynamic surface structure” of adaptation to currently controversial technologies accords with the various manifestations of the alleged archetypal myth as they occur in various cultures.

finement. As a genre's classic conventions are refined and eventually parodied and subverted, its transparency gradually gives way to *opacity*: we no longer look *through* the form (or perhaps "into the mirror") to glimpse an idealized self-image, rather we look *at the form itself* to examine and appropriate its structure and its cultural appeal. (38)

In terms that come quite close to the substance and tone of a systems-theoretical approach, Schatz sums up his view thus: "A genre's progression from transparency to opacity—from straightforward storytelling to self-conscious formalism—involves its concerted effort to explain itself, to address and evaluate its very status as a popular form" (38).

We can imagine how this might apply to Frankenstein films. Universal's "classic" cycle perfected the Frankenstein film genre in the mode of horror. Hammer "refined" the basic formula, which means not so much that they improved upon it as that they embellished it and adapted it on the basis of an "awareness of the formal and thematic structures" established by Universal. This awareness is demonstrated, for example, in the dramatic shift from the creature to the creator as the central character of the Hammer series. Through such deviations, Hammer significantly transformed the formula, but they did not yet go beyond the "age of refinement" into what Focillon termed "the baroque age." This occurred later, when Mel Brooks parodied (but also paid tribute to) the formula, when Warhol's Frankenstein subverted it (or "fucked it in the gall bladder," in the words of the film's Baron Frankenstein), when other productions of the 1970s and beyond—such as *Rocky Horror*, Tim Burton's *Frankenweenie* (1984, 2012), and even an episode of *The X-Files* ("The Post-Modern Prometheus," 1997)—subjected it to further scrutiny, pastiche, deconstruction, made it "opaque" in order to examine its cultural function and appeal, and to display the hidden politics of that appeal.

There is, however, a problem with this view of Frankenstein films' development—namely: James Whale's "golden age" horrors, *Frankenstein* and *Bride of Frankenstein*, which together form the very epitome of the classical Frankenstein film, are themselves already extremely self-reflexive, full of camp and irony. On the other hand, some of the most "serious" or "straightforward" retellings of the Frankenstein tale (adaptations such as *Terror of Frankenstein*, 1977, or that better-known attempt at "faithfulness," *Mary Shelley's Frankenstein*) appear very late in the day. Frankenstein films, or so it would seem, simply do not follow the evolutionary pattern described by Schatz. Perhaps this deviation can be attributed in part to the long cultural prehistory of the (hypothetical) film genre, which includes Shelley's novel, satirical political cartoons, and a rich theatrical tradition of stage

plays of all sorts.<sup>13</sup> On the other hand, though, it might simply be that genres do not develop in the manner of an “evolution from transparent social reaffirmation to opaque self-reflexivity” (40-41). Steve Neale, for one, opts for the latter alternative and argues that Schatz’s model is far too hermetic, too closed off from the types of extrinsic influences that I have identified as forming the Frankenstein film’s prehistory—which never in fact ended but instead developed in parallel with cinematic incarnations across a wide range of media (comics, radio, TV, video games, etc.).<sup>14</sup> Indeed, though Schatz allows that there can be exceptions to the evolutionary model, the latter remains a more or less self-enclosed system; interestingly, the exceptional cases he acknowledges involve factors that are not so different in kind from the genre-extrinsic influences highlighted by Neale: Schatz maintains that “external pressures” such as “the threat of government censorship and religious boycott” can disturb the “internal evolution” of genres (40) rather than, as Neale would have it, militating against the notion of internal evolution itself.

Now my point is not to invalidate Schatz’s model or even to engage in this debate, which is far-ranging and goes beyond Schatz and Neale. To put it bluntly, genre theory is not my primary interest here at all, but only ancillary to another purpose. I raise the question of genre historicity, that is, not in order to learn about the history of genres but because the question focuses attention on a peculiar and significant feature of Frankenstein films—one that is touched upon in Schatz’s use of the terms “transparency” and “opacity” and that presents a much greater obstacle to the subsumption of Frankenstein films under Schatz’s model than the factors raised by Neale. Quite apart from those largely external factors (which would either invalidate the model *or* prove the rule by exception), there are in fact formal characteristics of Frankenstein films, factors *internal* to the films themselves, that militate against a purely formal or intertextual approach to their “internal evolution” as a genre. These characteristics, which are typical of Frankenstein films *as* a quasi-generic formation, are anchored in the films’ previously discussed realization *à la*

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13 As Steven Forry details in his *Hideous Progenies*, “the years between 1823 [when Richard Brinsley Peake’s theatrical adaptation *Presumption* appeared] and 1832 were years of proliferation during which the Frankenstein myth was transformed for popular consumption. From the passage of the first Reform Bill to the turn of the century, however, the myth spread among the populace, taking on new media, the most important of which was the political cartoon” (43). See Forry for an overview of pre- and non-filmic incarnations, especially the many theatrical productions, for which Forry reprints selected scripts.

14 See, for example, Neale’s article “Questions of Genre,” where he links historical change within a genre to a variety of factors, from changes in filmic technologies and social patterns of moviegoing to the relations between film and non-filmic entertainments and media such as vaudeville, comics, and popular literature and music.

*lettre* of the generic plot structure—in which the conflict, once established, is literally *animated* before the crisis intensifies and eventually finds resolution in the communal purging of the monster. In connection with this literalness, Frankenstein films' central thematic questionings of human-technological relations are consistently related, as we shall see in more detail later, to a formal or *medial* questioning of film-viewer relations—a self-reflexive questioning enacted by way of a competition staged between two filmic modes: between film as a transparent medium for the representation of characters, events, and dramatic conflicts on the one hand, and film as an opaque spectacle in its own right, a matter of special effects and the presentation of images *as* images on the other. Playing, that is, on the self-reflexive relation between the diegetic monster's animation through technical means and a view of film as itself a technology of animation, films such as *Whale's* foreground the mediality of film and set it in conflict with the mediated narrative.<sup>15</sup> This establishes a conflict for the spectator between the appeals of narrative integration and an alternative appeal, a pleasure in the spectacle and the technology of film as itself something wondrous, hearkening back to the “operational aesthetic” of so-called primitive film.<sup>16</sup> Caught between these poles, the viewer is implicated in the probing of a dynamic, phenomenally unstable realm not unlike that which characterized the historical transition, in the 1910s, from early to classical film.<sup>17</sup> Far from charting an evolutionary course from transparency to opacity, then, Frankenstein films possess a motivation, at once thematic and medial, for “baroque” formal opacity and self-reflexivity right from the start.

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15 The self-reflexive relation between film-as-animating-technology and Frankenstein films as films-about-technological-animation provides the jumping off point, in Chapter 2, for a historicizing approach to the phenomenological structure of cinematic spectatorship in general and in the specific case of Frankenstein films.

16 The term “operational aesthetic” was coined by Neil Harris and taken up by Tom Gunning to explain the non-narrative, techno-centric appeals characteristic of early film. See, for example, Gunning's “Crazy Machines in the Garden of Forking Paths: Mischief Gags and the Origins of American Film Comedy.” I return to early cinema and its phenomenological relevance for Frankenstein films in Chapter 2.

17 I set up the argument for this claim in Chapter 2. A full exploration of the thesis follows in Chapter 3.

## **METAPHYSICS: FILM AND THE ANTHROPOTECHNICAL INTERFACE**

Frankenstein films thus involve a probing of the filmic medium itself. But in what does the medium consist? While I am not concerned to formulate a definition *per se*, we can identify, as a start, the following least common technical denominator: film consists in a series of photographic images shown in rapid succession. Film's realization therefore requires an apparatus for capturing these images (the camera), a material base for storing them (film stock), and a means of reproducing them (a projector and a screen), not to mention a venue for viewing films and the humans who operate the machinery and view the films.<sup>18</sup> Frankenstein films, I contend, challenge us to probe our own relations to this technical infrastructure of film. And when we accept the challenge, as I intend to demonstrate in this book, what we discover is a historically variable material interface that challenges the primacy of human thought over technology: an embodied interface that subsists below the threshold of subjectivity. But if it eludes the advances of conceptual thought, then the task of grasping the anthropotechnical interface for the conceptual purposes of definition is difficult to say the least. Our initial approach, it would seem, has to be a negative one. Part One of this project can largely be understood as mounting such a negative approach, one which locates the anthropotechnical interface symptomatically, by means of the experiential gaps and lacunae that Frankenstein films confront us with. In Part Two, these gaps will serve as the basis for a more positive characterization in terms of my theory of the postnatural historicity of the interface.

Before that, however, I would like to offer a preliminary and orientational exploration of the anthropotechnical interface, by means of which my overall argu-

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18 Clearly, I am focusing on a certain historical configuration of technical apparatuses here; I am ignoring alternatives such as the camera-less (or camera-virtualizing) digital production of images, the storage of images on video or in digital formats, and the reproduction of images by means of DVD player/TV or computer/monitor combos, for example, or the pre-cinematic kinoscopes and similar peep-hole apparatuses that allowed only a single person at time to view recorded images. Besides these major variations, there are also many more significant shifts within the basic apparatus I describe, for example the shift from nitrate stock to acetate and then polyester film, or even more apparent changes such as the advent of sound, color, widescreen, 3D, and so on. My point here is not to downplay historical variation by excluding these alternatives and changes, but merely to highlight the existence of a material infrastructure. Historical changes in the constitution of this infrastructure will indeed be central to my argument, which will correlate such changes with (but not equate them with) the postnatural history of the anthropotechnical interface.



ment can be better understood. I shall begin this exploration in what might at first seem an unlikely and perhaps even unnecessarily indirect manner, by addressing the question: “Can film be art?” While it may seem gratuitous at present, this oblique strategy is necessitated by the resistance to conceptual capture of the anthropotechnical interface, to which the historical question of film’s artistic status is related by the series of attempts, on the part of film theory, to navigate a course between cheap entertainment and high culture, ostentatious technological show and refined aesthetic expression. This negotiational process of redefinition, which was most pronounced in the transitional era of the 1910s and involved such pioneers of film aesthetics as Vachel Lindsay and Hugo Münsterberg, necessarily implicated the medium in efforts to isolate and elevate it by containing film in aesthetic and cultural categories of discursive thought, making it a medium *qua* channel for the communication of artists’ inspired ideas, and thus capable of addressing essentially human, transhistorically stable faculties and subjectivities. Endowed with this timeless, transcendent communicative ability, film would thus be purified of the material taint of its lowly origins as a spectacle in the mode of technological exhibitions. At issue here, as I have elsewhere endeavored to show, was not only the social status of the cinema but also the corporeal impact of film’s technical materiality, which transformatively displaced human thought by revising the embodied basis of sensorimotor contact with the world.<sup>19</sup> In Lindsay’s struggles to tame what he calls “the non-humanness of the undisciplined photograph” (*Art of the Moving Picture* 193) and “the uncanny scientific quality of the camera’s work” (194), and in Münsterberg’s attempts to configure film as a vehicle of genius, which is freed from all causal constraint and “overcomes reality” (*The Photoplay* 144) in order to achieve “a new form of true beauty in the turmoil of a technical age” (233), we recognize transitional-era film aesthetics as motivated by the goal of buffering or warding off the impact of technology by subsuming film under a model of art as timeless, disinterested, and amenable to faculties of a static human essence.

As I have already intimated, the transitional-era context in which Lindsay and Münsterberg undertook their film-aesthetic projects is of central importance to my attempt to locate Frankenstein films’ experiential challenges; and as shall become increasingly clear in the course of my arguments in the coming chapters, the transitional-era conflicts these early theorists record are central not only to my film-historical outlook but to a broader metaphysical theory of transitionality per se, which stands at the heart of the anthropotechnical interface’s postnatural historicity. Perhaps the clearest view, however, of what Lindsay and Münsterberg were up against can be provided from a different vantage, far removed from the transitional

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19 See my article “Between Technology and Art: Functions of Film in Transitional-Era Cinema” for a fuller treatment of what follows.

era of the 1910s. In his 1981 article “Photography and Representation,” philosopher Roger Scruton takes up the question, by then no longer fashionable, of whether film can be art; his argument, which poses a fundamental challenge to film aesthetics, can be summarized as follows. Film is essentially dependent on photography as the source of its images. And while photography appears to share the property of *representation* that characterizes (non-abstract) painting’s relation to its objects, there is a significant difference between the two that distinguishes painting, and *not* photography, as a representational art. Representation in art, according to Scruton, is a matter of the communication of an artist’s thoughts about a subject by means of a mediated depiction of that subject. Accordingly, representational painting embodies in visual form an intentional relation between the painter and the depicted subject-matter. To appreciate the painting, the spectator must be able, on the basis of visible traces alone, to decipher the meaning of the artist’s intention—which is equivalent to understanding what the picture represents and at the same time comprehending the artist’s expressed thought about it—whereby the communicative act is consummated. An aesthetic interest in the painting is an interest in the representation as such and for its own sake—not an interest in the object represented but in the thoughts that the representation communicates and essentially *is*.

By contrast, the photographic image stands in a purely *causal* rather than intentional relation to the object it depicts. Based on the causal mechanism of the camera, the image is transparent to the world in such a way that bypasses the intention of the photographer, who is unable to completely control the details of the image and embody in it the expression of a representational thought. The photographer can attempt to assert his or her control over details by carefully staging the scene before taking the picture; but, Scruton reasons, if the scene is representational in the relevant sense, the photograph itself will be irrelevant to the representation—merely existing as a reminder of a dramatic scene. Or one might intervene in the developing or printing process, but the resulting image, if representational and not abstract, will then embody the artist’s thoughts more in the mode of painting than as a photograph. According to Scruton, then, the interest we take in a photograph can be either non-aesthetic (as when we view press photos in search of information), aesthetic but abstract (and thus not representational), or representational but not essentially photographic (because the representation involved is logically—and usually temporally—prior or subsequent to the mechanically causal process of photography). As a concatenation of photographs, film will similarly fall into one of these categories. If a film manages to be art, and if this art is representational, the film itself will be inessential to the representation involved. *Q.E.D.*: films will either not be artworks, or their artistic status will be dependent on another art form, most likely a pro-filmic drama for which the film itself serves as a mere conduit.

The argument goes straight to the heart of the Lindsay-Münsterberg project of establishing film as an independent art not reducible, in the parlance of their day, to “canned drama.” Both Lindsay and Münsterberg conceive the narrative film or “photoplay” as an author-centered, expressive medium, and each of them accepts Scruton’s premise that pictorial representation requires perfect coextension with the artist’s intention for communication to take place. That is, the representational artwork must embody completely, and without remainder, the thought it expresses. For example, due to his notion of “harmony, in which every part is the complete fulfillment of that which the other parts demand, when nothing is suggested which is not fulfilled in the midst of the same experience” (153), Münsterberg is committed to precisely this isomorphism of intention, expressive embodiment, and spectatorial experience—and thus also to an ideal of complete artistic control. Furthermore, Münsterberg explicitly extends this ideal from the film as a whole to its atomic parts as well: “Every single picture of the sixteen thousand which are shown to us in one reel ought to be treated with this respect of the pictorial artist for the unity of the forms” (190). Each frame, in short, should be a work of representational art.

But according to Scruton, “[t]he causal process of which the photographer is a victim puts almost every detail outside of his control” (593). Thus:

The history of the art of photography is the history of successive attempts to break the causal chain by which the photographer is imprisoned, to impose a human intention between subject and appearance so that the subject can be both defined by that intention and seen in terms of it. It is the history of an attempt to turn a mere simulacrum into the expression of a representational thought [...]. (594)

Here we have Lindsay’s “struggle against the non-humanness of the undisciplined photograph.” And Münsterberg is engaged in a similar battle, emphasizing that “[t]o imitate the world is a mechanical process” (144) that has little to do with art. Artistic representation, for Münsterberg, takes reality as its starting point, “[b]ut it becomes art just in so far as it overcomes reality, stops imitating and leaves the imitated reality behind it” (144). What could be a more “mechanical process,” though, than photographic “imitation”? The photographic image cannot simply and definitively “leave the imitated reality behind it” because, as the result of sheer causality, the photograph captures “the real things which are enchained by the causes and effects of nature,” freedom from which Münsterberg stipulates as a necessary condition of artistic beauty (151).

It would seem, then, that transitional-era film aesthetics was doomed from the start to failure. Today, however, this conclusion is likely to be greeted with complacency, and the entire discussion itself is likely to strike us as quaint and outdated. It

seems we are simply not worried any longer about whether film can be art, a question that we tend to affirm but without attaching much importance to the answer. The reason, of course, is that substantive notions of art like the one held by Scruton, Lindsay, and Münsterberg have largely fallen out of fashion. For one thing, the requirement of total artistic control seems hopelessly unrealistic, damning not only of photography but also of representational painting: does not the painter's embodiment as an organism, subject to physiological and chemical processes not completely within his or her control, imply that it will never be possible for a flesh-and-blood human to achieve the painterly mastery that Scruton demands of true, unadulterated expressions of artistic vision and thought? Besides, from our vantage point today, after postmodernism and in the wake of cultural studies, Scruton's ideas are likely to strike us not only as unrealistic abstractions but also as politically dubious notions that encode an elitist resistance to popular culture. Scruton writes: "Art is essentially serious; it cannot rest content with the gratification of mere fantasy, nor can it dwell on what fascinates us while avoiding altogether the question of its meaning" (602). But a commercialized entertainment industry, against which Lindsay defines his ideal filmic art, is ignorant of these deeper significances, is content in its pursuit of profit to cater to the superficial desires of the masses. The latter are desperately in need of reform, and art, in the form of the artistic photoplay, will save them from their fallen state. Münsterberg writes in this vein: "The people still has to learn the great difference between true enjoyment and fleeting pleasure, between real beauty and the mere tickling of the senses" (230). Thus, very much in accordance with Scruton's open conservatism, the film-aesthetic theories of Lindsay and Münsterberg were complicit in the transitional era's larger efforts to police the cinema as a public sphere, to gentrify it and free it from its unseemly history as a fairground attraction.<sup>20</sup>

So why not simply reject the stipulated notion of representational art and move on? Why dwell on these discussions of film as art? And why on earth should we bring them to bear on Frankenstein films, of all things, which themselves are largely indifferent, or so it would seem, to the question of film's artistic status? The answer, in short, is that what is ultimately at stake in these arguments over the artistic potential of film is precisely the impact of filmic technology that is also at stake in Frankenstein films. That is, by demonstrating that film cannot live up to the definition of representational art that he shares with Lindsay and Münsterberg, Scruton is in fact pointing out something crucial about the nature of the filmic apparatus's contact with human beings. The photographic causality that causes the

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20 Miriam Hansen's *Babel and Babylon*, which will be central to my arguments in Part One, is especially illuminating with regard to the competition of interests at work in transitional-era cinema.

filmic image to elude the artist's control suggests that film is *opaque to thought* precisely because it is *transparent to the material world*.<sup>21</sup> And apart from the problem of authorial control, this indicates that film at least in part bypasses representational thought, thereby establishing a channel for non-cognitive impacts on its spectators. In other words, cinema, like other technologies, has a direct impact on human *bodies* and the *material lifeworlds* that ground psychic subjectivities and social formations. The impact is *direct* in the sense that it bypasses conscious, discursive perception and affects human beings at the level of pre-reflective experience; technology, that is, makes up a part of the phenomenally unthematized "flesh" of the world. Herein lies the anthropotechnical interface, which is basic to the constitution of the people we take ourselves to be.

In the case of cinema, on my view, film's technical materiality therefore haunts the soul itself, unmasking its alleged timelessness and sets it in historical relation to the shocks, velocities, and technologies of modernization. This is not just a matter of film's content, of the prevalence of technologies in the subject-matter of popular films. Instead, it is a question of an entirely new type of vision, one that is only possible with cinema's enabling technical infrastructure. The camera does not just extend the vision of filmmakers and spectators; it significantly reduces *and* augments direct experience. Like painting, it channels experience into a framed visual form, but it also enables new visions that are impossible to the unaided eye. Substitution techniques, slow and reverse motion, for example, are not seen directly by the cinematographer but made possible only when the camera's photographic record is processed and projected properly. In this way, the projector offers the specta-

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21 To say that the camera captures the objects of reality so that we really see *them* in mediated form—and not (just) *representations* of them—is emphatically not equivalent to the claim that the image is identical with its object. However, in discussions of photographic and cinematic realism there has been considerable slippage between the two positions. André Bazin, for example, claims in "The Ontology of the Photographic Image" that "[t]he photographic image is the object itself" (14), a claim of identity that he relates to the causal claim that "an image of the world is formed automatically, without the creative intervention of man" (13), so that the relation between it and the object is similar to "a fingerprint" (15). Arguably, Christian Metz also equivocates between the two views: "The cinema is the 'phenomenological' art *par excellence*, the signifier is coextensive with the whole of the significate, the spectacle its own signification, thus short-circuiting the sign itself" (*Film Language* 43). Kendall L. Walton, in "Transparent Pictures," makes a strong case for the transparency of photographs—"the viewer of a photograph sees, literally, the scene that was photographed" (252)—while clearly distinguishing his position from the identity thesis. Furthermore, he argues that this transparency is not equivalent to, and is irreducible to, an alleged "illusion" of seeing reality.

tor a visible spectacle that is radically incommensurate with the structure of a pre-technical or pre-modern mind. The introduction of film therefore marks a radical change in humans' relations to the world, but the scope of this change eclipses thought and points to the presence of a sub-personal, material interface; accordingly, the anthropotechnical interface subtends human agency as the site of its historical transformation. More than the social status of the cinema, I suggest, it was this transformation that transitional-era film aesthetics took aim at: with their theories of a timeless, universal art of the photoplay, Lindsay and Münsterberg tried to shore up the deterritorializing force of anthropotechnical transitionality itself.

As I have pointed out, Frankenstein films tend to foreground their own mediality, making it formally "opaque" in the manner that Schatz associates with the so-called baroque stage of generic evolution, and in this way they challenge us to reassess our relations with technology and its material opacity with regard to thought. Scruton's argument about photographic causality, while ostensibly designed to show why cinema can never be art, ironically helps us to rethink the means by which Frankenstein films pose their challenges. Near the end of his article, Scruton writes: "the cinema [...] provides us with a ready means of realizing situations which fascinate us. It can address itself to our fantasy directly without depending upon any intermediate process of thought" (602-03). Probably this is meant to suggest that, in contrast to "serious" art, popular productions like Frankenstein films are just superficial fluff; but, as we have seen, it can also be taken to highlight film's direct address of the body. This immediacy or directness, Scruton continues,

is surely what distinguishes the scenes of violence which are so popular in the cinema from the conventionalized death throes of the theatre. And surely it is this too which makes photography incapable of being an erotic art, in that it presents us with the object of lust rather than a symbol of it: it therefore gratifies the fantasy of desire long before it has succeeded in understanding or expressing the fact of it. The medium of photography, one might say, is inherently pornographic. (603)

Now rather than trying to refute this claim, my suggestion is that we take Scruton's hyperbole seriously, that we accord to film a basically pornographic ontology which is grounded in its ability to move our bodies directly, "long before it has succeeded in understanding or expressing the fact of it." At their most effective moments, Frankenstein films manage to turn this ability of film—and therefore the anthropotechnical interface that materially connects us with filmic technology—into the very object of our longing. In a sense more fundamental than arousing sexual desire, Frankenstein films are pornographic by virtue of gratifying us directly, "present[ing] us with the object of lust rather than a symbol of it," and thus

submitting our bodies to material transformation without the mediation of representational thought. Linda Williams, discussing pornography in the narrower sense, calls it, along with horror and melodrama, a “body genre.”<sup>22</sup> Though perhaps lacking the coherence of a determinate genre, Frankenstein films must be seen as a preeminent formation of the body-genre type. Whether they arouse us, terrify us, or move us to tears, the power of Frankenstein films derives from a sort of archepornographic interest in the filmic medium’s power to transform us; at their best, the films cultivate this interest and focus it on the anthropotechnical interface itself, allowing us to savor our own vulnerability to chance and our lack of conscious control over the postnatural course of our becoming.

### A Preview of Coming Attractions

As I indicated earlier, the body of this work is divided into three main parts, the task of Part One being to *locate* the experiential challenges posed by Frankenstein films. Towards this end, Chapter 2 develops a historically indexed “techno-phenomenology” of the dominant film-viewer relations under the paradigms of early and classical film; I then apply this perspective to the analysis of two Frankenstein films from the respective film-historical periods, each of which is shown to instantiate a vacillating destabilization of spectatorial relations, pointing to a volatile intermediate realm between the phenomenological regimes of early and classical cinema. In Chapter 3, I follow this cue to the transitional era of the 1910s, and specifically to the first known Frankenstein film proper: the Edison Studios’ 1910 production *Frankenstein*. As I argue in that chapter, the dualities of address exemplified in this film point to a broader experience of *transitionality* which, on the move between more determinately stabilized situations, presents itself negatively to phenomenological subjectivity—as an indeterminate gap.

It is in these gaps of transitionality that I locate Frankenstein films’ characteristic challenge, and in Part Two I take up that challenge by formulating a theoretical framework, that of postnaturalism, that would be able to *answer* the films’ provocations. Chapter 4 first circles around the gaps that feminist readers have located in the text of Mary Shelley’s Gothic novel before diving into them to discover a theory of a pre-personal and therefore non-discursive contact between human embodiment and technological materiality. On the basis of this contact, as I argue, technological revolutions (such as the industrial revolution in the wake of which Shelley

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22 See Williams’s “Film Bodies: Gender, Genre, and Excess.” The epilogue to the second edition of Williams’s *Hard Core* (280-315) is also highly relevant to the present discussion.

composed her novel) are capable of radically destabilizing human agency, causing us to draw experiential blanks and to produce textual gaps—which, however, are quickly filled in and forgotten in the process of novel technologies’ habituation and naturalization. In the techno-scientific interlude of Chapter 5, I trace these processes in the context of the industrial steam engine’s recuperation by thermodynamic science in order to uncover the postnatural historicity of natural science’s nature itself—i.e. the fact, not reducible to an epistemic phenomenon of discursive construction and projection on the part of human subjects, that material nature itself is constantly in motion, in transition, and that—due to the role of technologies in this history—nature has thus never been “natural.” Chapter 6 translates these findings into a specifically postnatural media theory, which pertains not only to empirically determinate apparatuses but to the very historicity of the phenomenological realm as it is co-articulated between human and nonhuman agencies; as a film-theoretical correlate of this theory, I put forward what I call a “cinematic double vision,” which alternates between a Merleau-Ponty inspired phenomenological perspective and a Bergsonian metaphysics to reveal film experience as animated by the interchange between human situations and technological displacements.

Part Three then returns to Frankenstein films to demonstrate the films’ special relations to the postnatural historicity of the anthropotechnical interface and, in effect, to execute a *rapprochement* between the conflicting human and nonhuman agencies inhabiting these films. In order to do so, Chapter 7 turns to the paradigmatic filmic progenies, James Whale’s *Frankenstein* and *Bride of Frankenstein*, and, on the theoretical basis of postnaturalism, alternately illuminates the human and nonhuman perspectives that come together to animate the films’ central creature. In this confrontation—the staging of which is inextricable from the films’ historical moment and specifically from their relations to the then-recent transition to sound cinema—I seek a non-reductive means of apprehending the alterior agency that occupies the gaps in subjective experience provoked by Frankenstein films. Chapter 8, by way of conclusion, briefly pursues this line beyond the paradigm case, taking a more synoptic view of the continuing proliferation of the Frankenstein film; here I seek to illuminate the active role played by cinematic technologies in eliciting a fleeting experience of transitionality, which lies submerged beneath the weight of our habituated or “natural” relations to those technologies. The *rapprochement* of which I spoke consists, then, of a recognition of the mutual articulation of experience by human and nonhuman technical agencies, whereby the affective and embodied experience of anthropotechnical transitionality is not arrested and subjugated to human dominance, but approached experimentally as a joint production of our postnatural future. This is the ultimate challenge posed for us by Frankenstein films.